# **œrlikon**

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# **Business** report

# **Letter from the Chairman**

#### Dear Shareholders

Looking at our business in 2016, I am pleased to report that despite the difficult market environment, we laid a strong foundation to build the future of the company around our well-performing surface solutions business. While underperforming key markets such as China and parts of Europe as well as unexpected geopolitical and macroeconomic events like the UK's vote to leave the European Union or the US presidential elections created uncertainties that impacted the global economy, financial markets and our end markets, we were able to win important new projects and customers in all Segments. We could even improve our market-leading positions in some fields and took key steps to diversify our business into growth markets. We also made good progress with the repositioning and restructuring of our drive systems business and managed the Manmade Fibers Segment well during the significant market down cycle.

In March 2016, Dr. Roland Fischer, an experienced industry leader with broad expertise in the energy, aviation and aerospace sectors, was appointed CEO. Once on board, Roland undertook a series of initiatives to create a more customer- and market-oriented company, as well as measures to facilitate efficiency improvements. Specifically, the Group headquarters and Surface Solutions Segment's functions were merged. Recognizing the importance of motivated employees and highly-qualified specialists and teams, the HR department has been strengthened and realigned in order to win and retain the best professionals for Oerlikon. Anna Ryzhova was appointed Chief Human Resources Officer and a member of the Executive Committee. She is creating a more knowledge-based culture in which new and entrepreneurial ideas can be born and decisions can be taken quickly.

# Intelligently engineering and processing surfaces and materials

With our strategy focusing on advanced materials and surface solutions, we address major societal and industrial trends. We are building Oerlikon's future on our ability to create value for customers by combining advanced materials science with functional surface technologies, built upon our comprehensive competence in the engineering and processing of materials and surfaces.

The acquisition of Metco in 2014 was a perfect match, making us a leader in technologies used to improve surface properties. A key step for us was the creation of the foundation to focus the company around our unique technological competencies. The joint power of Oerlikon Balzers, with its leading thin-film coating expertise, and Oerlikon Metco, with its extensive know-how in materials, thermal spray and other technologies, puts us in a distinct position of strength.

Today, we are able to offer an exceptionally broad and versatile portfolio of coating technologies, materials, equipment and services with a global footprint of more than 145 service and production centers. With Oerlikon Balzers, we hold a market-leading position in coating services and equipment and served in



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2016 more than 30 000 customers from the automotive and general industrial markets. Oerlikon Metco is one of the largest players in thermal spray equipment and materials and has a firmly anchored position in the aerospace and industrial gas turbine markets, offering coating materials, services and components. Our strength lies in our deep understanding of our technologies, customer needs and markets and in creating solutions that support customers in the development of more effective and sustainable components and products. Surface solutions and advanced materials remain the key enablers for productivity gains, energy efficiency and lightweight solutions in many industries and for a broad range of applications.

#### **Promising perspectives**

The Segment's good results in 2016 confirm the value of the business and that we are moving in the right direction. In fact, in certain areas such as tooling, we are outperforming our peers and gaining market share. Today, many companies are not yet using our technologies. We see opportunities to expand our coating services for precision components used in all industries and for specialized applications in aerospace, turbines and medical fields.

We have, over the years, built up strong relationships with many key manufacturers in the aerospace, energy, automotive and tooling industries. By intensifying our relationships with customers, also in the R&D area, we see potential for developing coating technologies for applications that have not been coated so far, or that offer new functionalities. We also see attractive opportunities where we can easily transfer our expertise and technologies into other sectors and fields.

A promising new business area worth highlighting is additive manufacturing. Today, additive manufacturing technology is at a major inflection point in industrialization. The market is growing rapidly with an expected compound annual growth rate of approximately 40% over the next five years. Additive manufacturing allows industrial components to be developed in new forms, new materials and with less material. It can also alter the economics of production, resulting in companies saving significantly on the cost of the part and retooling, and in short-

er production lead times, thereby increasing competitiveness. This is particularly interesting for companies in the tooling, aerospace, automotive or medical sectors, as it opens up new perspectives to improve productivity. We are building our business model in additive manufacturing as a service to all industrial companies.

In 2016, we made our first organic and inorganic investments in this field. There will be costs incurred initially with investments, but these investments are essential for the start-up phase and for building up the new business in order to benefit from returns in the medium term. In the metal-based additive manufacturing market, estimated to reach almost CHF 2 billion by 2021, the Group plans to invest a total of around CHF 300 million to develop this business and targets to achieve around CHF 300 million in sales per year within the five-year period.

#### Sustaining market leadership despite down cycle

We also hold unique technology expertise and strong market positions in the processing of polymer materials. Our Manmade Fibers Segment is a world market leader for systems used in processing filaments, bulked continuous filaments (BCF – carpet yarn), staple fibers and polymer materials. We are the only company with the know-how to offer a complete manmade fiber spinning system from a single source – from melt to yarn, fibers and nonwovens. Our equipment enables customers to benefit from low operating costs and a reduced energy-consumption and equipment footprint.

Despite the fact that the filaments equipment market has been undergoing a sharp cyclical downturn, the Segment has strong structural fundamentals and attractive prospects. Our market-leading technologies form the basis for almost all manmade fibers textiles made and used in growth markets such as apparels, energy, food, functional wear, infrastructure and transportation. The yarns and fibers produced by our systems are applied broadly – in filters, automobile tires, safety belts, airbags, roofing membranes, safety equipment, protective clothing and conveyor belts, as well as in geotextiles, medical textiles and much more.

In the years 2012 to 2014, boosted by significant investments in manmade fibers equipment in China, the Segment achieved peaks in sales of over a billion Swiss francs and strong profitability that contributed substantially to the Group's performance. The overinvestments in the market led to overcapacities, which triggered the start of a down cycle in 2015 that was made even more serious and noticeable due to China's economic slowdown. This resulted in the Segment's sales falling by almost 40% in 2016. The decisive measures taken by the Segment to reduce its breakeven point and protect profitability have resulted in the EBITDA margin remaining positive in 2016. This is especially notable when viewed against the near 40% reduction in sales and a noteworthy achievement of the management. At the same time, the Segment has invested in maintaining its innovation and capabilities, and is well positioned to benefit when the market recovers.

#### Challenging environment as innovation driver

Looking ahead, China will remain the Manmade Fibers Segment's key market since most of our key customers for filaments equipment are located in this country. Toward the end of 2016, we noted that shelved projects are starting to be revived, indicating that the bottom of the cyle was reached in 2016. A second important market for manmade fibers is India. In 2016, the Indian textile market appeared to be ramping up on higher-quality equipment in its move to gain a share of the export market. We saw a first round of investments there in 2016 and were able to secure approximately 80% of all orders for filament spinning lines. We expect to see an improvement in 2017 for our filaments equipment business, in terms of both sales and operating profitability. However, at the moment, the overall market for filaments equipment remains challenging with limited projects, and is highly price-competitive. This will impact the profitability of the Segment in 2017, and margins are only expected to see an improvement over the medium term.

We will use the gradual market recovery in Asia to further build our market share, increase our installed customer base to favorably position ourselves for potential follow-up projects, and increase the share of recurring service business generated from the installed systems. In parallel, we have accelerated our diversification and are building up businesses outside the China-led filaments equipment market. We also see additional opportunities in special industrial applications such as fibers for reinforcing concrete, cement and plastics that can be used in the automotive, aerospace, construction and marine sectors.

#### Good progress in reshaping drive systems business

The Drive Systems Segment continued to face challenging market conditions in most of its end markets. Equipment investments were sluggish in the agriculture, construction, transportation and oil & gas sectors, although there were initial indications that the trough in the oil & gas sector is reached and that the start of a slow recovery could be expected. In spite of the tough market climate, the Segment won new projects and customers, and made good progress in repositioning and restructuring.

Alongside reducing costs, we invested in productivity-enhancing initiatives such as implementing the harmonized quality systems, standardizing key procedures and improving technology competences. The progress is clearly visible, and our initiatives to strengthen and realign our capabilities and resources with market opportunities will continue in 2017 and help to drive profitability and further improve the business outlook. We will therefore continue our efforts and invest to establish a robust business foundation for the Drive Systems Segment in order to reposition it for future opportunities.

With the measures already taken, the prospects for the Drive Systems Segment are improving. Going forward, we are using our market leadership position and our core competence to successfully expand into adjacent industries such as commercial trucks and high-volume automotive applications, and have already achieved major new business wins in these areas in 2016.

Our unique understanding of and manufacturing capabilities for performance gears and bevel gear sets for power transfer units

(PTUs) and differentials have allowed us to successfully extend our product applications into commercial and especially into electric vehicles. Recent technology innovations include planetary drives with integrated electric and hydraulic motors as well as dynamic brakes. These integrated systems provide a more compact and lower-weight package while delivering enhanced performance, functionality and safety. The latest development, an integrated compact electric drive solution for compact construction machines, features an integrated new electric motor design that is up to 70 % smaller and lighter yet 20 % more efficient than traditional solutions.

In the area of hybrids and e-drives, the Drive Systems Segment has steadily established itself as an innovator. For hybrid applications, we have developed a concept both for performance cars and compact, front-wheel drive, high-volume production cars, combining the efficiency and low cost of automated manual transmissions with the smooth driving experience of an automatic while reducing fuel consumption by up to 20%. In addition, we have established partnerships in 2016 with electric motor manufacturers to provide electric drive solutions for on-and off-highway applications.

#### A cautiously optimistic outlook

Since political and economic uncertainties, compressing market cycles and market volatility are likely to remain, the ability to adapt and change will be a constant theme in the coming years. At the same time, change will also be driven by the expanding demand for energy, mobility and infrastructure, fueling the need for industrial manufacturers to become more energy efficient, minimize the use of scarce resources and improve environmental sustainability.

Technological change driven by digitalization is recognized as the accelerator of long-term growth. Accordingly, the successful digitalization of our business is a key prerequisite for staying competitive. The respective transformation of the company has already started. It represents the biggest challenge we are facing in the years to come as innovative production and service solutions and improved productivity is unthinkable without the benefit offered by digitally designed, developed, managed and controlled processes. With a digital initiative involving additional investments and resources, we will ensure that Oerlikon stays at the forefront as one of the technologically-leading global companies, also during times of fundamental industrial changes.

In this context, we will be cultivating a stronger innovation culture that encourages the development of new ideas and successful product launches. We have a robust set-up and a strong balance sheet that allows us to invest in the transformation, both organically and inorganically. The upside potential as we execute our strategy will become more visible with each step we take, and bring us closer to become a powerhouse in surface solutions and advanced materials. The result will be a profitable, attractive and sustainable company with a competitive business model and clear differentiation.

In 2016, our share price developed positively, outperforming Swiss and industrial indices. Our objective with our new strategy

is to create long-term value for our shareholders and a sustainable dividend policy. Reflecting the strength of our balance sheet and development of the company, the Board of Directors will be proposing at the upcoming Annual General Meeting of Shareholders (AGM) a dividend payout of CHF 0.30 per share, that is maintaining the same payout as in the previous year.

Progress is only possible through hard-working and dedicated people. I would like to take this opportunity to thank all employees at Oerlikon, the management team and my colleagues on the Board for their valuable support, hard work and commitment. I would also like to thank Hans Ziegler, who resigned in 2016 as a Board member, for his contributions over the past years. At the same time, I would like to express my gratitude to all of our customers, who continued to invest and have confidence in our technologies.

Last but not least, I would like to thank you, our shareholders and investors, for the trust that you place in Oerlikon, in our strategy and in supporting us as we execute the strategy and work to ensure that Oerlikon reaches its fullest potential.

February 28, 2017

Best regards

Prof. Dr. Michael Süss

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Chairman of the Board of Directors

# **Letter from the CEO**

#### Dear Shareholders

In 2016, we delivered on all the targets that we set. We performed well in the difficult market environment, supported by the noticeable increase in sales and orders in the fourth quarter. Strategically, we executed the first steps of our strategy to become a global powerhouse in advanced materials and surface solutions, sharpened our market and customer focus, and increased our resilience and efficiency.

We anticipated difficult market conditions for 2016, which was a year filled with challenging macroeconomics and geopolitical events. China's economic deceleration, uncertainties in the European Union and the US, and commodities price volatilities led to a fragile market landscape, dampening investments in end markets. Key sectors such as the filaments equipment market, energy, construction and agriculture continued to see weak demand.

Against this backdrop, Oerlikon performed well and delivered good results. The Group's order intake for 2016 came in at CHF 2413 million, including a positive currency impact of 1.2%, while Group sales totaled CHF 2331 million, including a currency impact of also 1.2%. EBITDA was CHF 334 million, corresponding to an operating profitability margin of 14.3%. The net result amounted to CHF 388 million, reflecting underlying earnings per share of CHF 1.14. With an equity ratio of 48%, the Group's financial position remained strong in 2016. The net cash position at the end of the year amounted to CHF 401 million and cash flow from operating activities before changes in net current assets was CHF 269 million. The Group's return on capital employed (ROCE) was at 5.7 %. In 2016, we also strengthened our financial flexibility and signed an agreement for a new, unsecured syndicated credit facility amounting to CHF 600 million, with a five-year term and two optional one-year extensions. Our strong financial base enables us to continue implementing our organic and inorganic growth strategy in the future.

The Surface Solutions Segment achieved a consistently good performance, confirming the potential of this business and our strategy going forward. Our technologies are found at the center of the automotive, aerospace, energy, tooling and many more industries. They serve the growing demand from our industrial customers for lighter and more durable materials with new or better properties that are able to deliver increased performance. Our two other Segments, Manmade Fibers and Drive Systems, delivered results lower than the year before, reflecting the market challenges they face in their respective businesses.

The Surface Solutions Segment was the main income and profit generator for the Group in 2016. It slightly grew its orders and sales compared to the previous year, and saw stable demand in most of its key industries – automotive, aviation and power generation – and a positive development in general industries and tooling. It also improved its operating profitability compared to 2015. Its Q4 2016 EBITDA margin of 21.6 % marks a total of nine consecutive quarters where the Segment achieved an EBITDA margin of over 20 %. We continued to invest in new technologies and customer services and addressed new busi-



ness opportunities such as additive manufacturing. New coating technologies from Oerlikon Balzers' key product families of BALINIT® and BALITHERM® were launched and new alloyed additive manufacturing materials customized for specific applications were introduced to the market. Customer proximity was strengthened by opening a new coating and service center in South Korea and expanding an automotive competence center in India. We acquired citim GmbH, gaining additive production capabilities and announced the building of a new plant in Michigan, USA, to produce advanced materials for additive production and high-end thermal spray applications. In addition, we joined America Makes to stay at the forefront of the additive manufacturing development in the US, and partnered with the Shanghai Additive Manufacturing Association to establish an additive manufacturing network in China.

The Manmade Fibers Segment continued to be impacted by the prevailing overcapacity in the filaments equipment market. China's 5-year plan (2016-2020) depicted a 2-year consolidation period, and we are currently in the midst of this period. However, toward the end of 2016, we saw indications that projects are being reevaluated, implying that the bottom of the trough was reached in 2016. The Segment's efforts in diversifying its focus on areas outside of the China-led filaments market has started to bear fruit. To strengthen our foothold in the staple fibers market, we acquired Trützschler's staple fibers technology portfolio. Staple fibers, bulked continuous filaments (BCF) and texturing (DTY) are the main areas where the Segment has improved its business in 2016. Positive demand for staple fibers was noted in India and Europe, and positive uptakes for BCF systems and services in the US and Turkey. For DTY, partially oriented yarn (POY) systems installed in previous years triggered investments. The Segment has also improved its cost base in the reporting year through restructuring measures and was able to protect its operating profitability and delivered a positive EBITDA margin for the full year despite sales level coming in almost 40% lower than in 2015.

All of the Drive Systems Segment's end markets continued to be under pressure in 2016. Agriculture, construction, energy and mining sectors saw subdued demand, which resulted in the Segment recording lower sales in 2016 than in the previous year. Nevertheless, the Segment's strategic reshaping of its product portfolio has led to first positive results. It managed to increase its order intake year-on-year by winning customers and projects in several market, such as in the US and European construction and transportation sectors, in the public transportation sector in China and in agriculture in India. Thanks to its consistent execution of restructuring and process optimization measures, the Segment also succeeded to obtain a notably improved year-on-year operating profitability, with an EBITDA margin of 8.4 %.

In 2016, we took many steps in executing our strategy. We closed the sale of the vacuum business to Atlas Copco, freeing up resources for our core businesses. We integrated the Group headquarters with the Surface Solutions Segment, creating a structure where the Business Units and Group functions can benefit from synergies, increase efficiency and improve their value proposition to markets and customers. This realignment will make us leaner, more agile, responsive and market-oriented. In that context, I also took over the operative management of the Surface Solutions Segment as part of my responsibility in order to be closer to our core business.

To maintain our technology leadership in our markets, we continued to invest in our innovations and R&D. In 2016, we filed 67 patents and allocated 4% of our total sales in R&D, developing upgrades and innovations to meet customers' needs and demands.

Looking ahead, we expect the macroeconomy in 2017 to remain uncertain. Open questions such as the policy changes by the newly inaugurated US president in the areas of foreign policy and international trade, China's ability to maintain its GDP growth and rebalance its economy, and the Euro Area's political, economic and migrant issues will need to be answered. These changes will inevitably impact the global and end markets, raising concerns on how we need to better address risks and mitigate against market developments. Having said that, based on our performance in 2016, we expect, even in the difficult market environment, to increase order intake and sales for the full year 2017 to around CHF 2.5 billion each and to deliver an operating profitability around the same level as in 2016. However, given the substantial planned investment expenses for the additive manufacturing business, the EBITDA margin is expected to be around 13%.

The longer-term prospects for our business remain attractive. We have laid the foundation, focusing Oerlikon on strong technologies that address important industrial customer needs in growing markets. In 2016, we made important progress toward our key goals of strengthening our surface solutions business, managing the market cycle for manmade fibers and reshaping our drive system business. Taking further steps in our strategy execution is equally important for us. In 2017, we will work at enlarging our growth base to ensure sustainable profitable growth in the medium term. We want to grow our existing business organically, but will also look at value-added investment opportunities to complement our existing technology and service portfolio. Our key areas of focus will be in strengthening our

technology leadership through continuous innovation, growing existing customer business, developing new business areas such as additive manufacturing, and bringing our organization to the next level. This will help us stay at the forefront of technology innovations and drive profitable growth in all our businesses in the future.

In closing, I would like to personally thank our employees for their ongoing dedication and efforts; our customers for the trust they place in us to deliver value-added technologies and services, and also to thank you, our shareholders, for your continued support in Oerlikon.

February 28, 2017

Best regards

**Dr. Roland Fischer**Chief Executive Officer

# 2016 at a glance

### Financials

Order intake in 2016 (in CHF)

2413 million

4.9% below prior year

EBITDA margin

14.3%

1.6% points above prior year

Operating cash flow<sup>1</sup> (in CHF)

<sup>1</sup> Before changes in net current assets.

269 million

31.6% below prior year

Earnings per share in 2016 (in CHF)

1.14

>100% above prior year

Sales in 2016 (in CHF)

2331 million

12.7 % below prior year

Net result in 2016 (in CHF)

388 million

>100% above prior year

Net cash (in CHF)

401 million

>100% above prior year

Dividend proposal for 2016 (in CHF)

0.30

maintained at prior year's level

### **Key figures of the Oerlikon Group**

in CHF million	January 1 to December 31, 2016	January 1 to December 31, 2015	
Order intake <sup>1</sup>	2413	2537	
Order backlog <sup>1</sup>	447	431	
Sales <sup>1</sup>	2331	2671	
EBITDA <sup>1, 2</sup>	334	338	
- as % of sales	14.3%	12.7%	
EBIT <sup>1,3</sup>	158	-306	
- as % of sales	6.8%	-11.4%	
Result from continuing operations	82	-402	
Result from discontinued operations, net of income taxes <sup>4</sup>	306	-16	
Net result	388	-418	
- as % of equity attributable to shareholders of the parent	21%	-27 %	
Cash flow from operating activities <sup>5</sup>	293	289	
Capital expenditure for property, plant and equipment and intangible assets <sup>1</sup>	144	150	
Total assets	3825	4097	
Equity attributable to shareholders of the parent	1826	1 554	
- as % of total assets	48%	38%	
Net cash <sup>1,6</sup>	401	79	
Net operating assets <sup>1,7</sup>	1 867	1875	
Number of employees <sup>1</sup>	13840	13723	
Personnel expense <sup>1</sup>	796	785	
Research and development expenditure <sup>1,8</sup>	94	103	

<sup>&</sup>lt;sup>1</sup> Continuing operations.

- $^{\rm 2}$  2015 includes one-time effects of CHF -112 million (restructuring).
- <sup>3</sup> 2015 includes one-time effects of CHF -588 million (restructuring expenses of CHF -112 million and impairment losses of CHF -476 million).
- 4 Includes reclassification of translation differences and other items of other comprehensive income amounting to CHF -29 million (previous year: CHF -21 million).
- 5 Cash flow from operating activities before changes in net current assets amounts to CHF 269 million (previous year: CHF 393 million).
- <sup>6</sup> Net cash includes cash and cash equivalents, deposits and marketable securities less current and non-current debt.
- Net operating assets include current and non-current operating assets (including goodwill and brands and excluding cash and cash equivalents, current financial investments, current income tax receivables and deferred tax assets) less operating liabilities (excluding current loans and borrowings, non-current financial liabilities, current income tax payables and deferred tax liabilities).
- 8 Research and development expenditure includes expenses recognized as intangible assets in the amount of CHF 22 million (previous year: CHF 22 million).

### Key share-related figures<sup>1</sup>

in CHF		January 1 to December 31, 2016	January 1 to December 31, 2015	
Share price	Year high	10.10	12.70	
	Year low	7.76	8.42	
	Year-end	10.00	8.95	
Shares outsta	nding at year-end	339758576	339758576	
Market capital	lization at year-end in CHF million	3398	3041	
EBIT per share	e <sup>2</sup>	0.47	-0.90	
Earnings pe	r share	1.14	-1.24	
Cash flow from	n operating activities per share	0.86	0.85	
Equity per sha	are <sup>3</sup>	5.38	4.58	
Dividend pe	r share	0.304	0.30⁵	

<sup>&</sup>lt;sup>1</sup> Average number of shares with voting and dividend rights (undiluted).

<sup>&</sup>lt;sup>2</sup> Continuing operations.

<sup>&</sup>lt;sup>3</sup> Attributable to shareholders of the parent.

 $<sup>^{\</sup>mbox{\tiny 4}}$  Dividend proposal for 2016, to be paid in 2017.

<sup>&</sup>lt;sup>5</sup> For financial year 2015, paid in 2016.

# 2016 at a glance

### Strategic and operational

## Top management

Appointed Dr. Roland Fischer as new CEO and Anna Ryzhova as new Chief Human Resources Officer and a member of the Executive Committee.

# Organization

Merged Group HQ functions and Surface Solutions Segment to create a more agile and market-focused organization.

## **Additive manufacturing**

Enlarged platform for mid-term growth with acquisition of citim for additive production expertise.

## **Partnerships**

Joined America Makes and partnered with the Shanghai Additive Manufacturing Association to foster the development of the additive manufacturing business.

# **Service footprint**

Opened a new coating center in South Korea and an automotive competence center in India for surface solutions customers.

# **Acquisition**

Acquired Trützschler's staple fibers technologies portfolio to strengthen foothold in synthetic staple fibers market.

### Joint venture

Joint venture Oerlikon Barmag Huitong Engineering recorded first sale of polyester production system in China.

# **E-mobility**

Won new customers and partnerships for e-drive and hybrid technology.

# **Reshaping business**

Repositioning of the Drive Systems Segment through streamlined product portfolio, increased reach in key markets, optimized processes, restructuring and building up growth business.

#### **Divestment**

Successfully completed sale of non-core vacuum business to Atlas Copco at an enterprise value of CHF 525 million.

### **Financial position**

Strong financial base strengthened with new unsecured credit revolving facility of CHF 600 million to support execution of growth strategy.

# Restructuring

Restructuring measures in Manmade Fibers Segment and Drive Systems Segment helped in lowering break-even point.

### Innovation

Maintained high commitment to innovation with 4% of total Group revenues in R&D, a team of over 1000 engineers globally and 67 patents filed in 2016.

#### **Product launches**

Launched more than 35 new and improved technologies and products across all three Segments.

# **Employee safety**

Improved safety at work for employees based on lost time accidents frequency rate, which decreased by 23 % to 0.39 compared to 2015.

### Operational Excellence

Supply chain management initiatives yielded total annual gross savings in millions of Swiss Francs in the double-digit range for 2016.

# **Oerlikon Group**

#### **Corporate structure**

Oerlikon is a leading global technology Group providing market-leading surface solutions, manmade fibers and drive technologies and services for industrial applications in sectors such as aerospace, automotive, energy, industrials solutions, textile, construction and agriculture. The Group is currently structured in three Segments¹: Surface Solutions, Manmade Fibers and Drive Systems. Each Segment offers technologies and solutions under well-established industry competence brands and adopts strategies specific to their respective market needs and requirements.

Globally, Oerlikon operates more than 180 own sites in 37 countries. Publicly listed on the SIX Swiss Exchange, the Group has a solid innovation base and long-standing customer relations in Europe and a strong technology lead and market presence in Asia, particularly in the emerging markets of China and India. In the US, the Group has a well-established foothold, serving core end markets from key locations through innovation and production hubs as well as service centers.

#### Sustainability and key Group developments

Oerlikon is committed to adhering to the principles of good corporate governance, in particular, the guidelines defined in the Swiss Code of Best Practice for Corporate Governance by economiesuisse. Apart from the Articles of Incorporation, in which the purpose of the company, the corporate bylaws and statutes are officially filed, the Group has a clearly defined Code of Conduct covering the ethical and legal framework for all its business activities.

Sustainability at Oerlikon cuts across all areas of the business, from business strategy, customer service, R&D, innovation and operational excellence (covering manufacturing, supply chain,

health, safety and environment) to HR policy, risk management and compliance with legal, regulatory, ethical and internally defined requirements.

#### Strategic transformation

In November 2015, Oerlikon announced its long-term growth strategy to become a global powerhouse in surface solutions, advanced materials and materials processing.

The strategy is built on the strong fundamentals that industrial customers increasingly need lighter, more energy efficient, sustainable and productive products, driven by global trends such as population growth and limited resources. Advanced materials and surface technologies can make a difference in meeting the aforementioned demands and in addressing the challenges of the industries.

In 2016, Oerlikon undertook the first strategic steps to transform the company. It started to strategically align the organization to make it more agile, responsive and market-oriented, and took decisive actions to strengthen its businesses, customer focus and resilience. Dr. Roland Fischer was brought on board as Group CEO to accelerate the execution of the strategy, and Anna Ryzhova joined as Chief Human Resources Officer to strengthen Group HR for the transformation process and to bring HR to the next level. The Group also integrated its head-quarters functions with the Surface Solutions Segment to create a leaner organization with a sharpened focus on its surface solutions markets and industries. In a related action, Dr. Fischer took on the added role of CEO of the Surface Solutions Segment.

Oerlikon continued to solidify and invest in its main growth engine, the surface solutions business, in 2016. A deep dive analysis of the surface solutions business was conducted to identi-

# Group structure and competence brands<sup>1</sup>



**Surface Solutions Segment** 

Manmade Fibers Segment **Drive Systems Segment** 

**œrlikon** 

**cerlikon** barmad

**cerlikon** graziano

**œrlikon** 

**cerlikon** neumag

**cerlikon** fairfield

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For the manmade fibers business, the Group diversified its focus in areas outside of the filaments equipment market and improved its cost base through restructuring to mitigate the negative impacts from the down cycle. Specifically, the Segment expanded its business in texturing and staple fibers, and also in regional markets outside of China, such as USA, India and Turkey. The Segment acquired the entire staple fibers technology portfolio from Trützschler, making it a technology leader in the synthetic staple fibers market. For its polycondensation business, the Segment's joint venture, Oerlikon Barmag Huitong Engineering, was formed in 2015 and recorded its first sale of a polycondensation system in China despite market weakness.

For its drive systems business, the company made progress with its four-pillar strategy – streamlining product portfolio, increasing market reach in key markets, optimizing processes and restructuring. Focus was shifted to high value-added orders, reducing the number of direct customers and moving sales of lower-volume products to distributors. It also extended the reach of its key products to related industries, eg. offering its fuel-consumption-saving hybrid electric technologies for off-highway vehicles. To support the demand for e-drive technologies, targeted partnerships and joint ventures such as in the Chinese mass transportation market and in the areas of e-axles, e-drives and electronically controlled differentials were made.

With the successfully closed sale of its vacuum business to Atlas Copco on August 31, 2016, at an enterprise value of CHF 525 million, Oerlikon shifted further resources and attention to its core strategic businesses.

#### **Customer service**

Proximity to customers, in-depth understanding of their complex production processes and systems and effective key account management are vital to Oerlikon's strategy for deepening customer relationships. In 2016, the Group reinforced its efforts in building world-class customer services to meet customers' needs and increased the proportion of revenue generated from services to 36.6% of total 2016 Group sales.

In 2016, the Surface Solutions Segment opened a new sales office and a coating center in South Korea and expanded its automotive competence center in India to serve customers from close proximity. Customers benefit from access to a strong global network of production and service centers, strategically located at more than 145 sites in 37 countries. Oerlikon Metco significantly improved its service level, achieving 97% delivery to promise and 94% delivery to service and extended its coatings offering in the US for oil & gas applications.

As part of its strategy to build a more stable and diversified business, the Manmade Fibers Segment is improving its service offering with the introduction of new customer services such as the Intelligent Plant Control 4.0 (IPC 4.0) and signed new long-term contracts to install and run maintenance workshops at customers' sites in India and China.

In line with its efforts to strengthen customer relations and services, the Drive Systems Segment appointed a new Head of Global Service and After Market and conducted more than ten customer and technology days in 2016. In addition, the Segment is preparing a web portal for distributors and spare parts, which will be launched first in Europe, Middle East and Africa (EMEA) in the first quarter of 2017, and followed later in other regions.

As technologies become more automated and gain complexity, the services business is gaining in importance. New ways of servicing customers pre- and post-sales and new business models will also be needed in response to the increasing use of digitization in industries. Oerlikon continually strives to improve its focus on and create more value for customers.

#### **R&D** and innovation

In 2016, the Group continued to invest over 4% of its annual total sales in R&D, corresponding to CHF 94 million, and filed 67 patents worldwide. The innovation pipeline is fed by a dis-

Peer group of companies for benchmarking				
Aalberts	American Axle	Bodycote	BorgWarner	Carraro
Dana	GKN	Kennametal	Praxair	Sandvik
Tocalo				

tinctive research and scientific approach that targets customer needs and market potential. Through collaborations with academia and industry experts, Oerlikon's R&D aims contribute to the development of advanced science and technology projects.

Some examples of products introduced by Oerlikon in 2016: Under the Oerlikon Balzers' brand, the Surface Solutions Segment launched BALINIT FORMERA, a highly resilient coating for advanced high-strength steels, and BALINIT DIAMOND, coating products applied in the aerospace industry, and further expanded the BALIQ™ coating family for applications in the medical and aerospace industries.

Upgrades of filament spinning systems – WINGS POY® for better processing of high titers yarn and WINGS FDY PLUS® and its eco variant for a broader application window that gives more flexibility in the production of yarns – by the Manmade Fibers Segment. And, from Drive Systems Segment – a compact, smaller and lighter, yet still highly efficient electric drive system and an electronically controlled Limited Slip Differential (e-LSD) to enable the distribution of torque to rear wheels in a smooth and comfortable manner.

Oerlikon is building up its additive manufacturing business and has committed to build a state-of-the-art manufacturing facility in Michigan, USA. This facility is dedicated to producing advanced materials for metals-based additive manufacturing and high-end surface coatings and will house an R&D lab for further developments of titanium and other alloys and for joint R&D projects with customers.

#### **Operational excellence**

The Oerlikon Operational Excellence (OOE) program is centrally led by the Group Business Services function and focuses on three interrelated areas: world-class manufacturing, world-class procurement, and health, safety and environment (HSE). As the Group strives to achieve world-class performance in all three areas, its ongoing initiatives have been gaining traction, showing material results from improvements in efficiency and productivity in its production and supply chain processes.

Since its commencement, the Group's HSE program has led to significant reductions in accidents and the associated lost time accident frequency rates (LTAFR). All in all, Oerlikon's operational excellence programs contribute to improving the workplace for employees and to generating important cost savings for the Group.

#### World-class manufacturing

In 2016, the application of the Oerlikon operational excellence program to manufacturing processes has yielded meaningful efficiencies, cost savings and innovation. Achievements in 2016 include:

- Ten sites worldwide implemented value stream analysis projects and realized improvements in areas such as net working capital, throughput time and cross-functional communications. Training on operational excellence was started in the Surface Solutions Segment and will be continued in 2017. Due to the large number of sites worldwide, the Segment developed a project tracking tool to collect and keep track of the status of the implementation of all operational excellence ideas and projects. A large number of operational excellence ideas were generated by the management and workforce this year and will continue to be implemented over the coming years.
- At an Oerlikon Metco site in the Netherlands, two automated cell concepts were installed for the next generation engine programs Leap X and GTF.
- At Oerlikon Metco's sites in Hungary and the Netherlands, product data management (PDM) was implemented to improve efficiency, accuracy and support the paperless vision.
- For its automated cell concept, Oerlikon Metco's Eldim won the High Tech Branch 2016 award and the award for being the most innovative company of 2016 in the Netherlands from the independent National Business Success Award Institute.
- At the Manmade Fibers Segment in Remscheid, Germany, a software upgrade extended and improved existing communication and production processes.
- All sites from the Manmade Fibers and Drive Systems Segments are stably running shop floor management. Line managers use this central leadership tool to steer and guide

The future belongs to materials technologies that deliver more from less — more productivity, more performance and more possibilities. Advanced materials and surface engineering are re-defining what is possible by enhancing existing products with new shapes, superior properties and new functionalities. **Oerlikon is an unparalleled leader in developing advanced materials and surface solutions.** Our technologies and expertise in material processing and components engineering help drive, fly, build, power and dress the world — more efficiently and more durably. Today,

- half of the top ten auto manufacturers deploy our technologies to increase component lifetime and reduce fuel consumption
- all major jet engine companies trust our technologies to improve airplane turbine performance and reduce emissions
- 40 % of tool makers use our technologies to increase product longevity and
- over 50% of textile manufacturers use our technologies to produce clothes.

Our materials, coatings and equipment are successfully applied in a wide array of industries. With our commitment to innovation and engineering excellence, we will continue to set new and future standards for the development, manufacturing and performance of products.

### **Cost-effective alternative**

# Curbing car emissions with brake disc coatings

Brake wear is said to be responsible for 50% of car emissions, largely due to the particulate emissions produced during braking. Ceramic brake disks can reduce wear but are expensive. Steel brake disks that are specially coated are the ideal alternative. By reinforcing their durability, they can deliver the same benefit at a significantly reduced cost.

- employees, who in turn use it to address and resolve problems through an inclusive, bottom-up approach.
- Two-thirds of the blue-collar workers of the Drive Systems and Manmade Fibers Segments' operations and service teams worldwide were involved in continuous improvement activities. Besides having a dedicated person for operational excellence, they anchored the improvement process into the organization by defining team leaders, each leading a team of around ten workers, and their exact roles. With the help of a weekly meeting, they realized the teams' ideas for improvement directly on the shop floor.

#### **World-class supply chain management**

In 2016, Oerlikon continued to optimize its supply chain in order to benefit from higher operating efficiency, better use of resources and cost savings. The Group achieves this with a procurement harmonization program, which encompasses actions such as establishing closer partnerships with strategically selected suppliers, pooling purchasing, creating knowledge networks, utilizing advanced procurement tools and streamlining processes. The initiatives yielded for the Group total annual gross savings in millions of Swiss Francs for 2016 in the double-digit range despite the challenging market environment. The program is centrally coordinated and implemented across the Group, with clear strategic and financial objectives. Oerlikon also ensures that its suppliers meet high quality and sustainability standards. Other milestones achieved in 2016 include:

- Regional councils were established to leverage the local spend under management and to improve the collaboration between the Segments and the local sites.
- A surface solutions global procurement organization was formed and initiated. Following this, global workshops were held with participation from all procurement managers to define the common targets for 2016 and 2017.
- The online platform STEP (Savings Tracking Execution Platform) at the Surface Solutions Segment continued to track and coordinate savings management worldwide.
- Under the supply chain academy program, a total of 50 procurement staff from all regions were trained in 2016.

■ The global implementation of eProcurement continued to be maintained at the procurement excellence level. For the Manmade Fibers Segment, the electronic Procure-to-Pay (eP2P) is in operation at two plants in Germany, enabling functions such as automated purchasing with suppliers to be performed over a web-based system.

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#### **Health and Safety**

In 2016, Oerlikon continued to make occupational health and safety of employees a priority, with the vision of achieving "zero harm to people". Health and Safety remain an integral part of the Group's business processes, and initiatives such as Visual Safety Leadership continued to play a key role, whereby concretely defined measures were implemented to reduce accident figures and protect the health of employees. The improvement is reflected in the lost time accidents frequency rate (LTAFR), which stood at 0.39 compared with 0.51 in 2015, and 0.75 in 2014.

Health & Safety guidelines and monitoring are centrally coordinated, while the programs and processes are decentralized and implemented by the Segments and sites locally. Other milestones achieved in 2016 include:

- Through Oerlikon's second Global Health & Safety day, with the theme of "Drive Safe," employees were made aware that health and safety concerns extend beyond company locations and manufacturing facilities and include accident prevention while traveling to and from work and on business.
- A safety guideline was issued, specifying the controls necessary to minimize injury risk to operators and bystanders and to avoid property damage while using or in the vicinity of powered industrial trucks, such as forklifts.
- To improve and standardize real-time sharing of information on accidents and their follow-up, a Group-wide accident database was deployed.
- The Surface Solutions Segment implemented a new health and safety organization to provide support to the operational entities. Safe working procedures were implement-

### **Supporting recovery**

# Improving patient outcomes with surgical implant coatings

Medical implants can trigger inflammation or infection, and are often rejected by the recipient. Bone implants are a particular challenge as they typically do not fuse quickly enough, reducing the stability of the implant and slowing down a patient's healing process. Titanium implants coated with a silver-containing layer can prevent inflammation, stop the body from rejecting the implant and reduce the need for secondary operations. In addition, titanium bone implants can be given a mineral coating whose biocompatible, porous structure promotes bone growth and speeds up a stable connection between implant and bone.

### Saving 50 % of costs

# Coating turbochargers for maximum efficiency at a lower cost

For car manufacturers, turbochargers are instrumental in improving vehicle efficiency and cutting  ${\rm CO}_2$  emissions. Their performance can be considerably enhanced with coating solutions. Oerlikon's abradable coatings for clearance control increase efficiency and cut the cost in half compared to conventional coatings. This makes turbochargers attractively priced for the mass market.

#### More operating cycles

# Lengthening the service life of micro-tools

In the electronics and watchmaking industries, micro-tools are essential elements of the manufacturing process. After only 10 to 20 operating cycles, drills with a diameter of as little as 0.1 mm will become worn. Oerlikon's aluminium titanium nitride and aluminium chromium nitride coatings not only increase the precision of the drills but also lengthen the service life to up to 1000 operating cycles with the same tool.

ed, for example, for contractors' safety management and handling of cranes and hoist operations. The Segment also provided training, risk assessment updates and review of lessons learned on accidents and near-miss events. The coating center in Pune (India) won first prize in the small-scale category of the 5th Federation of Indian Chambers of Commerce & Industry's (FICCI) Safety Systems Excellence Awards for Manufacturing.

- Senior managers at the Manmade Fibers Segment participated in a seminar on the topics of legal obligations for health and safety and how to implement a health and safety strategy and culture.
- The Drive Systems Segment trained supervisors to focus on improving safety behavior, and a recognition program was implemented. Further investments were made in the lockout/tag-out (LOTO) equipment of its automatic manufacturing cells, far above legal requirements and industry standards.

#### **Environment**

Oerlikon further implemented measures in 2016 to reduce energy consumption and minimize the environmental impact of its global operations. In 2016, a new Health, Safety & Environmental Sustainability policy was validated and issued. This policy commits the Group to further strengthening its health and safety measures, as well as coordinating and advancing the Group's contribution to environmental sustainability alongside its long-term goals of sustaining profitable growth and value creation for all stakeholders. Other milestones achieved in 2016 include:

- The Surface Solutions Segment successfully passed the annual surveillance audit and obtained the ISO 14001 matrix certificate for 28 of its worldwide thin-film production and service sites.
- The Drive Systems Segment implemented a certified environmental management system in accordance with ISO 14001 in eight sites, and successfully passed the surveillance audits for these sites.

At Oerlikon, sustainability also means strengthening the Group's ability to provide customers with more sustainable products and services. A case in point is the high-tech coatings from the Surface Solutions Segment used in the jet engines of a fleet of A320 family of aircrafts results in daily savings of millions of liters of fuel and reduction of thousands of tons of carbon dioxide  $(CO_2)$  emissions.

#### **Employees**

Oerlikon employees are encouraged to behave according to the defined core values of Integrity, Team Spirit, Excellence and Innovation. Oerlikon aims to be a preferred employer for current and potential new employees. Apart from competitive pay and a modern HR policy, Oerlikon ran various HR programs in 2016:

- To foster diversity, the percentage of women at the Executive Committee (EC) level increased to 20% with the naming of Anna Ryzhova as Chief Human Resources Officer. The percentage of women among global leaders increased from 6% to 8% in 2016. Diversity in middle management trainings also went up, where 65% of the participants were non-European (versus 49% in 2015) and 17% were female (versus 6% in 2015).
- Development of the Group's leadership principles to foster a stronger leadership culture was initiated at the 2016 Global Leaders Meeting. The principles were pre-launched in December 2016 to the global leaders and the Group-wide launch is planned in 2017.
- The Group-wide HR team upgraded their skills through specialized trainings. Specifically, 26 were trained in talent acquisition, while 11 received training in talent calibration including succession management.
- The Surface Solutions and Drive Systems Segments launched training programs for sales and business development, with an emphasis on best practices, professional selling and strategic selling.

### 30% reduction

# Reducing oil consumption by reinventing cylinder surfaces

Car engines are becoming lighter, more efficient and more environmentally friendly, but they must run at high temperatures to burn fuel more efficiently, placing added stress on conventional engine parts. By applying a special coating to the cylinder bores, Oerlikon's surface technology reduces friction and makes them more heat-resistant. The result is a 30 % reduction in oil consumption and a fuel saving of around 2 %.

#### **Ensuring performance**

# Protecting turbine blades from erosive materials

Kaplan water turbines employ an adjustable propeller that allows the turbine to operate efficiently in various flow conditions. As the turbine blades are exposed to erosive materials such as sands, silts and gravels, turbine efficiency is reduced. The blades are also subjected to fluid erosion and cavitation. With Oerlikon's High Velocity Oxygen Fuel (HVOF) materials, the blades are protected, significantly extending the blades' service life while ensuring high turbine efficiency and maintaining the expected turbine power output.

### Reducing ocean pollutants

# Turning plastic waste into opportunity

The seas are overflowing with plastics. It is estimated that about 20% of these plastics could be reused sensibly, thereby eliminating a burdensome blight on the world's waterways. To reduce plastic waste being simply thrown away, Oerlikon's manmade fibers technologies offer a comprehensive solution, as part of its "from melt to yarn" strategy, for the recycling of plastic bottles, which are converted into granules and then into polyester yarns and fabrics. Through this solution, Oerlikon helps to conserve resources and decrease environmental waste.

- At the Manmade Fibers Segment, two programs were started, one for the development of an internal talent pool with 22 candidates (OMF+) and the other as an internal start-up working on futuristic projects for Industry 4.0.
- The Manmade Fibers Segment conducted a workshop with a German works council on "investing in our future" to involve the council in the transformation of the Segment at an early stage, resulting in valuable input from employees and the works council on suggested changes.
- At the Drive Systems Segment, selected employees were identified as potential influencers and change drivers, and were trained to lead culture change projects. The program was successfully rolled out in all regions and 290 employees completed it.

#### Risk management

Oerlikon takes a comprehensive approach to risk management that identifies, assesses and monitors all corporate risks relevant throughout the Group, including market, credit and operational risks. The risk management system is integrated throughout the company from an operational and management perspective. Further information on risk management can be found on pages 64 and 65.

#### Compliance

Business practices worldwide are conducted in line with Oerlikon's Code of Conduct, internal regulations, as well as legal and regulatory requirements. Compliance is monitored at Group level, where standards are set, preventive measures are recommended, and information, training and consultation are provided. Listed on the SIX Swiss Exchange (SIX), Oerlikon complies with the legal and regulatory requirements specified by SIX and the Swiss government. Further details on compliance can be found on page 65.

### Saving fuel

# Allowing jet engines to run hotter and longer

Aircraft engines need high temperature to work, subjecting the jet engine blades to incredibly high heat and pressures. Oerlikon's high-temperature ceramic abradable materials and thermal barrier materials are developed specifically to handle the heat and allow engines to run hotter and longer. In addition, Oerlikon offers specially designed cascading arc plasma spray guns and easy-to-use spray control systems to apply these materials at a lower processing time and cost. This is why Oerlikon is a preferred partner of many aircraft OEMs worldwide to develop ideal surfaces for the engines of today and tomorrow.

### **Maximizing durability**

# Protecting against vapor and other environmental attacks

Gas turbine components need to be able to withstand immense vapor, heat and pressure conditions to function efficiently. To maximize the benefits of these components manufactured from SiC-based CMCs (Ceramic Matrix Composites), Oerlikon coats them with EBC (Environmental Barrier Coating) systems. These carefully tailored materials ensure excellent thermal expansion and provide protection against vapor and other environmental attacks. This, in turn, maximizes the performance, reliability and durability of gas turbines.

### A clean print

# Ensuring precisely metered ink for clean prints

A messy and dirty print happens when ink is not precisely metered to the printing plate for flexographic printing. It is also costly, as it ruins the entire print run. To ensure the quality of the anilox rolls, plasma-sprayed chromium oxide is homogenously coated on them, ensuring successful laser engraving of the ink-metering cells while also protecting the anilox roll from the corrosive effects of the ink.

# Core sectors\*

#### **Automotive**

The size of the automotive sector addressed by Oerlikon is estimated at CHF 3.6 billion in 2016. That market grew at a slower pace in 2016, with some recovery in demand in China due to 2016 tax breaks, growth in most European markets, continued strength in the US but declining demand in Russia and Brazil. IHS Markit forecasted that the automotive light vehicle market will grow 2 to 3% over the next five years. Long-term growth drivers remain relevant include urbanization, a growing global middle class, an ever-greater need for mobility and environmental issues, and create demand for higher fuel efficiency, smaller engines and lower emissions.

All three of Oerlikon's Segments serve the automotive market but mainly by the Surface Solutions and Drive Systems Segments, where automotive market sales represented 24 % and 18 % of the Segment's sales, respectively.

Oerlikon Balzer's BALINIT coatings, used to coat parts and components such as gears, are present today in passenger cars of most leading brands worldwide. Whereas Oerlikon Metco's SUMEBore®, a thermal spray coating, is used to coat cylinder liners, brake discs and turbochargers. With fine dust reduction being part of the future environmental standard to be phased in from 2020 as part of the EU's tightened  $\rm CO_2$  regulation, the demand for coatings is expected to increase. In 2016, the Surface Solutions Segment launched coatings for friction systems used for hybrid technology cars.

### 3.6 billion

Targeted market size in 2016 (in CHF)

#### 3.8 billion

Targeted market size in 2017 (in CHF)

4.2%

CAGR 2017-2021

Automotive is a key end market for the Drive Systems Segment, which provides engineered gearing solutions, drive systems and planetary drives used in passenger and premium sports car brands, and in electric and hybrid vehicles. Oerlikon was a major contributor to defining IATF 16949:2016 – the new benchmark for one of the automotive industry's most widely used international quality management standards. In 2016, the Drive Systems Segment also presented several electric and hybrid drive concepts to meet the increasing demand in this market. Technical textiles used in vehicles, such as tire cords, air bags, seat belts, carpets and interior trim, are produced using technologies from the Manmade Fibers Segment.

### Aerospace

The aerospace sector targeted by Oerlikon was CHF 530 million in 2016, with an expected five-year compound annual growth rate (CAGR) of 3%. Demand in the commercial aircraft market has remained strong, even after several years of robust growth, as Airbus and Boeing continue to work off multi-year backlogs. According to the International Air Transport Association (IATA), airline profitability remained at record levels amid healthy growth trends in global air traffic and low oil prices. Airlines are actively replacing aging aircraft and upgrading to next-generation models with more efficient engines, achieved also through using lighter and more thermally resistant materials. The next-generation engine fleet is estimated to grow by over 25% through 2020.

The aviation sector is mainly addressed by the Surface Solutions Segment, and aviation-related sales in 2016 represented 13% of total Segment sales. Oerlikon coatings allow aviation components such as aircraft turbine blades and vanes to withstand harsh conditions, satisfy safety and environmental regulations and improve efficiency. In addition to engine components, the Group's products are used in engine pylons, landing gear, hydraulic systems and related tools. The increasing use of additive manufacturing for airframes and engine parts yields attractive opportunities for Oerlikon for its advanced materials and additive manufacturing services.

Oerlikon Metco delivers engine components used in aircrafts to the

## 530 million

Targeted market size in 2016 (in CHF)

#### 552 million

Targeted market size in 2017 (in CHF)

3.0%

CAGR 2017-2021

Leap-X program, and in 2016, it increased the share of its contributions in the program. It also added Safran Helicopter Engines as a customer. To support continued growth, two automated cell concepts were installed in the Oerlikon Metco plant in the Netherlands to serve next generation engine programs: Leap-X and GTF. Oerlikon Metco also continued to develop higher-temperature engine coatings such as coatings for the environmental barrier coatings (EBC) system used to protect ceramic matrix composites (CMCs) at temperatures up to 1300°C (2370°F). Oerlikon Balzers' BALINIT DIAMOND micro and nano coatings were also upgraded in 2016 to provide extra reliability and longer tool life for machining of materials such as carbon fiber reinforced plastics for aerospace.

<sup>&</sup>lt;sup>1</sup> Targeted market size is the size of the market addressed by Oerlikon in that specific sector.

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#### **Apparels & industrial textiles equipment**

The size of the apparel and industrial textiles equipment market addressed by Oerlikon in 2016 was estimated at CHF 1646 million. Accounting for 38% of this market is filaments equipment, which experienced an exceedingly difficult year in 2016 due to overcapacities and heightened by China's economic slowdown. However, toward the end of 2016, there were signs of renewed interest in investing in filament equipment, indicating that the bottom of the cycle was reached in 2016.

Over the longer term, the market is being driven by trends toward more eco-friendly and hard-wearing manmade fibers for apparel; technical textile applications for use in construction; and demand for carpet yarn – supported by underlying global trends such as population growth, urbanization and the expansion of the middle class in emerging countries such as China.

In 2016, the Manmade Fibers Segment strengthened its business in the other apparel and textile areas outside of filaments equipment. It acquired Trützschler's staple fibers technology portfolio, making it a leader in the global synthetic staple fibers market. It succeeded to expand its business in this market and its order book is well filled for the next few years. For the drawn textured yarn (DTY) market, the Segment launched a highly productive automatic texturing and compact, eAFK HQ®, which saves space while offering a 50% increase in

#### 1.65 billion

Targeted market size in 2016 (in CHF)

#### 1.61 billion

Targeted market size in 2017 (in CHF)

**5.9** %

CAGR 2017-2021

productivity. For the polycondensation market, the Segment's joint venture, Oerlikon Barmag Huitong Engineering, signed its first order for a 60 000-tons-per-year polycondensation system in China. Furthermore, new solutions were brought to the market for the production of technical yarns for tire cords (HLMS), seat belts and geotextiles. The Segment also improved its services for customers in this market with new orders to run maintenance workshops at customers' sites in India and China, and plans to launch new digital-based customer services such as the Intelligent Plant Control 4.0 (IPC 4.0).

### Agriculture

In 2016, the agricultural market addressed by Oerlikon was approximately CHF 2.5 billion and is expected to grow at a five-year CAGR of 1.6%. In the near term, the market has been challenged by the global farm recession due to declining commodity prices, the slowdown in China's economy, and low farmer confidence and incomes. Over the long term, agricultural output must expand significantly to support the world's growing population. This will lead to a demand for agricultural products and for equipment that is more productive, energy efficient, durable and cost-effective, driving demand for Oerlikon's solutions.

Agriculture is the largest market for Oerlikon's Drive Systems Segment, and contributed 34% to the Segment's total sales in 2016. The Segment has a significant market share in solutions for gearboxes, drives, brakes and other systems used in tractors, combines, harvesters and feed mixers.

With its sharpened strategic focus, the Drive Systems Segment recorded a slight increase in sales in 2016 in the agriculture market despite ongoing market weakness, by winning market share and new business in countries such as Turkey and India. The principal global manufacturers of premium tractors utilize Oerlikon Graziano's Shifting Solutions in dual-clutch transmissions (DCTs) and have access to a wide portfolio of products, from synchronizers to power shift clutches. Oerlikon Fairfield's Torque-Hub planetary drives are recognized as a leading brand

### 2.5 billion

Targeted market size in 2016 (in CHF)

#### 2.5 billion

Targeted market size in 2017 (in CHF)

1.6%

CAGR 2017-2021

in North America, and Oerlikon Fairfield now offers the Champion Series of hydrostatic drives, specifically designed for the requirements of modern, self-propelled spray tractors.

The Surface Solutions Segment also provides coating solutions to the agriculture market. For instance, Oerlikon Balzers' BALINIT C is a special coating that improves the wear resistance and efficiency of differential housings and bevel sets used in farming machinery. Oerlikon Metco's surface solutions provide reliable protection against corrosion and wear for the most stressed parts of agricultural machinery like harvester blades and other essential components.

#### **Industrial solutions**

The industrial solutions market served by Oerlikon encompasses tools, equipment, aftersales and precision components – and amounted to a market valued at approximately CHF 1.9 billion in 2016. While the sector has recently been affected by a flattening of industrial production in Europe and the US, long-term prospects are solid. The overall industrial solutions market is estimated to grow at a CAGR of 4% from 2016 to 2021. Key drivers of demand include the continuing industrial growth of countries such as China and India, as well as the requirements of customers for solutions that enhance the performance, durability and cost effectiveness of tools and precision components.

The Surface Solutions Segment generated 23 % and 33 % of its total sales in the general industries and in the tooling market, respectively. The general industries market is served under the Oerlikon Balzers and Oerlikon Metco competence brands. Oerlikon Metco's solutions are applied in industries such as metals processing, heavy machinery, medicine and electronics.

Under the Oerlikon Balzers' brand, a wide range of coatings for industrial solutions are offered by its BALINIT and BALIQ families. Each solution provides the type of hardness, strength, thickness/thinness, wear and friction protection, etc., tailored for the exacting specific industrial applications. In 2016, the Segment served over 30 000 customers in automotive and industrial solutions, and won new customers in China and the USA.

### 1.92 billion

Targeted market size in 2016 (in CHF)

#### 1.99 billion

Targeted market size in 2017 (in CHF)

4.0%

CAGR 2017-2021

In the tooling industry, the Segment's coating solutions help increase the productivity of tools, resulting in longer lifetimes and reduced maintenance. Despite the weakness of the tooling market, the Segment managed to outperform peers in 2016 and increase its market share in tooling services. To meet increasing demand for reconditioning of tools, it extended the service capacity at its regrinding centers in Argentina, China and India. The Segment also continued to invest in developing new and improved coating equipment such as INNOVENTA MEGA® – coating system for large production capacities, INGENIA S3p® – coating system for precise, small batch sizes and proprietary coatings with S3p (scalable pulsed power plasma) and BALINIT HARD CARBON – coating for machining of non-ferrous metals.

#### **Additive manufacturing**

Additive manufacturing (AM), the process of making 3D objects from digital models by depositing layers upon layers of metal or other material, will change how products will be designed, manufactured and distributed in the future. In 2016, the metal-based AM market is valued at approximately CHF 393 million and is estimated to reach CHF 1976 million by 2021 – a five-year CAGR of 38%.

AM stands before a breakthrough in industrialization as it delivers many advantages over traditional manufacturing, such as permitting complex designs and yielding components with higher performance and durability. AM also reduces product development time, enables rapid response to changing customer needs, raises manufacturing productivity and reduces waste. Given its significant benefits, Oerlikon expects to see demand for AM in aerospace, due to weight and safety benefits; medical devices, especially implants; power generation, driven by capacity investments; high-end automotive; and in a slowly recovering oil & gas market.

Oerlikon is a market leader with deep expertise in advanced materials, post processing surface solutions and engineering competencies. Combined with its global service network and strong customer relations in the above-mentioned industries, Oerlikon is well positioned to drive the industrialization of AM as an integrated service provider.

### 393 million

Targeted market size in 2016 (in CHF)

#### 612 million

Targeted market size in 2017 (in CHF)

38.1 %

CAGR 2017-2021

In 2016, Oerlikon acquired citim to complement its additive production capabilities in Europe and the USA. It is also building a state-of-the-art manufacturing facility in Michigan, USA, to produce advanced materials also for AM applications. In addition, Oerlikon is conducting an R&D project for a US energy company using AM technology in industrial gas turbine applications, and has launched a new thermal spray system platform that enables automated powder-fed AM and coating processes. Oerlikon joined America Makes and partnered with the Shanghai Additive Manufacturing Association to advance this technology and make it part of mainstream manufacturing.

#### Construction

Oerlikon addresses a CHF 2.2 billion segment of the construction machinery market, primarily through the Drive Systems Segment. That market is forecasted to grow at a five-year CAGR of 2.6%, in line with world GDP growth. In 2016, the knock-on effects of commodity market volatility and economic slowdown in China impacted the costs and investments in construction. Over the long term, increased mechanization in infrastructure coupled with growing population and urbanization are expected to drive market demand. Emerging trends, such as the increasing requirement for green construction to reduce the carbon footprint, building information systems for efficient building management, and using fiber-reinforced polymer composites for the rehabilitation of aging structures, will also dictate the technologies required in this sector.

The construction sector represented 25% of the Drive Systems Segment's total sales in 2016. The Segment serves key market players in this industry such as Caterpillar, one of the world's largest construction machinery companies. Its strengths include long years of experience in developing driveline solutions and its engineering competencies for hydraulic, mechanical and electric drive applications.

In 2016, the Segment partnered with Ashwoods Electric Motors Ltd. to develop a compact, high efficiency electric drive system, which consists of a planetary drive integrated with an electric motor. The current solutions used in off-highway vehicles com-

#### 2.2 billion

Targeted market size in 2016 (in CHF)

#### 2.3 billion

Targeted market size in 2017 (in CHF)

2.6% CAGR 2017-2021

monly utilize large, heavy and inefficient brushed DC or induction motors coupled to a planetary gearbox - and present a number of challenges to vehicle designers, such as limited vehicle range, limited space around the motor/drivetrain and motor durability. The new, integrated system uses an Oerlikon Torque Hub® planetary drive and Ashwoods' first-to-market Interior Permanent Magnet Motor. These products are integrated and incorporate a brake solution to eliminate redundant components.

#### **Energy**

The energy market served by Oerlikon is approximately CHF 2.5 billion, of which power generation contributes CHF 530 million and oil & gas & mining accounts for CHF 2 billion. Power generation has been stable in the near-term. Over the long term, it has good prospects driven largely by investments in distributed-power installations and the shift to alternative energy. The replacement of aging equipment with more energy efficient, environmentally compliant industrial gas turbine engines, and the gas turbine maintenance, repair and overhaul market, are especially promising factors for power generation. The oil & gas sector has been hurt by depressed energy prices, leading to reduced spending on exploration and production. The oil market saw the beginning of a slow recovery at the end of 2016, which is expected to continue in 2017, while prospects for long-term growth in natural gas as a fossil fuel remain strong. The mining sector was and is expected to stay under pressure.

In 2016, the energy sector contributed 7% of sales in the Surface Solutions Segment, and 6% of sales in the Drive Systems Segment.

Oerlikon's innovative coatings enable turbines, hydroelectric plants and drilling equipment to withstand extreme temperature, pressure and friction. Oerlikon Balzers' BALINIT coatings and heat treatment solutions help prevent wear in steam and wind turbine blades. Oerlikon Metco's surface solutions are essential

#### 2.5 billion

Targeted market size in 2016 (in CHF)

#### 2.6 billion

Targeted market size in 2017 (in CHF)

4.7%

CAGR 2017-2021

in turbine blades, and for valves, riser systems and blowout preventers used in oil and gas exploration. Oerlikon Metco is working closely with original equipment manufacturers in the power generation sector on tailored materials and advanced equipment technology (cascaded plasma) to achieve efficiency gains. The Drive Systems Segment technologies are mainly adopted in the oil & gas and mining sectors, such as gears and drives for mud and fracking pumps, marine winches, hoists and jack-up rigs.

# **Key markets by regions**

#### China

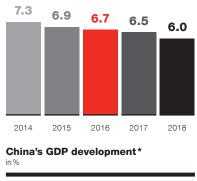
China's GDP grew 6.7% in 2016, down from 6.9% in 2015 and 7.3% in 2014. This deceleration was due in part to muted global economic growth but the abruptness of the slowdown is likely attributed to a cyclical correction, which typically follows a period of overheated economic growth. Facing high debt that was created to drive growth in previous years, China's policymakers have been making efforts to shift its economy away from its reliance on investment and industry toward domestic consumption and services. The renminbi depreciated modestly in 2016, falling by more than 4%, while inflation rose to 2.1%. Once the cycle turns and policy changes take effect, the outlook in China should improve. In 2016, Oerlikon generated 16% of Group sales in China, where it employed more than 1 450 people at 23 sites.

In 2016, the Surface Solutions Segment saw sturdy growth in China's tooling market in the second half of the year and also made good inroads in developing its business in the country's aerospace and power generation sectors. Currently, the Surface Solutions Segment generates 11% of its sales in China. To establish business opportunities for its additive manufacturing business, Oerlikon entered into a partnership with the Shanghai Additive Manufacturing Association.

China's development affected Oerlikon's 2016 performance due to China's dominant role in the filaments equipment business. Specifically, eight of the Manmade Fibers Segment's top ten customers are based in China. In 2016, the Manmade Fibers Segment generated over 38 % of its sales in China. However, Oerlikon

enjoys continued good standing and trusted relationships with key customers in China, and expects to benefit from this when the market turns around. Indications were noted toward the end of the year implying that the filaments equipment market have reached the bottom of the trough in 2016.

The Drive Systems Segment won business in China's commercial vehicle market with axles for low-floor city bus applications, and signed partnerships with leading automotive manufacturers for hybrids and e-drive systems. The Segment generated 6% of its 2016 sales in China.



\*Reported and estimated by the IMF.

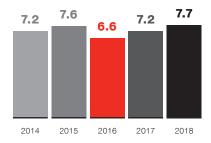
#### India

India's economic growth in 2016 was also affected by the subpar global economic development and the country's GDP grew 6.6%. According to the IMF, India benefited from an improvement in trade due to a decline in commodity prices, stronger external buffers and effective policy actions. However, ongoing efforts to enact structural and economic reforms were overshadowed late in the year by a move to demonetize India's high-value currency, a policy aimed at reducing corruption and strengthening the formal economy. Although demonetization is likely to be beneficial for the economy over the medium term, economic growth is expected to be adversely impacted at least through to the first quarter of 2017. The government is aiming for manufacturing to contribute 25% of GDP by 2025, up from 16% in 2015. In 2016, Oerlikon generated 7% of Group sales in India, where it employed more than 2800 people at 16 sites.

Oerlikon's operations in India are focused mainly on serving domestic customers. The Surface Solutions Segment, which operates a network of 10 service and production centers, extended its service offering for the automotive industry at its facility in Bangalore. In 2016, the Segment took advantage of the growing economy and further developed its coating business in the automotive, aerospace, power generation, oil & gas and general industrial sectors.

India's burgeoning textile industry continued to grow in importance for the Manmade Fibers Segment, which has been operating in the country for more than 30 years. In 2016, the Segment won additional long-term contracts to install and run maintenance workshops at customers' sites.

The Drive Systems Segment increased sales in the agriculture, construction and transportation sectors in India, fueled by the increase in local demand and for regional exports.



India's GDP development\*

<sup>\*</sup>Reported and estimated by the IMF.

#### Europe

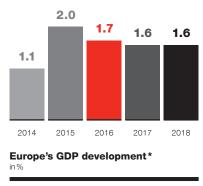
Europe grappled with economic and political uncertainty in 2016, with the UK's unexpected vote to leave the European Union and migrant issues playing dominant roles. These issues, combined with Europe's ongoing structural challenges, dampened economic growth and contributed to a flattening of industrial production, notwithstanding the continued low interest rate policy in the Euro Area. In Germany, Europe's biggest economy, real GDP grew 1.7% and is expected to decline to 1.5% in 2017, according to the IMF. France's GDP grew 1.3% and is forecasted to remain flat in 2017. Overall the Euro Area economic growth for the year was 1.7% and is projected by the IMF to decline to 1.6% in 2017. Europe accounted for 42% of Oerlikon's sales in 2016 and continued to serve as the base for the Group's global headquarters. Oerlikon employs in Europe at 84 sites more than 6800 employees, corresponding to nearly half of its global workforce.

In 2016, Oerlikon made a strategic investment in Germany for its additive manufacturing portfolio by acquiring citim GmbH, which will be a part of the Surface Solutions Segment. As a stamp of approval of its quality in the aviation sector, a Surface Solutions Segment's coating center in the UK received certification from Airbus. The Segment generates 47 % of its sales in Europe.

For its Manmade Fibers Segment, Oerlikon acquired the staple fibers technology portfolio of the German company Trützschler Nonwovens & Man-Made Fibers GmbH, in order to expand its offering, gain access to customers and solidify the Segment's position as a leader in synthetic staple fibers. In 2016, positive

demand for staple fibers was noted in Europe, and positive uptakes for bulked continuous filaments systems and services in Turkey. Europe accounted for 21% of the Manmade Fibers Segment's sales in 2016.

Italy remains the main hub for the Drive Systems Segment, where innovative solutions are developed for passenger, hybrid and electric vehicles as well as for customers in the agricultural, oil & gas, and construction sectors. Although all of its key sectors experienced lingering weakness in 2016, the Segment won new customers and incremental projects with existing customers in the European construction sector and increased sales revenues in its agriculture business in Europe. In total, the Segment generates 47% of its sales in Europe.



\*Reported and estimated by the IMF (Euro Area).

#### **North America**

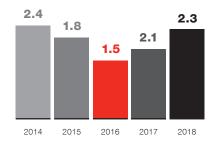
The US economy lost momentum in the early part of the year, with weakness in business fixed investment driven by a decrease in capital spending in the energy sector and financial market volatility. The UK's vote to leave the European Union drove up demand for an already strong US dollar, which climbed further following the November US presidential election, creating headwinds for export-oriented industries and the manufacturing sector. Full-year US GDP growth was 1.6% according to the IMF. Canada was also affected and its GDP grew 1.3% for the year. In 2016, Oerlikon generated 21% of its sales and employed more than 1750 people at 30 sites across North America.

Looking ahead, the IMF expects US GDP growth to rebound to  $2.3\,\%$  in 2017 and GDP growth in Canada is projected to increase to  $1.9\,\%$ .

The Surface Solutions Segment operates a network of 33 service and production centers in the Americas and is a major supplier to the US automotive, aerospace, energy and food sectors. The Segment is building a state-of-the-art manufacturing facility in Michigan, dedicated to producing advanced materials for additive manufacturing and high-end surface coatings. In June 2016, Oerlikon joined America Makes, the US National Additive Manufacturing (AM) Innovation Institute, to partner with other leading organizations in AM. The Surface Solutions Segment generates 19% of its sales in North America.

The Manmade Fibers Segment, based in North Carolina and Georgia, mainly supplies manufacturers of bulked continuous filaments (BCF) used in carpet production, and benefited from renewed BCF market demand. North America accounted for 12% of the Segment's sales in 2016.

The Drive Systems Segment, based in Indiana, develops and manufactures drives and transmissions for the agriculture, construction, oil & gas and mining sectors, and expects to benefit from the recovery in US end markets. In 2016, the Drive Systems Segment generated 33 % of its sales in North America.



North America's GDP development\*

<sup>\*</sup>Reported and estimated by the IMF (Canada & USA).

# **Serving our customers locally**



Oerlikon has a strong global footprint with over 180 sites in 37 countries. The Group is strongly committed to research and development, which is reflected by its 55 production and R&D sites worldwide. Together with its sales and services network of more than 175 sites, Oerlikon operates in close proximity to its customers, improving customer interaction, response times and satisfaction.



# 182 sites globally

38 in the Americas

60 in Asia

84 in Europe

# 177 sales and services sites

150 Surface Solutions Segment

12 Manmade Fibers Segment

15 Drive Systems Segment

# 55 production and R&D sites

38 Surface Solutions Segment

5 Manmade Fibers Segment

12 Drive Systems Segment

- O Production and R&D sites
- New sites in 2016 (incl. production)
- Other Oerlikon sites (incl. production)
- o Partners (distributors, representatives)

# **Group business review**

Oerlikon delivered a good performance for the full year of 2016 in the challenging market environment and in line with the guidance it provided. The Group's results were boosted by a strong closing in the fourth quarter, during which a noticeable increase in sales and orders were recorded. The Group also succeeded in protecting its operating profitability and market leadership position despite weak end markets caused by geopolitical and macroeconomic developments.

In 2016, Oerlikon executed the first steps in its transformation to become a global powerhouse in surface solutions and advanced materials and to position the company in markets characterized by attractive structural growth. Organizationally, the Group headquarters and the Surface Solutions Segment were merged, making the company leaner, more market-oriented and more focused on its surface solutions business. Strategically, Oerlikon successfully closed the sale of the vacuum business to Atlas Copco for an enterprise value of CHF 525 million, increasing funds and resources to invest in core businesses.

Reflecting the developments in the end markets, the full-year Oerlikon Group order intake in 2016 was CHF 2413 million (including a positive currency impact of 1.2%) versus CHF 2537 million in 2015, a decrease of 4.9%, although order backlog increased by 3.7% to CHF 447 million at year-end 2016, compared with CHF 431 million at year-end 2015. Group sales were CHF 2331 million in 2016 (including a positive currency impact of 1.2%), or 12.7% lower than the 2015 figure of CHF 2671 million. As the Group increased its customer focus, the Group improved the ratio of Group service sales to 36.6% of total Group sales (2015: 33.6%).

Oerlikon Group progressively improved its operating profitability each quarter in 2016, as measured both by EBITDA and EBIT. Despite demanding market conditions, Oerlikon achieved for the full year a resilient EBITDA margin of 14.3%, corresponding to an EBITDA of CHF 334 million (including restructuring and pension adjustments totaling CHF 19 million). That compares with reported EBITDA of CHF 338 million (including restructuring adjustments of CHF -112 million), or an EBITDA margin of 12.7% in 2015. Full-year 2016 Group EBIT was CHF 158 million (including restructuring, pension and impairment adjustments totaling CHF 18 million), yielding a margin of 6.8%. EBIT for 2015 was CHF -306 million in 2015 (including restructuring and impairment adjustments of CHF -588 million), or minus 11.4% of sales.

Oerlikon Group returned to net profitability in 2016, with a net result of CHF 388 million. This translates to underlying earnings per share of CHF 1.14. In 2015, the Group reported a loss of CHF 418 million (including impairments, restructuring costs, amortization of acquired intangibles from Metco, net of tax and results from discontinued operations totaling CHF -625 million) or a loss of CHF 1.24 per share. The tax expense for 2016 was CHF 53 million, while in 2015, it was CHF 63 million.

Cash flow from operating activities before changes in net current assets remained strong at CHF 269 million in 2016 compared with CHF 393 million in 2015. The Group's return on

capital employed (ROCE) was  $5.7\,\%$  in 2016. In 2015, the Group's ROCE was -19.8 %.

#### **Performance in the Segments**

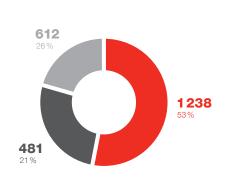
The Surface Solutions Segment, Oerlikon's largest segment as measured by sales and profit contribution, continued to perform well in 2016 in the difficult market environment. Its performance underscores its pivotal role in the Group and offers further validation of the strategy. The Segment's order intake remained strong in 2016 at CHF 1 236 million (including a positive currency impact of 1.3%) compared to CHF 1 233 million in 2015, as did the order backlog of CHF 80 million, which was around the same level as the CHF 81 million in the previous year. The Segment's sales increased slightly by 0.7% in 2016 to CHF 1 238 million (including a positive currency impact of 1.4%), and contributed 53% to total Oerlikon sales. In 2015, sales stood at CHF 1 229 million, or 46% of total Oerlikon sales.

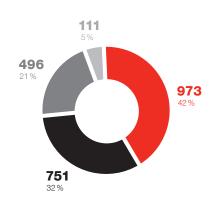
Continuing its profitable growth trend, the Surface Solutions Segment achieved an EBITDA margin of 21.6% in the fourth quarter of 2016, making a total of nine consecutive quarters where the Segment had an EBITDA margin of over 20%. For the full year 2016, EBITDA for the Segment increased 4.9% to CHF 277 million (including restructuring and pension adjustments totaling CHF 9 million), and yield an EBITDA margin of 22.2%. In 2015, the Segment's EBITDA was CHF 264 million (including restructuring adjustment of CHF -2 million) and the EBITDA margin was 21.4%. In 2016 and 2015 respectively, the Surface Solutions Segment represented 83 % and 78 % of total Oerlikon EBITDA. The Segment's EBIT in 2016 increased 2.5 % to CHF 161 million (including restructuring, pension and impairment adjustments totaling CHF 8), or 13.0 % of Segment sales, compared with CHF 157 million (including restructuring adjustments of CHF -2 million), or 12.7 % of Segment sales, in 2015.

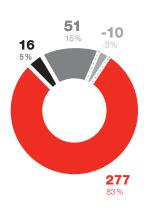
In 2016, the Segment continued to invest in technologies and customer services, while building up new business such as additive manufacturing (AM). It opened new sites in South Korea and expanded an automotive competence center in India. It acquired DMX SAS in France, a specialist in Physical Vapor Deposition (PVD) coatings for forming tools and precision medical implants and components, to strengthen its technology and market position in the French coating market. Additionally, the Segment took important strides in 2016 in the emerging additive manufacturing market, with the intent to play a leading role in the industrialization of that market. It acquired citim GmbH, a leader in additive manufacturing design and production of metal components, to add additive production expertise and capabilities to its portfolio. The Segment is also building a new state-of-the-art manufacturing facility in the USA to produce advanced materials for additive manufacturing and high-end surface coatings.

In 2016, the Manmade Fibers Segment continued to be impacted by the prevailing overcapacity in the filaments equipment market. China's 13th 5-year plan (2016–2020) depicted a 2-year consolidation period, and the Segment is currently in the midst of this period. The oversupply and resulting negative investment trend strongly affected the Segment's performance in 2016.









#### Sales 2016 by Segment<sup>1</sup>

in CHF million

- Surface Solutions Segment
- Manmade Fibers Segment Drive Systems Segment

<sup>1</sup> Continuing operations.

#### Sales 2016 by region<sup>1</sup>

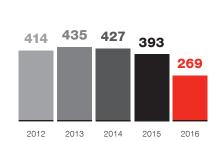
in CHF million

- Europe
- Asia Pacific
- North America Other regions
- <sup>1</sup> Continuing operations.

### EBITDA 2016 by Segment<sup>1</sup>

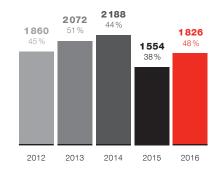
in CHF million

- Surface Solutions Segment
- Manmade Fibers Segment
- Drive Systems Segment
- Others
- <sup>1</sup> Continuing operations.



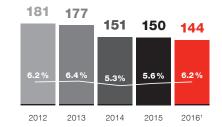
#### Operating cash flow<sup>1</sup>

in CHF million



### Equity<sup>1</sup>

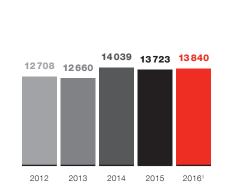
in CHF million (as % of assets)



#### **Capital expenditure**

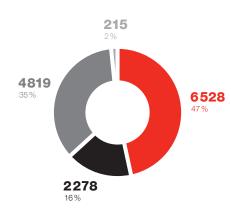
in CHF million

- In % of sales.
- <sup>1</sup> Continuing operations.



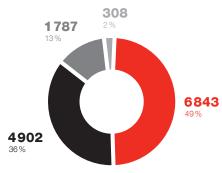
### **Employees**

<sup>1</sup> Continuing operations.



#### Employees 2016 by Segment<sup>1</sup>

- Surface Solutions Segment
- Manmade Fibers Segment ■ Drive Systems Segment
- Other
- <sup>1</sup> Continuing operations



#### Employees 2016 by region<sup>1</sup>

- Europe (EMEA)
- Asia Pacific
- North America Other regions
- <sup>1</sup> Continuing operations

<sup>&</sup>lt;sup>1</sup> Before changes in net current assets.

<sup>&</sup>lt;sup>1</sup> Attributable to shareholders of the parent.

However, toward the end of 2016, the Segment saw positive development in order intake and order backlogs, confirming that the bottom of its trough was reached in 2016.

Segment order intake for full year 2016 was CHF 577 million (including a positive currency impact of 0.9%), a decrease of 21.3% from CHF 733 million in 2015. In contrast, Segment order backlog increased 13.9% to CHF 270 million at year-end 2016 versus CHF 237 million at year-end 2015. Sales declined 39.4% in 2016 to CHF 481 million (including a positive currency impact of 0.7%) versus CHF 794 million in 2015.

Considering the significantly lower top lines, the Segment managed to deliver positive operating profitability as it reduced its cost base through restructuring. Segment EBITDA amounted to CHF 16 million in 2016 (including restructuring adjustments of CHF 3 million), or 3.3% of sales, versus CHF 85 million in 2015 (including restructuring adjustments of CHF -43 million), or 10.6% of sales. EBIT in 2016 was CHF -3 million (including restructuring adjustments of CHF 3 million), or -0.6% of sales. In 2015, EBIT was CHF 67 million (including restructuring adjustments of CHF -43 million) and the margin: 8.4%.

To mitigate the impacts from the down cycle, the Segment further diversified its focus by developing its business in texturing, bulked continuous filaments (BCF), polymer processing and staple fibers, and in regional markets outside of China such as India, Turkey and USA. The Segment acquired the staple fibers technology portfolio from Trützschler, making it a leader in the synthetic staple fibers market. In 2016, the Segment's joint venture, Oerlikon Barmag Huitong Engineering, recorded its first sale of a polycondensation system.

In 2016, all of the Drive Systems Segment's end markets continued to be under pressure. Continued volatility in commodity prices and sluggish economic development resulted in equipment investments being kept on hold. The agriculture, construction, energy and mining sectors remained weak, although there are first indications that the trough in the oil & gas sector has been reached and the start of a slow recovery could be expected. Due to market developments, Segment recorded lower sales in 2016. However, the Segment's strategic reshaping of its product portfolio has led to initial positive results. The Segment managed to increase its order intake year-on-year by winning customers and projects, such as in the US and European construction and transportation sectors, in the public transportation sector in China and in the agriculture market in India.

Segment order intake increased 5.1% in 2016 to CHF 600 million (including a positive currency impact of 1.4%) compared to CHF 571 million in 2015, while order backlog declined 14.2% to CHF 97 million from CHF 113 million in 2015. Segment sales totaled CHF 612 million in 2016 (including a positive currency impact of 1.4%), a 5.6% decrease from CHF 648 million in 2015.

Thanks to the consistent execution of restructuring and process optimization measures, the Segment succeeded in delivering a significantly improved EBITDA, amounting to CHF 51 million (in-

cluding restructuring adjustments of CHF 5 million), or 8.4% of sales. In 2015, the EBITDA was CHF -19 million (including restructuring adjustments of CHF -68 million), and the margin was -3.0%. 2016 EBIT stood at CHF 12 million (including restructuring adjustments of CHF 5 million), or 2.0% of sales. In 2015, EBIT was CHF -534 million (including restructuring and impairment adjustments of CHF -544 million) and the margin was -82.3%.

To support customers in agriculture and construction, the Segment appointed new distributor partners in France, Brazil and the Gulf Region. To strengthen its position as a provider of solution/engineered products, it acquired the remaining shares of its UK-based Vocis subsidiary, an engineering firm providing transmission controls technology and developing new driveline controls. To extend the reach of key products to adjacent industries, the Segment introduced its fuel-consumption saving hybrid electric technologies for off-highway vehicles. It also made some targeted strategic partnerships and joint ventures, including for the Chinese mass transportation market and with customers in the areas of e-axles, e-drives and electronically controlled differentials.

#### A globally balanced business

Maintaining a portfolio of market and technology leading technologies, a global presence and comprehensive services is an important aspect of the Oerlikon strategy. By Segment - the Surface Solutions Segment contributed 53% to total Group sales in 2016, the Manmade Fibers Segment accounted for 21% of Group sales, and the Drive Systems Segment represented 26% of Group sales. As an international company with a strong global footprint, Oerlikon operates over 180 sites in 37 countries. In 2016, Europe accounted for the largest proportion of Group sales, with CHF 973 million or 42% of Group sales, versus CHF 1 023 million, or 38 % of Group sales, in 2015. Asia Pacific remained the second largest regional contributor to Group sales, despite the substantial decline in sales in China by the Manmade Fibers Segment. In total, the Group's sales in Asia Pacific totaled CHF 751 million in 2016, or 32 % of sales, compared with CHF 1007 million or 38% of Group sales in 2015. Group sales in North America totaled CHF 496 million in 2016, which is 21 % of Group sales, in 2016 – a decline of 5 % versus CHF 520 million, which represented 19% of Group sales in 2015. Sales in other regions in 2016 accounted for 5% of Group sales at CHF 111 million.

# Increased balance sheet strength with equity ratio of

As of December 31, 2016, Oerlikon's balance sheet totaled CHF 3825 million, compared to CHF 4097 million at year-end 2015. The Oerlikon Group had equity (attributable to shareholders of the parent) of CHF 1826 million, representing an equity ratio of 48%, compared to CHF 1554 million and an equity ratio of 38% at December 31, 2015. The year-on-year decrease in the total balance sheet and the strong equity ratio primarily reflected the impacts from the closed strategic divestment of the Vacuum Segment in 2016, while the equity ratio was also attributable to the reduced current liabilities. Net cash amounted to CHF 401 million at year-end 2016, compared with CHF 79 million at December 31, 2015.

In December 2016, Oerlikon obtained a new, unsecured syndicated revolving credit facility amounting to CHF 600 million, consisting of a revolving credit facility and an ancillary credit facility with a five-year term and two optional one-year extensions. The new facility improves Oerlikon's financial flexibility and will reduce the company's annual financing costs by approximately CHF 0.5 million. Underscoring the continued financial strength of Oerlikon, both the pricing and the terms and conditions are in line with syndicated loan market standards for investment-grade companies. The new credit facility replaced the existing credit facility that was due to expire in July 2017.

#### Continued strong operating cash flow

Cash flow from operating activities before changes in net current assets remained strong at CHF 269 million compared with CHF 393 million in 2015. Net working capital, defined as trade and trade notes receivables plus inventories minus trade payables and current customer advances, amounted to CHF 316 million, corresponding to 14% of Group sales in 2016, versus CHF 391 million, or 15% of Group sales, in 2015.

Disciplined investment and use of cash continued to be Oerlikon's top priorities. Capital expenditure (CAPEX) amounted to CHF 144 million, compared to CHF 150 million in 2015. Excluding amortization of acquired intangible assets, the CAPEX-to-depreciation ratio was 1.01 times, with the Group's target continuing to be between 1.0 to 1.2 times. Among the significant capital expenditures in 2016 were: the new sales and production sites in South Korea and the expanded automotive center for the Surface Solutions Segment, and extending production facilities for the Drive Systems Segment.

Cash flow from investing activities amounted to CHF 57 million, mainly attributable to proceeds from sale of vacuum business less capital expenditure and short-term deposits investments, compared with minus CHF 107 million in 2015. Cash flow from financing activities amounted to minus CHF 448 million, primarily reflecting the dividend payments of CHF 104 million, repayment of financial debt of CHF 301 million and interest paid of CHF 38 million. This compares with minus CHF 142 million in 2015, primarily reflecting the dividend payments of CHF 105 million and interest paid of CHF 41 million. Primarily reflecting the Group's operating cash flow, Oerlikon reported a cash and cash-equivalent position at the end of 2016 of CHF 751 million compared to CHF 851 million for 2015.

Oerlikon continued to invest around 4% of its revenues in research and development (R&D). In 2016, R&D expenditures were CHF 94 million, or 4.0% of Group sales, compared to CHF 103 million, or 3.9% of Group sales, in 2015.

Oerlikon believes that dividend payout is an important mean of returning value to shareholders. Accordingly, at the Annual General Meeting (AGM) of Shareholders, taking place on April 11, 2017, the Board of Directors will propose a dividend payout of CHF 0.30 per share, maintaining the same level of payout as in the prior year.

#### 2016 key Group figures at a glance

- Order intake totaled CHF 2413 million versus CHF 2537 million in 2015, a decline of 4.9%.
- Order backlog increased 3.7 % in 2016 to CHF 447 million versus CHF 431 million in 2015.
- Sales decreased 12.7 % to CHF 2331 million from CHF 2671 million in 2015.
- EBITDA was CHF 334 million, or 14.3 % of sales, versus CHF 338 million in 2015, or 12.7 % of sales.
- EBIT was CHF 158 million, or 6.8% of sales. EBIT for 2015 was CHF -306 million.
- The result from continuing operations was CHF 82 million. In 2015, it was CHF -402 million.
- Oerlikon returned to net profitability with net result of CHF 388 million, representing earnings per share of CHF 1.14.
- Headcount totaled 13840 compared with 13723 employees worldwide in 2015.
- ROCE stood at 5.7 %, compared with -19.8 % in 2015.
- The Board of Directors will propose at the 2017 AGM a dividend payout of CHF 0.30 per share, maintaining the same level of payout as in 2015.

# **Surface Solutions Segment**

**Order intake** amounted to CHF 1236 million

**Sales** came in at CHF 1238 million

The merging of Group HQ and the Surface Solutions Segment led to a more streamlined organizational structure to accelerate decision-making and drive business growth.

The Segment gained additive production capabilities with the citim acquisition, enabling it to offer a full suite of integrated additive manufacturing services from design to post processing.

**EBITDA margin** stood at 22.2 %

To strengthen its position in additive manufacturing, the Segment joined America Makes and partnered with the Shanghai Additive Manufacturing Association.

To reinforce its advanced materials portfolio, a state-of-the-art manufacturing facility in Michigan, USA, will be built to produce materials for additive manufacturing and high-end thermal spray applications.

Bringing services closer to customers, the Segment added coating service centers in **Korea and India**, and opened its first regrinding center in **Argentina** and its third in **China**.

Coating innovations launched in 2016 include Oerlikon Balzers' BALITHERM IONIT ST and BALINIT FORMERA – to extend wear and service life of automotive applications.

### **Key figures**

2016	2015	Δ%
1236	1233	0.2%
80	81	-1.2 %
1238	1229	0.7%
277	264	4.9%
22.2%	21.4%	_
161	157	2.5 %
13.0%	12.7 %	_
69	70	-1.4%
	1236 80 1238 277 22.2% 161 13.0%	1236 1233 80 81 1238 1229 277 264 22.2% 21.4% 161 157 13.0% 12.7%

#### **Profile**

The Surface Solutions Segment represents the focal point of the Group's strategy to become a global powerhouse in surface solutions, advanced materials and materials processing. Through its brands Oerlikon Balzers and Oerlikon Metco, the Segment has around 80 years of experience in developing engineered surface solutions for components and tools used in multiple industrial applications where superior surface mechanisms are required.

The Segment serves customers in close proximity and operates one of the most extensive global networks, consisting of over 145 service and production centers among some 150 sites, spread across 37 countries and supported by more than 6500 employees.

#### **Markets**

The Surface Solutions Segment targets a combined addressable market of about CHF 5.8 billion in 2016. The Segment's most important markets are automotive, aerospace, general industries (tooling) and energy. The Segment's surface solutions include materials such as abradables and ceramics; coatings and coating equipment; services and specialized components; and physical vapor deposition (PVD) coating, nitriding and friction systems for automobiles. The Segment also serves the rapidly growing additive manufacturing market.

With the exception of general industries, the Segment faced a conservative investment approach in its end markets in 2016. Oerlikon Balzers holds a market-leading position in industrial solutions (tools) and in 2016 served more than 30 000 customers from the automotive and general industrial markets, which accounted for 48 % of its sales. Oerlikon Metco is one of the largest players in thermal spray equipment and materials and is uniquely positioned in the aerospace and industrial gas turbine markets, offering coating products, services and components. In the automotive sector, the Segment's friction systems are a technology leader and its PVD coatings enjoy a strong market position in gasoline direct injection (GDI) plungers and piston pins. Europe accounted for nearly half of the Segment's sales, followed by Asia (29 %) and the North America (19 %).

Over the next five years, the Segment's addressable market is forecast to grow at a compound annual growth rate of 7 %, reaching CHF 8.3 billion in 2021, also supported by the expected slow recovery in the oil & gas market. Demand for next generation turbines and landing gears in the aerospace industry,  $\rm CO_2$  emission programs in the automotive industry and precision components across a range of end markets are expected to drive healthy demand for coating technologies. In addition, the Segment's additive manufacturing business is projected to grow as a result of the ever-increasing need for stronger performance, new material properties that reduce weight and costs, and greater sustainability. In the coming years, sales of materials and services for additive manufacturing are expected to outgrow the underlying end-user industries by significant margins.

#### **Key developments**

An important move in 2016 was the organizational development with the goal to create a stronger market and customer focus in the business. The integration of the Group's head-quarters and the Surface Solutions Segment into a single organization was an important milestone supporting this development. The simpler and more agile structure will help to accelerate decision-making and increase business relevance.

To strengthen its technology and market position in the French coating market and gain further complementary competences for the medical market, the Segment acquired DMX SAS, a specialist in Physical Vapor Deposition (PVD) coatings for forming tools and precision medical implants and components based in France.

The Segment also opened a new sales and a coating center in South Korea, and expanded an automotive competence center in India to serve customers in close proximity. It also opened its first regrinding center in Argentina and its third in China. The Oerlikon Metco facility in the US successfully added capabilities and expertise for the oil & gas sector.

In 2016, the Segment introduced a number of new innovative technologies. For example, under the Oerlikon Balzers' brand, BALINIT FORMERA, a highly resilient coating for advanced high strength steels that provides great abrasive wear protection and can increase efficiency by up to 680 % more than comparable coatings; further expansion of the BALIQ coating family with applications in the medical and aerospace industries; and BALITHERM IONIT ST, a specialized coating for automotive that extends wear and service life by hardening rust and acid-resistant steels. It also launched a new powder feeder – Twin 150 pro® – and new alloy materials for additive manufacturing. Additionally, the Segment introduced a new diamond product line for aerographite applications and carbon fiber reinforced plastic (CFRP) cutting.

To strengthen its offering in additive manufacturing, the Segment acquired citim GmbH of Germany, a leading company in additive manufacturing design and production of metal components. In addition, the Segment is building a state-of-the-art manufacturing facility in Michigan, USA, to produce advanced materials, such as titanium alloys, for the additive manufacturing market and other high-end thermal spray powders. Fostering a closer working relationship with industry leaders and experts in additive manufacturing, Oerlikon is partnering with America Makes and the Shanghai Additive Manufacturing Association to develop the business in the respective markets.

# **Manmade Fibers Segment**

**Order intake** amounted to CHF 577 million

**Sales** came in at CHF 481 million

EBITDA margin

stood at 3.3%

Introduced a **new custom- er service** at ITMA Asia – **Intelligent Plant Control 4.0** (IPC 4.0), which provides customers with on-the-move real-time connectivity to technical and service experts worldwide via a device like the Microsoft HoloLens.

Improved customer services and signed new long-term contracts to run maintenance workshops at customers' sites in India and China.

The joint venture Oerlikon
Barmag Huitong Engineering
signed its first order for
a 60 000-tons-per-year
polycondensation system for the production of
manmade fibers.

Strengthened staple fibers portfolio with the acquisition of Trützschler's synthetic staple fibers technology.

Expanded WINGS product family with **WINGS FDY PLUS eco** and **WINGS POY HD** for processing high yarn titers and **eAFK HQ** – one of the world's most productive automatic texturing machines with the smallest space requirements in the DTY (texturing) market.

Increased diversification and developed non-filament equipment businesses such as in texturing (DTY), staple fibers, polymers processing and bulked continuous filaments (carpets).

#### **Key figures**

in CHF million	2016	2015	Δ%
Order intake	577	733	-21.3%
Order backlog	270		13.9%
Sales (third parties)	481	794	-39.4%
EBITDA	16	85	-81.2%
- as % of sales	3.3%	10.6%	
EBIT	-3	67	<-100.0%
- as % of sales	-0.6%	8.4%	
Research and development expenses	19	24	-20.8 %

#### **Profile**

The Manmade Fibers Segment, with its Oerlikon Barmag and Oerlikon Neumag brands, is a world market leader for solutions used in the manufacture of manmade fibers. In 2016, it employed more than 2200 employees at 13 sites worldwide. Synthetic fibers are processed into functional clothing, carpets and furnishings, and also into technical textiles for airbags and safety belts, as well as into geotextiles for road construction and other industrial applications.

Oerlikon Manmade Fibers Segment's extensive range of products and applications include manmade fibers filament spinning systems, texturing machines, bulked continuous filament (BCF) systems, staple fibers systems, nonwovens and artificial turf systems. Through the joint venture Oerlikon Barmag Huitong Engineering, the company offers customers access to the entire process of polycondensation systems – from the monomer all the way through to the textured yarn.

The Oerlikon Manmade Fibers Segment is deeply committed to customer service. Its international service network offers engineering solutions for the entire textile value-added chain and comprehensive service packages along the whole product life cycle. The Segment's research and development efforts embrace energy-efficiency and sustainable technologies. It currently has 27 research partnerships with universities and associations.

#### Market

Oerlikon Barmag holds the leading technology and market position in the textile filament equipment market, with a 45 % market share in 2016. Eight of the Segment's top ten customers are based in China, which accounts for the majority of sales. The Segment's strong exposure to the filaments equipment market and the prevailing overcapacity in that business – heightened by the economic slowdown in China – significantly impacted its performance in 2016. However, toward the end of the year, there were signs that shelved investment plans were being resurrected, indicating that the bottom of the cycle was reached in 2016.

Oerlikon Neumag's core competency is high-tech production systems for the manufacturing of BCF used in carpet yarns, synthetic staple fibers and nonwoven fabrics. The USA, Turkey and China are its primary markets, where the brand maintains a strong position.

The size of the targeted market for the Manmade Fibers Segment was valued at around CHF 1.65 billion in 2016, and a 5 % CAGR over the next five years is forecasted. Several drivers are expected to fuel growth in the medium term, for example, the Segment's entry into new, growing markets for technical textiles (geotextiles). The Segment also aims to grow its market share in staple fibers and foresees opportunities in polycondensation, where the Segment is uniquely positioned to provide end-to-end solutions and project management services. In addition, the Segment plans to continue improving its customer services also by delivering new digital services.

#### **Key developments**

In 2016, the Segment continued to reinforce its foundation while facing the down cycle of the filaments equipment market. It further built up its market presence in businesses outside of filaments equipment and improved its customer services. In addition, the Segment effectively reduced its cost base through restructuring measures such as volunteer programs at its sites in Germany, shorter work weeks and a reduction of full-time equivalent employees through temporary work worldwide.

To strengthen its position in the staple fibers market, Oerlikon acquired the entire staple fibers technology portfolio of Trützschler in 2016, making the Segment a leader in the global synthetic staple fibers market. The Segment succeeded in establishing an even stronger foothold in this market in 2016 and has a well-filled order book for the next years.

For the drawn textured yarn (DTY) market, the Segment launched a highly productive automatic texturing and space saving machine, eAFK HQ, which saves space and offers a 50% increase in productivity.

In the polycondensation market, the joint venture Oerlikon Barmag Huitong Engineering, signed its first order for a 60 000-tons-per-year polycondensation system in China, despite the conservative investment climate caused by the economic deceleration. The system will be commissioned in Jiangsu province in the second half of 2017 and can allow the customer to produce differentiated yarns – from bright, dull or semi-dull yarns to special flame-retardant, high-shrinkage or water-soluble polyesters, or to process polyethylene terephthalate (PET) and polytrimethylene terephthalate (PET).

At the ITMA Asia + CITME trade fair in 2016, the Segment showcased numerous innovations. In line with its digitization initiatives, it presented its updated Plant Operation Center (POC) 4.0 with new features such as wipe management, ERP connections and visual inspections and the predictive maintenance concept IPC 4.0 (Intelligent Plant Control) using Microsoft's HoloLens. It also showed upgrades of several of its filament spinning systems from its WINGS family: WINGS POY HD - for better processing of high titers yarn (yarn of thick density); WINGS FDY PLUS and its eco variant - both offering a broader application window that gives more flexibility in the production of yarns used to manufacture textiles that do not require finishing; and WINGS FDY SD and WINGS FDY BR - "specialist" systems for yarn that are of semidull and trilobal bright luster (glossiness). Furthermore, it introduced new multifunctional forming tables and a FAUS operating unit system, which require smaller footprints while still delivering higher reliability for nonwoven meltblown systems.

# **Drive Systems Segment**

**Order intake** amounted to CHF 600 million

**Sales** came in at CHF 612 million

**EBITDA margin** stood at 8.4%

Co-presented with
Ashwoods an ultracompact electric drive solution for off-highway vehicles that is up to 70 % smaller and lighter and yet 20 % more efficient than traditional solutions.

Partnering with **Kenway** to develop and sell inverted portal axles for low-floor city buses in China to offer the public easier and quicker access to the buses.

Unveiled an innovative single-speed transmission product for battery electric vehicles that is compact and optimized for weight and that can provide a maximum input torque of 270 nm and max input speed of 14000 rpm.

**Expanded its plant in Sanand, India,** for the production of differential units for a North American car manufacturer.

Introduced a new patented front-wheel-drive hybrid transmission technology concept that can reduce component costs, improve acceleration by 40 % and reduce CO<sub>2</sub> emissions by 25 % compared to traditional technologies.

Contributed to defining one of the automotive industry's most widely used international standards for quality management – IATF 16949:2016.

#### **Key figures**

in CHF million	2016	2015	Δ%
Order intake	600	571	5.1 %
Order backlog	97	113	-14.2 %
Sales (third parties)	612	648	-5.6%
EBITDA	51	-19	>100%
- as % of sales	8.4%	-3.0%	_
EBIT	12	-534	>100%
- as % of sales	2.0%	-82.3%	_
Research and development expenses	12	10	20.0 %

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#### **Profile**

The Drive Systems Segment, with its brands Oerlikon Graziano and Oerlikon Fairfield, is a leading provider of gears, drives and shifting solutions. The value proposition of the Segment is built on its more than 95 years of experience in developing power transmission solutions for electric, mechanical and hydraulic drive applications. Additionally, the Segment is one of the world's largest independent full-service gear suppliers with a focus on high-performance cylindrical and bevel gears, as well as gear and shaft assemblies including planetary drives, PTUs and differentials, shifting solutions including synchronizer components and systems as well as clutch modules, and hybrid and e-drive transmissions.

The Segment operates five R&D locations where mechanical design, analysis and simulation, testing and verification, software development, as well as calibration and prototyping are performed for all product lines. The Segment differentiates itself through its full systems development and vehicle integration capabilities. The Segment serves customers directly and through selected representatives from 90 locations worldwide, and has a workforce of over 4800 employees.

#### **Markets**

The Segment provides its high-tech products to the agriculture, construction, automotive, transportation, oil & gas and mining markets, representing a combined addressable market of CHF 10.5 billion in 2016. The agriculture industry remains the Segment's most important market, with more than two-thirds of all tractors manufactured worldwide containing shifting solutions from Oerlikon. Next in importance is the construction market, where it provides innovative planetary drive solutions to leading equipment manufacturers. The Segment also serves the automotive sector, delivering technologies for AWD and high-performance cars, as well as for electric and hybrid vehicles. Its geographic markets span Europe, the Middle East, Africa and Russia (EMEAR), the Americas, India and China.

In 2016, the agriculture, construction, transportation, oil & gas and mining sectors were all under pressure, with demand and investment hampered by China's growth deceleration, a weak recovery in oil and commodity prices, and political and economic uncertainties. However, the Segment's combined addressable market is forecasted to grow at a compound annual growth rate (CAGR) of 3%, reaching CHF 12.5 billion by 2021, with each of the Segment's addressable markets projected to grow over this time period, led by China and India. Factors supporting this forecast include: overall global population growth, the move toward vehicle electrification, urbanization along with new megacities requiring better infrastructure, and demand for more efficient and clean urban mobility.

#### **Key developments**

In 2016, the Segment made progress in realigning its business by streamlining its product portfolio, increasing its market reach in key markets, optimizing its processes and restructuring, including voluntary retrenchments and early retirement programs. In its efforts to extend its market range,

the Segment introduced planetary drives with integrated brakes and/or electric and hydraulic motors in North and South America and axles for city buses in China. It also expanded the markets for its gear sets, performance gears, shafts and synchronizer systems in China, India, North America and Russia. In addition, it successfully developed differentials for construction vehicles, all-terrain vehicles, utility vehicles and electric vehicles in Europe, India and North America.

An increasingly important market is drive technologies for electric and hybrid vehicles. The Segment currently provides e-drives for leisure vehicles such as Club Cars, ATVs, the Citroen Méhari, and for the BLUECAR® car-sharing e-vehicles from the Bolloré Group. In 2016, the Segment presented multiple e-drive technology breakthrough solutions. For example, it co-presented an innovative electric drive system for off-highway vehicles, in which Oerlikon's Torque Hub planetary drive was integrated with an Interior Permanent Magnet Motor by Ashwoods Electrical Motors to create an ultracompact drive solution that is up to 70% smaller and lighter and yet 20% more efficient than traditional solutions. For frontwheel-drive (FWD) vehicles, a new modular hybrid transmission technology concept with full hybrid functionalities was introduced. Based on existing OGeco transmission architecture, the new patented FWD technology concept can reduce component costs, offering a 40 % improvement in acceleration and reduce CO<sub>2</sub> emissions by 25 % compared to traditional technologies. The Segment also unveiled an innovative single-speed transmission for battery electric vehicles designed for a maximum input torque of 270 nm and a maximum input speed of 14000 rpm. The lubrication concept is developed to guarantee maximum flexibility in terms of installation angle to allow the highest level of compatibility with different vehicle layouts. Another remarkable factor that makes it unique in its kind, is its compact design (150 mm center distance input shaft), concentrated on weight optimization. Particular efforts have been focused on efficiency, cost and NVH (noise, vibration and harshness) optimization, crucial features for electric vehicles. All these items ensure a high level of function integration with the electric motor to optimize powertrain weight and performance.

To advance its market position, the Segment acquired the remaining shares of its UK-based subsidiary, Vocis, who provides transmission controls technology and develops new driveline controls. The e-LSD (electronic Limited Slip Differential), developed by Vocis, is the first generation of e-LSD that has been successfully tested by major Italian, German and British OEMs.

Other products introduced to the market by the Segment in 2016 include the new compact track loader (CTL) fully integrated drive, featuring a two-speed hydraulic motor and integrated brakes designed for use in track-driven utility vehicles, and the new hydrostatic Torque-Hub drives from the Champion Series, offering a range of three-wheel drives and delivering wheel propulsion benefits where speed, heat and high radial load are of particular concerns.

# Corporate governance report

# **Corporate governance**

Oerlikon is committed to the principles of good corporate governance as they are defined, in particular, in the Swiss Code of Best Practice for Corporate Governance of economiesuisse. Through this commitment, Oerlikon aims to sustainably reinforce the trust placed in it by the company's present and future shareholders, lenders, employees, business partners and the general public.

Responsible corporate governance requires transparency with regard to the organization of management and control mechanisms at the uppermost level of the enterprise. Therefore, the SIX Swiss Exchange's "Directive on Information relating to Corporate Governance" (DCG) requires issuers to make available to investors certain key information, in an appropriate form, pertaining to corporate governance.

The framework of the DCG has been adopted; however, the section "Compensations, shareholdings and loans" has been moved to a separate chapter ("Remuneration report"). All statements in this section ("Corporate governance") are as of the balance sheet date, except where – in the case of material changes between the balance sheet date and the time this Annual Report went to print – otherwise indicated.

Further information regarding corporate governance can be found on the company website at www.oerlikon.com/en/investor-relations/investor-relations-new-governance/.

#### Group structure and shareholders

#### **Operational Group structure**

The Oerlikon Group is divided into the following three Segments: Manmade Fibers, Drive Systems and Surface Solutions. The operational responsibility lies with the Segments, each of which is overseen by its own Segment CEO, whereby Dr. Roland Fischer took on the added role of CEO of Surface Solutions on August 2, 2016. Business performance is reported according to this operational Group structure. For further information regarding the operational Group structure, see page 28 et seqq. ("Group business review") and page 74 et seqq. (Financial report: "Key figures"/"Group").

#### **Listed Group company**

OC Oerlikon Corporation AG, Pfäffikon is listed on the SIX Swiss Exchange (symbol: OERL; securities number: 81682; ISIN: CH0000816824). On December 31, 2016, the company's market capitalization totaled CHF 3 398 million. For further information on OC Oerlikon Corporation AG, Pfäffikon see page 135 et seqq.

#### **Non-listed Group companies**

OC Oerlikon Corporation AG, Pfäffikon as parent company of the Group, owns all of the Group companies either directly or indirectly, mostly with a 100% interest. The local companies included in the scope of consolidation are shown on page 146 et seqq. in their legal ownership structure, and on page 128 et seqq., they are listed by country together with each company's share capital, percentage of shares owned and number of employees.

#### Significant shareholders

		Shareholdings <sup>1</sup>
	number of shares	in percent <sup>2</sup>
Renova Group <sup>3</sup> (composed of Liwet Holding AG, Zurich, Switzerland; Renova Innovation Technologies Ltd., Nassau, Bahamas; Lamesa Holding S.A., Panama, Republic of Panama <sup>4</sup> )	146 222 8894	43.04
Chase Nominees Ltd., London	13 629 220 <sup>5</sup>	4.01
Baillie Gifford Life Limited, Edinburgh	1 670 259 <sup>6</sup>	0.49

- <sup>1</sup> Source: disclosure notifications pursuant to Art. 120 et seqq. of the Federal Act on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading (Financial Market Infrastructure Act, FMIA) and share register.
- <sup>2</sup> Basis: shares issued (339758576).
- <sup>3</sup> Beneficial owner (as per disclosure notification): Viktor F. Vekselberg, Zug and Moscow.
- <sup>4</sup> Source: disclosure notification published by SIX Exchange Regulation on December 17, 2015.
- 5 Source: share register as at December 31, 2016.
- <sup>6</sup> According to the disclosure notification by Baillie Gifford & Co., Edinburgh (published by SIX Exchange Regulation on February 17, 2016), Baillie Gifford Life Limited holds a purchase position of 3.04 % (0.49 % in shares and 2.55 % voting rights at its own discretion).

The disclosure notifications pursuant to Art. 120 et seqq. of the Financial Market Infrastructure Act (FMIA) that were submitted during the year under review are published on the electronic publication platform of SIX Swiss Exchange Ltd, Disclosure Office (www.six-exchange-regulation.com/en/home/publications/significant-shareholders.html).

#### **Cross-shareholdings**

There are no cross-shareholdings.

#### Capital structure

#### Capital

The share capital of OC Oerlikon Corporation AG, Pfäffikon amounts to CHF 339 758 576, composed of 339 758 576 registered shares, each with a par value of CHF 1.00. The company also has conditional capital amounting to CHF 40 million for convertible and warrant bonds, etc., and CHF 7.2 million for employee stock option plans.

# Authorized capital and conditional capital in particular

Authorized capital: The company has no authorized capital.

Conditional capital for warrant and convertible bonds: Pursuant to Art. 11a of the Articles of Association, the company's share capital shall be increased by a maximum aggregate amount of CHF 40 million through the issuance of a maximum of 40 million registered shares with a par value of CHF 1.00 per share, by exercising the option and conversion rights granted in connection with bonds of the company or one of its Group companies. The subscription rights of shareholders are excluded in this regard. Current holders of option certificates and/or convertible bonds are entitled to acquire the new shares. When issuing warrant or convertible bonds, the Board of Directors can limit or exclude the preemptive subscription rights of shareholders (1) to finance and refinance the acquisition of enterprises, divisions thereof, or of participations, or of newly planned investments of

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the company, and (2) to issue warrant and convertible bonds on international capital markets. Insofar as preemptive subscription rights are excluded, (1) the bonds are to be placed publicly on market terms, (2) the exercise period for the option and conversion rights may not exceed seven years from the date the bond was issued, and (3) the exercise price for the new shares must at least correspond to the market conditions at the time the bond was issued.

Conditional capital for employee stock option plans: Pursuant to Art. 11b of the Articles of Association, the company's share capital will be increased by a maximum aggregate amount of CHF 7.2 million, excluding the preemptive subscription rights of current shareholders, through the issuance of a maximum of 7.2 million fully paid-in registered shares with a par value of CHF 1.00 each, by the exercise of option or conversion rights granted to the employees of the company or one of its Group companies under a stock option plan yet to be approved by the Board of Directors. The issuance of shares at less than the stock exchange price is permissible; further details shall be determined by the Board of Directors.

#### Changes in capital

During 2016, there were no changes in capital.

Detailed information on changes in the equity capital of OC Oerlikon Corporation AG, Pfäffikon over the last three years can be found in the holding company's equity capital statement on page 143 of the Annual Report.

#### **Shares and participation certificates**

The equity securities of OC Oerlikon Corporation AG, Pfäffikon consist exclusively of 339 758 576 fully paid-in registered shares with a par value of CHF 1.00, all of which are equal with respect to their attendant voting rights, dividend entitlement and other rights. The registered shares of OC Oerlikon Corporation AG, Pfäffikon are in principle not certificated but instead issued as uncertificated securities within the meaning of the Swiss Code of Obligations and as intermediated securities in terms of the Intermediated Securities Act, respectively. Shareholders may at any time request that the company print and deliver their shares in certificate form free of charge, and the company may, at any time and without shareholders' approval, convert the uncertificated securities into share certificates, global certificates or collectively deposited securities. If registered shares are to be printed, OC Oerlikon Corporation AG, Pfäffikon may issue certificates covering multiples of registered shares. The share certificates bear the facsimile signatures of two members of the Board of Directors.

#### **Profit-sharing certificates**

OC Oerlikon Corporation AG, Pfäffikon has not issued any profit-sharing certificates.

# Limitations on transferability and nominee registrations

There are no restrictions on the transfer of OC Oerlikon Corporation AG, Pfäffikon shares. The company recognizes only those parties entered in the share register as shareholders or usufructuaries. Fiduciary shareholders and nominees will also be entered in the share register.

#### **Convertible bonds and options**

As at December 31, 2016, there were neither convertible bonds nor options outstanding.

# Stability and competence

#### The Oerlikon Board of Directors







Gerhard Pegam
1962, Austrian citizen
Vice Chairman of the Board of Directors
(since December 1, 2016)
Member of the Strategy Committee
Chairman of the Audit Committee
(since December 1, 2016)



**Dr. Jean Botti**1957, French citizen
Member of the Board of Directors
(since April 5, 2016)
Member of the Strategy Committee
(since April 5, 2016)

**Professional background and education** Prof. Dr. Michael Süss was elected to the Board of Directors and as Chairman of the Board at the 2015 Annual General Meeting. From 2015 to 2016, Prof. Dr. Süss held the position of CEO at Georgsmarienhütte Holding, a traditional German steel company. Prior to that, he was a member of the Managing Board of Siemens AG and CEO of the Siemens Energy Sector. From 2008 to 2011, he served as CEO of the Fossil Power Generation Division of the Energy Sector and was a member of the Group Executive Management of the Siemens AG Power Generation Group from October 2006 to December 2007. From 2001 to 2006. Prof. Dr. Süss was COO at MTU Aero Engines, where he was significantly involved in the initial public offering of the company. Before joining MTU, he worked in the automotive industries, holding various management and Board positions at BMW and Porsche. Prof. Dr. Süss graduated with a degree in Mechanical Engineering from the Technical University of Munich, Germany, and completed his doctorate in 1994 at the Institute for Industrial Science/Ergonomics at the University of Kassel (Dr. rer. pol.), Germany. On October 29, 2015, Michael Süss was awarded the honorary professorship of the TU Munich.

Other activities and vested interests
Prof. Dr. Süss is a Director of Renova Management AG, First Deputy Chairman of the Supervisory Board of Verbund AG and a member of the Supervisory Board of Herrenknecht AG.

Professional background and education Gerhard Pegam was elected to the Board of Directors at the 2010 Annual General Meeting. In 2012, he founded his own consulting firm. From June 2011 until June 2012, he was a Corporate Officer of TDK Corporation, Japan. From 2001 until 2012, he was CEO of EPCOS AG, Germany, and from 2009 until 2012, he additionally served as a board member of TDK-EPC Corp., the parent company of EPCOS AG. From 1982 to 2001, he held several management positions with EPCOS AG, the Siemens Group and Philips. Gerhard Pegam graduated from the Technical College Klagenfurt, Austria, with a diploma in Electrical Engineering.

Other activities and vested interests Gerhard Pegam is a Board member of Süss MicroTec AG and Schaffner Holding AG.

Professional background and education Dr. Jean Botti was elected to the Board of Directors at the 2016 Annual General Meeting. He has been Chief Innovation and Strategy Officer at Royal Philips since April 1, 2016. Prior to Philips, Dr. Botti was the Airbus Group's Chief Technical Officer for ten years. From 1997 to 2006, he served in diverse management roles at Delphi, including in customer solutions, as CTO and as Business Line Executive for the powertrain product line. Before joining Delphi, Dr. Botti held various management positions at General Motors and Renault, mostly in the area of chassis engineering, drivelines and automotive components. Dr. Botti holds 31 patents. He has two Master's degrees: one in Mechanical Engineering from the Institute National des Sciences Appliquées of Toulouse, France, and the other in Science Administration from the Central Michigan University, USA, and a PhD in Mechanical Engineering from the Conservatoire des Arts et Métiers, Paris, France.

Other activities and vested interests None.





#### **David Metzger**

1969, Swiss and French citizen Member of the Board of Directors (since April 5, 2016) Member of the Audit Committee (since April 5, 2016)

Professional background and education David Metzger was elected to the Board of Directors at the 2016 Annual General Meeting. He serves as Managing Director Investments of the Renova Management AG, Zurich, Switzerland. Since 2011, he has held various positions at Renova, initially as CFO of Venetos, and later as Deputy Managing Director Strategy and M&A. Prior to Renova, David Metzger worked for Good Energies, a highly renowned renewable energy fund, where he was an investment manager for four years during which he also served as CFO and Board Member of several investments. Before Good Energies, he was a senior manager at Bain & Company, focusing on strategy and private equity. David Metzger holds a Master's degree in Business Economics from the University of Zurich, Switzerland, and an MBA from INSEAD, Fontainebleau, France.

Other activities and vested interests David Metzger is a Board member of Octo Telematics Ltd.

#### Alexey V. Moskov

1971, Cypriot and Russian citizen Member of the Board of Directors (since April 5, 2016) Member of the Audit Committee (since December 1, 2016) Member of the Human Resources Committee (since April 5, 2016)

**Professional background and education** Alexey V. Moskov was elected to the Board of Directors at the 2016 Annual General Meeting. In 2004, he was appointed Chief Operating Officer of Renova Management AG, Zurich, Switzerland. Prior to Renova. he served on the Board of Directors of NGK Slavneft and worked in diverse managerial positions at Tyumen Oil Company TNK-BP. Alexey V. Moskov holds a Master's degree in Engineering and Development from the Moscow State Railway University (Technical Cybernetics Department), Moscow, Russia.

Other activities and vested interests None.

#### **Board of Directors**

The rules and regulations governing the organization and duties of the Board of Directors of OC Oerlikon Corporation AG, Pfäffikon are to be found in the Swiss Code of Obligations, the Articles of Association of OC Oerlikon Corporation AG, Pfäffikon and the Organizational and Governance Rules of OC Oerlikon Corporation AG, Pfäffikon.

#### **Members of the Board of Directors**

In the year under review, the Board of Directors of OC Oerlikon Corporation AG, Pfäffikon was composed of Prof. Dr. Michael Süss (Chairman), Gerhard Pegam (Vice Chairman since December, 1, 2016), Dr. Mary Gresens (until April 5, 2016), Dr. Jean Botti (since April 5, 2016), Johan Van de Steen (until April 5, 2016), David Metzger (since April 5, 2016), Mikhail Lifshitz (until April 5, 2016), Alexey V. Moskov (since April 5, 2016) and Hans Ziegler (until November 29, 2016). The two previous Board members who remain on the Board of Directors and the three new Board members were all reelected and elected, respectively, by the Annual General Meeting of Shareholders on April 5, 2016, for a term of office of one year.

In the three financial years preceding the reporting period, the members of the Board of Directors were not involved in the executive management of OC Oerlikon Corporation AG, Pfäffikon or any other Group company. They also do not have any significant business connections with companies of the Oerlikon Group.

#### Other activities and vested interests

Regarding the activities of the members of the Board of Directors in governing and supervisory bodies of important Swiss and foreign organizations, institutions and foundations under private and public law, permanent management and consultancy functions for important Swiss and foreign interest groups, and official functions and political posts, see page 42 et seqq.

#### **Number of permitted mandates**

Pursuant to Art. 32 of the Articles of Association, no member of the Board of Directors may hold more than four additional mandates in the supreme governing body of listed companies and ten additional mandates in the supreme governing body of legal entities that are required to be registered in the commercial register or a comparable foreign register. Not subject to these limitations are (1) mandates in inactive companies and in companies that are controlled by OC Oerlikon Corporation AG, Pfäffikon or which control OC Oerlikon Corporation AG, Pfäffikon and (2) mandates in associations, charitable organizations, foundations, trusts and employee welfare foundations, whereby no member of the Board of Directors shall hold more than ten such mandates. Mandates in different legal entities that are under joint control are deemed one mandate.

#### **Elections and terms of office**

Board members are elected annually by the General Meeting of Shareholders for a term of one year. They are eligible for reelection; a "year" means the period from one ordinary General Meeting of Shareholders to the next. In the event of elections for replacement or elections of additional members during the year, the period until the next ordinary General Meeting of Shareholders shall be deemed to constitute a year. Each member of the Board of Directors shall be elected individually. Only persons who have not completed their 70th year of age on the election date are eligible. The General Meeting of Shareholders may, under special circumstances, grant an exception to this rule and may elect a member of the Board of Directors for one or several terms of office provided that the total number of these additional terms of office does not exceed three.

#### **Composition of the Board of Directors**

Name (nationality)	Domicile	Position	Age	Joined	Term expires	Executive/ non-executive
Prof. Dr. Michael Süss (DE)	DE	Chairman	53	2015	2017	Non-executive
Gerhard Pegam (AT)	DE	Vice Chairman since December 1, 2016	54	2010	2017	Non-executive
Dr. Jean Botti (FR)	FR	Member since April 5, 2016	59	2016	2017	Non-executive
David Metzger (CH/FR)	CH	Member since April 5, 2016	47	2016	2017	Non-executive
Alexey V. Moskov (CY/RU)	RU	Member since April 5, 2016	45	2016	2017	Non-executive
Dr. Mary Gresens (US)	US	Member until April 5, 2016	61	2015		Non-executive
Mikhail Lifshitz (RU)	RU	Member until April 5, 2016	53	2013	_	Non-executive
Johan Van de Steen (BE)	CH	Member until April 5, 2016	51	2015		Non-executive
Hans Ziegler (CH)	CH	Member until November 29, 2016 (Vice Chairman since July 26, 2016)	64	2008	_	Non-executive

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#### Internal organizational structure

The Board of Directors is the ultimate supervisory body of the Oerlikon Group. It is responsible for the overall management, oversight and control of the Oerlikon Group, determines the Group strategy and oversees the CEO. It sets forth guidelines on the general and strategic direction of OC Oerlikon Corporation AG, Pfäffikon and the Oerlikon Group and periodically reviews their implementation.

The Board of Directors shall consist of at least three but not more than seven Board members, the majority of whom should be independent. In general, a Board member shall be deemed to be independent if, during the three years immediately prior to taking up office, he was neither a member of the executive management of OC Oerlikon Corporation AG, Pfäffikon, the Oerlikon Group, an Oerlikon Group company or an audit firm of any of them, nor close to any of the latter, and had no significant business relations, whether directly or indirectly, with the Oerlikon Group. Should the Board of Directors exceptionally assign certain executive tasks for a limited period of time to one of its Board members, such assignment alone shall as a rule not by itself qualify such Board member as a dependent member of the Board of Directors.

The Chairman of the Board of Directors shall ensure that the Board of Directors may and does effectively carry out its superintendence and oversight role on an informed basis. He shall endeavor, in close contact with the CEO, to provide the Board of Directors with optimal information regarding operating activities of OC Oerlikon Corporation AG, Pfäffikon and the Oerlikon Group. Together with the CEO, the Chairman shall perform a leadership role in the implementation of the strategic orientation of the Group, as set out by the Board of Directors on a collegial basis, and shall represent OC Oerlikon Corporation AG, Pfäffikon and the Oerlikon Group in relations with important shareholders, clients, further stakeholders and the general public.

The Chairman shall convene, prepare and chair Board meetings and may convene meetings of the Board of Directors Committees. He shall coordinate the work of the Board of Directors and the Board of Directors Committees and shall ensure that Board members receive in a timely manner all information necessary to perform their duties. In cases of uncertainty, he shall delineate authorities between the Board of Directors, its Committees and the CEO, unless the entire Board of Directors intends to address the matter.

The Board of Directors may at any time create committees from among its members to assist it in the performance of its duties. These committees are permanent advisory groups supporting the Board of Directors with their particular expertise. Unless expressly stated in the Organizational and Governance Rules, the Chart of Competences or the relevant committee's rules and regulations, they shall not have any authority to decide matters in lieu of the Board of Directors. All cases in which the currently existing committees do in fact have authority to decide matters in lieu of the Board of Directors will be specified hereinafter. They may prepare, review and investigate matters of relevance within their field of expertise and submit proposals to the Board of Directors for deliberation, but must not themselves take resolutions beyond recommendations, proposals or motions to be submitted to the Board of Directors for deliberation.

There are currently three permanent Committees of the Board of Directors, namely the Audit Committee (AC), the Human Resources Committee (HRC) and the Strategy Committee (SC).

Membership of these Committees in the year under review was as follows:

#### **Composition of Committees of the Board of Directors**

Name (nationality)	Audit Committee (AC)	Human Resources Committee (HRC)	Strategy Committee (SC)	
Prof. Dr. Michael Süss (DE)		Chairman		
Gerhard Pegam (AT)	Chairman since December 1, 2016		Member	
Dr. Jean Botti (FR)			Member since April 5, 2016	
David Metzger (CH/FR)	Member since April 5, 2016			
Alexey V. Moskov (CY/RU)	Member since December 1, 2016	Member since April 5, 2016		
Dr. Mary Gresens (US)	Chairman until April 5, 2016	Member until April 5, 2016		
Mikhail Lifshitz (RU)	Member until April 5, 2016			
Johan Van de Steen (BE)	Member until April 5, 2016			
Hans Ziegler (CH)	Chairman from April 5, 2016 until November 29, 2016	Member until November 29, 2016	Member until November 29, 2016	

#### **Audit Committee (AC)**

As a rule, the AC shall be composed of at least three members of the Board of Directors. Members of the AC are not eligible if they perform any executive management duties within the Oerlikon Group while in office, or have significant business relations with OC Oerlikon Corporation AG, Pfäffikon or the Oerlikon Group, or have been members of the Executive Committee in the preceding three years. In all cases, they must have the degree of independence required by the Swiss Code of Best Practice for Corporate Governance, as amended from time to time. The majority of AC members, including its Chairman, must be experienced in the fields of finance and accounting and be familiar with internal and external auditing. As a separate advisory group, independent from the CEO, the AC shall advise the Board of Directors and exclusively follow the Board of Directors' instructions.

The AC monitors Group-wide operations with a view to providing a basis for assessment to the Board of Directors of the following:

- in relation to external audits: the relevance of the audit work plan and the price/performance ratio;
- in relation to internal audits: the relevance of the engagement of internal auditors and the professional performance of the auditors:
- in relation to the accounting and internal control systems: the relevance of the accounting system, financial strategy and planning, as well as financial risk control;
- in relation to annual and interim reports: the preparation of Oerlikon's financial statements and consolidated financial statements, annual business report, specific interim financial statements for publication and the financial reports on operating results and cash flows of the Oerlikon Group; and in relation to corporate governance and compliance: the reasonableness of Oerlikon's corporate governance and compliance, the relevant guidelines and organization, particularly as instruments to ensure Group-wide compliance with relevant applicable laws and regulations.

The AC decides about the appointment and dismissal of the Head of Group Internal Audit.

#### **Human Resources Committee (HRC)**

As a rule, the HRC shall be composed of at least three members of the Board of Directors. Members of the HRC are not eligible if they perform any executive management duties within the Oerlikon Group while in office, or have significant business relations with OC Oerlikon Corporation AG, Pfäffikon or the Oerlikon Group, or have been members of the Executive Committee in the preceding three years. In all cases, they must have the degree of independence required by the Swiss Code of Best Practice for Corporate Governance, as amended from time to time.

The HRC supports the Board of Directors with regard to matters related to human resources, including compensation policies, performance assessment, appointments and succession planning and other general topics related to human resources.

The HRC shall in particular support the Board of Directors in establishing and reviewing the Group's compensation strategy and in preparing the proposals to the General Meeting of Shareholders regarding compensation of the members of the Board of Directors and of the Executive Committee, and may submit proposals to the Board of Directors in other compensation-related issues. Furthermore, the HRC approves the Annual Pay Plan for the Group (including general salary increases) and the Group-wide compensation policies for non-managerial staff.

#### Strategy Committee (SC)

As a rule, the SC shall be composed of at least three members of the Board of Directors. All but one must be independent from the Oerlikon Group, i.e. not performing any executive management duties within the Oerlikon Group while in office, not have significant business relations with OC Oerlikon Corporation AG, Pfäffikon or the Oerlikon Group and not have been a member of the Executive Committee in the preceding three years.

The SC monitors that Oerlikon's strategy is properly implemented and complied with by the Executive Committee and all other management levels of the Oerlikon Group. Furthermore, it ensures that the Board of Directors becomes aware on a timely basis of changing trends, technologies, markets, habits and terms of trade that could jeopardize Oerlikon's strategy.

The SC has no authority to decide matters in lieu of the Board of Directors.

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# Work methods of the Board of Directors and its Committees

The Board of Directors meets at the invitation of its Chairman at least four times a year, or more often if necessary. The members of the Executive Committee attend the Board meetings by invitation. Each Board member and the CEO may request the Chairman to convene a Board meeting by stating the reasons for such a request.

In 2016, ten physical Board meetings were held, lasting on average around six hours and ten minutes. In addition, six telephone conferences were held (average duration: 45 minutes). Eleven Board meetings were attended by all Board members.

The members of the HRC are elected by the General Meeting of Shareholders, whereas the Chairman of the HRC is appointed by the Board of Directors at the proposal of the Chairman of the Board. The members of the other Committees, i.e., the AC and the SC, as well as their respective Chairmen, are elected by the Board of Directors at the proposal of the Chairman of the Board. Their respective terms of office correspond to their term of office as a Board member. Those Board members who are not members of a Committee have the right to attend Committee meetings with consultative vote. As a rule, the CEO, the CFO and the Head of Group Internal Audit should attend the meetings of the AC, and the CEO the meetings of the HRC and the SC. Additional persons (e.g., other members of the Executive Committee, representatives of the external auditors or Heads of Corporate Functions) may be invited, if required. At every Board meeting, each Committee Chairman provides the Board with an update on the current activities of his Committee and important Committee issues.

The AC and the SC meet at the invitation of their respective Chairmen at least four times a year, or more often if necessary. The HRC meets at the invitation of its Chairman at least three times a year, or more often if necessary.

In 2016, there were eight meetings of the AC, lasting on average around two hours and 25 minutes. The members of the AC participated in the meetings along with members of the Executive Committee and representatives of the Corporate Functions concerned (in particular Group Accounting & Reporting and Group Internal Audit). The external auditors (KPMG AG respectively PricewaterhouseCoopers AG) took part in three AC meetings. In 2016, the HRC held six physical meetings, lasting on average around two hours and 30 minutes, and one conference call (duration: 35 minutes). The SC held two physical meetings, lasting on average around eight hours and 45 minutes. In 2016, strategic topics of high relevance were increasingly discussed in strategy sessions of the full Board.

#### **Definition of areas of responsibility**

Pursuant to Art. 716b of the Swiss Code of Obligations and Art. 22 para. 3 of the Articles of Association, the Board of Directors has in principle delegated the operational management of the business of OC Oerlikon Corporation AG, Pfäffikon and of the Oerlikon Group to the CEO. The scope of tasks for which the Board of Directors bears responsibility essentially encompasses those inalienable and non-delegable duties defined by law. These include:

- the ultimate direction of the business of OC Oerlikon Corporation AG, Pfäffikon and issuing of the relevant directives;
- laying down the organization of OC Oerlikon Corporation AG, Pfäffikon;
- formulating accounting procedures, financial controls and financial planning;
- nominating and removing persons entrusted with the management and representation of OC Oerlikon Corporation AG, Pfäffikon and regulating the power to sign for OC Oerlikon Corporation AG, Pfäffikon;
- the ultimate supervision of those persons entrusted with the management of the OC Oerlikon Corporation AG, Pfäffikon with particular regard to adherence to law, to the Articles of Association and to the regulations and directives of the OC Oerlikon Corporation AG, Pfäffikon;
- issuing the Annual Report and the Compensation Report, preparing for the General Meeting of Shareholders and carrying out its resolutions;
- informing the court in case of indebtedness;
- determining the strategic direction and to approve the strategy for the Oerlikon Group and its Segments.

According to the company's Organizational and Governance Rules, it is also incumbent upon the Board of Directors to decide on the acquisition, divestiture, establishment, restructuring or liquidation of strategy-relevant companies or businesses and on business transactions whose financial value exceeds certain amounts.

The CEO is responsible for all issues relating to the operational management of the business of OC Oerlikon Corporation AG, Pfäffikon and the Oerlikon Group, to the extent that such decisions are not expressly reserved for the Board of Directors or delegated to individual Group companies. The Executive Committee is the supreme advisory body advising the CEO with respect to the management of the business of OC Oerlikon Corporation AG, Pfäffikon and the Oerlikon Group. The Executive Committee is chaired by the CEO. In the case of an Executive Committee member dissenting from a decision of the CEO, such member may immediately request the CEO to submit such matter to the Chairman of the Board of Directors for his recommendation. However, the CEO will take the final decision on all issues relating to the operational management.

More information regarding the areas of responsibility of the Board of Directors, the CEO and the Executive Committee can be found in the company's Organizational and Governance Rules published on the Oerlikon website at www.oerlikon.com/en/investor-relations/corporate-governance/investor-relations-new-statutes/.

# Information and control instruments vis-à-vis the Executive Committee

The Board of Directors has a wide array of instruments that enable it to perform the tasks of monitoring strategic and operational progress as well as risk exposure. The instruments at its disposal include the following elements:

The Board of Directors' right of access to and the CEO's duty of information: The CEO reports at Board of Directors meetings on the day-to-day operations, operating results and important business matters. Extraordinary occurrences (if any) must be immediately notified to the Chairman of the Board of Directors and to the Chairman of the relevant Committee. With the approval of the Chairman, members of the Board of Directors may also access specific business records and/or obtain information from any employees of the Oerlikon Group. The Board of Directors and its Committees regularly take advice from members of the Executive Committee in order to ensure that the most comprehensive and up-to-date information on the state of the company and all relevant elements are included in its decision making. Additionally, Heads of Business Units and Corporate Functions or other experts may be consulted on a case-by-case basis in order to gain detailed and comprehensive information on complex matters.

Accounting & reporting: The Group Accounting & Reporting function is responsible for the Group's Management Information System (MIS), which links all major Group companies and production sites directly with Group Headquarters to provide the Executive Committee and the Board of Directors with an institutionalized Group reporting on a monthly basis. This is consolidated to show the performance of each Business Unit and the Group and explains the reasons for any deviations from the key performance indicators. The Board of Directors may demand access to the relevant details at any time. Furthermore, Group Accounting & Reporting ensures compliance with International Financial Reporting Standards (IFRS).

Controlling: With regard to mid-term controlling, the key instruments are specific analyses prepared by the Segments, as well as annually updated five-year business plans on the Group and Segment level. In terms of short-term controlling, the Board of Directors receives the annual financial plan (budget) as well as periodic financial forecasts for the current fiscal year. In addition to the business updates provided by the CEO or CFO at the Board of Directors and Audit Committee meetings, the Board of Directors and the Executive Committee receive a monthly actual/target analysis of the key financials to assist them in the assessment of the Segments' performance and potential corrective measures. Furthermore, the Executive Committee holds regular business review meetings on the Group and Segment level, examining current performance and outlook, market competitive dynamics, Segment product portfolios and scenarios explored to improve Segment value cre-

Risk management: Oerlikon has a risk management system in place with which the enterprise-wide risk management is centrally managed and decentrally implemented. A key component of it is the generation and semi-annual update of risk profiles for the Group as a whole, as well as for its individual Business Units. All types of risks, internal and external, such as market, credit and operational risks are considered, including compliance and reputational aspects, and actions are defined in order to mitigate the risk exposure. Internal risk reporting to the Executive Committee, the Audit Committee and the Board of Directors is performed semi-annually based on consolidated risk reports. On this basis, the Board of Directors monitors the risk profile of the Group and the risk mitigation actions. For further information regarding risk management, see page 64 et seqq. ("Risk management and compliance") and page 112 et segg. ("Note 19 to the consolidated financial statements").

Compliance: There is a Group-wide compliance function in order to ensure compliance with legal, regulatory and internal regulations as well as the Group's ethical standards, in particular by preventive measures, training, information and consulting. The foundation of this program was laid and enhanced between 2009 and 2012, with a focus on key elements of a state-of-theart compliance program, such as the Code of Conduct, risk assessment and an anticorruption program. Between 2013 and today, the focus was on behavioral aspects of leadership awareness while dealing with integrity issues, on implementing and revising the business partner integrity screening process and on establishing Oerlikon's Anti-Trust program. In 2015 and 2016, the main emphasis was on defining and implementing a data compliance program to enhance all aspects of dealing with data privacy and information security as well as on renewing Oerlikon's House of Policies. In 2016, the Compliance function engaged an external auditor to have its compliance program assessed and received excellent and meaningful feedback. For further information regarding compliance, see page 64 et seq. ("Risk management and compliance").

Internal audit: Group Internal Audit is an independent and objective assurance activity that assists Oerlikon in accomplishing its objectives by bringing a systematic and disciplined approach to evaluating and improving the effectiveness of risk management, control and governance processes. The Head of Group Internal Audit reports functionally to the Chairman of the AC and administratively to the CFO. The AC approves the budget, the resources and the internal audit plan for the following year every fall. Group Internal Audit closely coordinates its plans and activities with the external auditor. Group Internal Audit projects are selected on the basis of a Group-wide risk assessment in coordination with Group Risk Management. The annual audit plan strikes the appropriate balance between operational, financial, compliance and follow-up reviews. The results of internal audits are communicated to the management team responsible, the Executive Committee, the AC, the Chairman of the Board and the external auditors through formal audit reports. During 2016, Group Internal Audit conducted 27 internal audits.

**External audit:** The external auditor examines the books and accounts of OC Oerlikon Corporation AG, Pfäffikon and those of the Oerlikon Group, coordinating its audit plan with that of Group Internal Audit. On completion of the audit, the external auditor prepares a comprehensive auditor's report to inform the Audit Committee and the Board of Directors about the detailed findings of the audit, and prepares a summary thereof for the Annual General Meeting of Shareholders. Since 2016, the external audit is carried out by PricewaterhouseCoopers AG. For further information regarding auditors, see page 53.

The continuing independence of the external auditor is ensured by written representations provided by the auditor and also by the monitoring of audit fees in relation to total fees for all services paid by Oerlikon to the audit firm.

# Leadership and accountability

#### The Oerlikon Executive Committee







#### **Dr. Roland Fischer** 1962, German citizen Executive Committee Member since March 1, 2016 Chief Executive Officer (CEO)\* Segment CEO Surface Solutions\* since August 2, 2016

Jürg Fedier 1955, Swiss citizen Executive Committee Member since January 1, 2009 Chief Financial Officer (CFO)\* Anna Ryzhova
1979, Russian citizen
Executive Committee Member
since October 10, 2016
Chief Human Resources Officer (CHRO)\*

**Professional background and education** Dr. Roland Fischer was appointed Chief Executive Officer of Oerlikon Group, effective March 1, 2016. Prior to Oerlikon, Dr. Fischer held senior management positions at Siemens AG, the most recent as CEO of the Power and Gas Division from 2013 to 2015. Between 2011 and 2012. Dr. Fischer served as CEO of the Fossil Power Generation Division, and from 2008 to 2011, he was CEO of the Business Unit Fossil Power Generation - Products, Siemens, Germany. Before joining Siemens, Dr. Fischer was 18 years at MTU Aero Engines AG in diverse management positions in Germany and Malaysia, lastly serving as Senior Vice President. Defence Programmes in Germany. Dr. Fischer graduated from the University of Stuttgart, Germany, with a degree in Aeronautical Engineering, and holds a PhD (Dr.-Ing.) in Aeronautical Engineering from the University of Karlsruhe, Germany.

Other activities and vested interests None.

Professional background and education Jürg Fedier was appointed Chief Financial Officer effective January 1, 2009. From 2007 to 2008, he acted as CFO of Ciba, Switzerland. Between 2006 and 2007, he was Head of Finance of Dow Europe and a member of the Executive Board. From 2002 to 2006, Jürg Fedier served as Vice President Finance for Dow Chemical, Performance Chemicals, USA, and between 2000 and 2002 as Global Business Finance Director for Dow Chemical, Thermosets. From 1978 to 2000, he filled several management positions with Dow Chemical in the USA and in Asia. Jürg Fedier holds a Commercial Diploma from the College of Commerce in Zurich, Switzerland, and completed international executive management programs at the IMD, Lausanne, Switzerland, and the University of Michigan, USA.

Other activities and vested interests Jürg Fedier is a member of the Board of Directors of Dätwyler Holding Inc.

Professional background and education Anna Ryzhova was appointed Chief Human Resources Officer effective October 10, 2016. Ms. Ryzhova has over 15 years of experience in leading HR functions, 13 of which were at the Renova Group in senior HR executive roles. Most recently, Anna Ryzhova was Chief Human Resources Officer at Renova Management AG, Zurich, Switzerland. From 2010 to 2015, she served as HR and Corporate Relations Director at the Renova Group Corporate Center in Moscow, Russia. Anna Ryzhova holds a Master's degree in Economics from the National Research University Higher School of Economics in Moscow and an Executive MBA from IMD. Lausanne. Switzerland.

Other activities and vested interests None.





**Dr. Bernd Matthes**1960, German and US citizen
Executive Committee Member
since April 1, 2014
Segment CEO Drive Systems\*

**Georg Stausberg** 1963, German citizen Executive Committee Member since January 1, 2015 Segment CEO Manmade Fibers\*

Professional background and education Dr. Bernd Matthes was appointed Segment CEO Drive Systems effective April 1, 2014. Between 2009 and 2014, he served as President (and founder) of Automotive Strategy Consultants LLC. In 2009, Dr. Matthes acted as Vice President, President and General Manager DualTronic Transmissions at BorgWarner, Inc. From 2005 to 2009, he was Vice President, President and General Manager Transmission Systems at BorgWarner, Inc. Between 2002 and 2005, Dr. Matthes served as Vice President Operations Europe and General Manager DualTronic at BorgWarner Transmission Systems. From 1993 to 2002, he filled several management positions within BorgWarner, Germany. Dr. Matthes holds both a MSc and PhD in Mechanical Engineering from TU Darmstadt, Germany.

Other activities and vested interests Dr. Matthes is a member of the Global Advisory Board, Center for Global Leadership and Understanding, Lawrence Technological University, Southfield, USA. Professional background and education Georg Stausberg has been Segment CEO Manmade Fibers since 2015. Between 2012 and 2014, he served as CTO and COO of the segment. From 2008 to 2012, Mr. Stausberg acted as CEO of the Business Unit Oerlikon Neumag. Between 2000 and 2008, he was leading the After Sales Division and the Gear Pump Divison of Barmag. From 1989 to 2000, Mr. Stausberg acted as R&D Engineer at Barmag. He graduated from RWTH Aachen University with a degree in Mechanical Engineering (Dipl.-Ing.).

Other activities and vested interests None.

<sup>\*</sup> A description of the role and authority of the Members of the Executive Committee can be found in the company's Organizational and Governance Rules, published on the Oerlikon website at www.oerlikon.com/en/investor-relations/corporate-governance/investor-relations-new-statutes/.

#### **Executive Committee**

#### **Management philosophy**

The Oerlikon Group's strategy is to become a powerhouse in surface solutions and advanced materials. In line with the strategy, the Group has started its transformation process by streamlining and centralizing relevant and specific management and operational functions, particularly between the Group Headquarters and the Surface Solutions Segment. Group Headquarters still determines strategic guidelines and sets operational targets, and monitors these with effective management processes and controlling; while the Segments and Business Units continue to be responsible for operations and for delivering on the agreed strategy and targets within given guidelines.

#### **Members of the Executive Committee**

On December 31, 2016, the Executive Committee consisted of Dr. Roland Fischer, CEO (since March 1, 2016) and Segment CEO of Surface Solutions (since August 2, 2016), Jürg Fedier, CFO (since January 1, 2009), Anna Ryzhova, CHRO (since October 10, 2016), Dr. Bernd Matthes, Segment CEO Drive Systems (Executive Committee member since April 1, 2014) and Georg Stausberg, Segment CEO Manmade Fibers (Executive Committee member since January 1, 2015). Dr. Roland Herb, decided to relinquish the role as Segment CEO Surface Solutions (Executive Committee member since June 3, 2014) and as a member of the Executive Committee as per August 1, 2016. As a consequence of the sale of the Vacuum Segment, as of August 31, 2016, Dr. Martin Füllenbach (Executive Committee member since February 11, 2014), ceased to be a member of the Executive Committee.

With the exception of Georg Stausberg, the members of Oerlikon's Executive Committee did not previously carry out tasks for OC Oerlikon Corporation AG, Pfäffikon or any other Group company. For further information, see page 50 et seq.

#### Other activities and vested interests

Regarding the activities of the members of the Executive Committee in governing and supervisory bodies of important Swiss and foreign organizations, institutions and foundations under

private and public law, as well as permanent management and consultancy functions for important Swiss and foreign interest groups and official functions and political posts, see page 50 et segg.

#### **Number of permitted mandates**

Pursuant to Art. 32 of the Articles of Association, no member of the executive management may hold more than four additional mandates in the supreme governing body of listed companies and ten additional mandates in the supreme governing body of legal entities that are required to be registered in the commercial register or a comparable foreign register. Not subject to these limitations are (1) mandates in inactive companies and in companies that are controlled by OC Oerlikon Corporation AG, Pfäffikon or that control OC Oerlikon Corporation AG, Pfäffikon and (2) mandates in associations, charitable organizations, foundations, trusts and employee welfare foundations, whereby no member of the executive management shall hold more than ten such mandates. Mandates in different legal entities that are under joint control are deemed one mandate. According to the internal chart of competencies, board memberships in third party companies require for the CEO the approval of the Chairman of the Board, and for the other Executive Committee members the approval of the CEO.

#### **Management contracts**

There are no management contracts with third parties.

#### **Composition of the Executive Committee**

Name	Nationality	Age	Position	Joined	In position since	Stepped down	
Dr. Roland Fischer	DE	54	CEO	2016	01.03.2016		
Jürg Fedier	CH	61	CFO	2009	01.01.2009		
Anna Ryzhova	RU	37	CHRO	2016	10.10.2016		
Dr. Bernd Matthes	DE/USA	56	Segment CEO Drive Systems	2014	01.04.2014		
Georg Stausberg	DE	53	Segment CEO Manmade Fibers	2015	01.01.2015		
Dr. Brice Koch	CH	52	CEO	2014	16.01.2014	29.02.2016	
Dr. Martin Füllenbach	DE	48	Segment CEO Vacuum	2014	11.02.2014	31.08.2016	
Dr. Roland Herb	DE	52	Segment CEO Surface Solutions	2014	03.06.2014	01.08.2016	

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#### Shareholders' participation

#### Voting rights restrictions and representation

The right to vote and the other member rights may only be exercised by shareholders or beneficiaries who are registered in the share register. Any shareholder may appoint the independent proxy, another registered shareholder with written authorization or his legal representative to act as proxy to represent his shares at the General Meeting of Shareholders. The Chairman decides whether to recognize the power of attorney. Regarding the written or electronic issuing of the proxy and of instructions to the independent proxy, the Articles of Association do not contain any provisions that deviate from the legal provisions. Those entitled to vote in the General Meeting of Shareholders are the shareholders whose names are entered in the share register as voting-registered shareholders at such cut-off date as shall be determined by the Board of Directors. Otherwise, there are no restrictions on voting rights.

#### **Statutory quorums**

The Articles of Association of OC Oerlikon Corporation AG, Pfäffikon provide for no specific quorums that go beyond the provisions of corporate law.

## **Convocation of the Annual General Meeting of Shareholders**

Supplemental to the statutory legal provisions, the company's Articles of Association provide for the convocation of an Annual General Meeting of Shareholders by a one-off announcement in the Swiss Official Gazette of Commerce.

#### Inclusion of items on the agenda

The Articles of Association provide that shareholders with a holding of CHF 1000000 nominal value are entitled to request that an item be included on the agenda, provided that their requests are submitted in writing and include the actual agenda item and the actual motions; this request is to be made at the latest ten weeks prior to the date of the General Meeting of Shareholders.

#### Inscriptions into the share register

The 44th General Meeting of Shareholders will be held on April 11, 2017, in the KKL Luzern (Culture and Convention Center), Lucerne. Entitled to vote in the General Meeting of Shareholders are those shareholders whose names are inscribed into the share register as shareholders with voting rights at the cut-off date to be determined by the Board of Directors.

# Right to inspect the minutes of the Annual General Meeting

The minutes of the 43rd General Meeting of Shareholders held on April 5, 2016, can be viewed on the Internet at www.oerlikon.com/en/investor-relations/investor-relations-new-generalmeeting/ and shareholders may also read the minutes at Group Headquarters upon prior notice. The minutes of the 2017 Annual General Meeting of Shareholders will be published on the Oerlikon website as soon as they have been compiled.

#### Changes of control and defense measures

#### Duty to make an offer

In accordance with the Articles of Association of OC Oerlikon Corporation AG, Pfäffikon a person who acquires shares in the company is not required to make a public purchase bid pursuant to Art. 125 para. 3 of the Financial Market Infrastructure Act.

#### Clauses on changes of control

There are no change-of-control clauses in agreements and schemes benefiting Members of the Board of Directors and/or of the Executive Committee, as well as other members of the Oerlikon management.

#### **Auditors**

# Duration of the mandate and term of office of the lead auditor

PricewaterhouseCoopers AG was elected by the 43rd Annual General Meeting of Shareholders of April 5, 2016, for the first time. The auditor is elected by the Annual General Meeting of Shareholders for a one-year term of office. The lead auditor responsible for the mandate, Mr. Stefan Räbsamen, served in this function since the financial year that ended on December 31, 2016. In accordance with Art. 730a para. 2 of the Swiss Code of Obligations, the lead auditor's term of office is a maximum of seven years.

#### **Auditing fees**

In the calendar year 2016, PricewaterhouseCoopers invoiced the company for CHF 2.3 million in global auditing fees.

#### **Additional fees**

In the calendar year 2016, PricewaterhouseCoopers invoiced the company for CHF 1 million in additional services. The additional fees were mainly invoiced for worldwide general and project-specific tax consultancy services.

# Informational instruments pertaining to an external audit

In accordance with Art. 728b para. 1 of the Swiss Code of Obligations, the external auditors provide the Board of Directors, on an annual basis, with a comprehensive report with conclusions on the financial reporting and the internal controlling system as well as the conduct and the result of the audit. Furthermore, the external auditors conduct interim audits during the year, on which they report their findings to the Executive Committee and the AC.

Once the auditing work has been completed, the AC assesses the results and findings of the external audit, discusses its assessment with the lead auditor in charge and reports the relevant findings to the Board of Directors. Further to this, the AC submits proposals in response to the external auditors' recommendations, objections and other discovered deficiencies, if any, to the Board of Directors for consideration and monitors the implementation of any relevant action decided upon by the Board of Directors.

The Chairman of the AC meets regularly with the lead auditor and other representatives of the auditing firm. The latter also participate in meetings of the AC dealing with the relevant agenda points. In the reporting year, KPMG AG and PricewaterhouseCoopers AG respectively, participated in three meetings of the AC.

On behalf of the Board of Directors, the AC evaluates the work done by the external auditors, based on the documents, reports and presentations issued by them as well as on the materiality and objectivity of their statements. Therefore, the AC consults with the CFO and the Head of Group Internal Audit. The fees paid to the external auditors are reviewed on a regular basis and compared with the auditing fees paid by other comparable listed Swiss companies. Auditing fees are negotiated by the CFO, evaluated by the AC and subject to the approval of the Board of Directors.

The AC submits a proposal to the Board of Directors for the election of external auditors by the Annual General Meeting of Shareholders.

#### Material changes since balance sheet date

There were no material changes since balance sheet date.

#### Information policy

#### General

Oerlikon provides its shareholders and the capital markets with transparent, comprehensive and timely information on relevant facts and developments and in a manner that is in line with the principle of equal treatment of all stakeholders, including the public and all actual and potential market participants.

Apart from its detailed Annual Report and Half-Year Report, which are prepared in accordance with International Financial Reporting Standards (IFRS), Oerlikon publishes its key financial figures and a related commentary for the first and third quarters of its financial year. In this way, Oerlikon increases its communication and transparency. Additionally, Oerlikon issues press releases on key company news during the year to ensure that shareholders and market participants are informed of significant changes and developments in the company. The company's website, www.oerlikon.com, offers a permanently accessible platform for all current information concerning the company.

As a company listed on the SIX Swiss Exchange, OC Oerlikon Corporation AG, Pfäffikon is subject to the obligation to disclose price-sensitive information (ad hoc publicity obligation) to the public, including all market participants.

The publication medium for corporation notices is the Swiss Official Gazette of Commerce. The Board of Directors may select additional publishing media. Communications to registered shareholders shall be sent in writing to their address last notified to the company.

#### Press releases

Press releases published in 2016, along with previous releases dating back to January 2004, can be accessed on Oerlikon's website at www.oerlikon.com/pressreleases. Those interested in receiving the company's press releases regularly by e-mail can subscribe to the service at www.oerlikon.com/en/media/press-releases/registration-for-corporate-news/.

#### Financial calendar

For the financial calendar with Oerlikon's 2017 key financial disclosure events, please refer to page 73 under the "Financial report" section of this Annual Report. The financial calendar, including further details on dates of roadshows, conferences and events, can be found at www.oerlikon.com/en/investor-relations/investor-relations-new-financialcalendar/.

#### Contact

Please refer to page 73 under the "Financial report" section of this Annual Report for contact information of the Oerlikon Group, Investor Relations and Corporate Communications.

# **Remuneration report**

#### Shareholder letter

Dear Shareholders

It is my pleasure as Chairman of the Human Resources Committee (HRC) to present to you the 2016 remuneration report of OC Oerlikon Corporation AG, Pfäffikon.

The strategy to become a powerhouse in surface solutions and advanced materials was communicated in November 2015. In 2016, the work of the HRC was mainly characterized by aligning the Executive Committee and compensation plans to support the implementation of this strategy.

The Executive Committee was adjusted in three steps. Firstly, in March 2016, Dr. Roland Fischer replaced Dr. Brice Koch as Chief Executive Officer (CEO) to accelerate the implementation of the strategy. Secondly, the Oerlikon Group headquarters' functions were merged with the Surface Solutions Segment to create a more responsive and market-oriented organization, and Dr. Roland Fischer took on the added role as CEO of the Surface Solutions Segment, replacing Dr. Roland Herb in August 2016. Thirdly, Anna Ryzhova joined the Executive Committee as Chief Human Resources Officer (CHRO) in October 2016 to ensure that Oerlikon retains the competitive and capable human capital required to execute the strategy.

While the compensation strategy was confirmed, the design of compensation plans was adjusted in two steps. A cash target was added to the growth, profitability and capital efficiency targets in the annual Short-Term Incentive (STI) plan. In the Long-Term Incentive (LTI) plan, an absolute Total Shareholder Return (TSR) target was added to the relative TSR, which will be measured against a smaller and more relevant group of peers. The group of peers was adjusted following the divestment of the vacuum business as many of the companies in the previously defined peer group were no longer of comparative relevance. The new STI design was implemented at the beginning of 2016, while the new LTI design was introduced upon the divestment of the vacuum business in the third quarter of 2016. The LTI grants made in May 2016 under the previous performance share plan were substituted for grants under the new performance share plan. LTI grants made in 2015 and 2014 were converted into restricted stock units in proportion to the remaining vesting period.

In 2016, the HRC selected and proposed three new members to the Board of Directors to replace Dr. Mary Gresens, Johan van de Steen and Mikhail Lifshitz, who did not stand for re-election. David Metzger, Alexey V. Moskov and Dr. Jean Botti were elected at the 2016 Annual General Meeting of Shareholders (AGM). Alexey V. Moskov was also elected as a member of the HRC. In November 2016, Hans Ziegler resigned from the Board of Directors and will not be replaced on the HRC until a successor is proposed for election at the 2017 AGM.

The remuneration report for 2016 does not differ in structure and continues to provide a high level of transparency. We continue to show the compensation of the Executive Committee from three perspectives, namely the effective compensation amounts that have been paid in 2016, the forward-looking target value amounts that have been granted in 2016 and their market value at year-end. These perspectives enable shareholders to better interpret the amounts on which they are voting, that is, the target value amounts granted, and to monitor the relationship between the company's performance and management's remuneration.

The proposals of the Board of Directors for the binding votes on remuneration will be published with the invitation to the 2017 AGM.

Sincerely

Prof. Dr. Michael Süss

Chairman of the Human Resources Committee

With this remuneration report, Oerlikon meets the requirements of Art. 13 to 16 of the Compensation Ordinance and para. 5 of the Annex to the Corporate Governance Directive (DCG) of the SIX Swiss Exchange, governing the disclosure of remuneration systems and compensation paid to members of the Board of Directors and the Executive Committee. Moreover, in regard to remuneration reporting, Oerlikon voluntarily complies with economiesuisse's Swiss Code of Best Practice for Corporate Governance.

The Articles of Association include rules on the principles applicable to performance-related pay and to the allocation of equity securities (Art. 30), additional amounts for payments to Executive Committee members appointed after the vote on pay at the AGM (Art. 29) and the vote on pay at the AGM (Art. 28). Details on these rules are available on our website, at the "Oerlikon – Investor Relations" webpage: http://www.oerlikon.com/en/investor-relations/corporate-governance/investor-relations- new-statutes/.

Compensation for the Board of Directors and the Executive Committee is made up of various components, which are described in detail in this report. This section discloses a summary of the following aspects for 2016:

- General principles of the compensation policy
- Setting and approving compensation
- Compensation system and compensation paid or granted to the Board of Directors in 2016
- Compensation systems and compensation paid or granted to the Executive Committee in 2016

#### Compensation policy

Attractive, motivating, fair and simple compensation for all staff is the foundation of Oerlikon's performance-based corporate culture. The compensation systems provide competitive base salaries and attractive incentive schemes. They give equal consideration to individual and company performance, reward excellence and promote an entrepreneurial attitude.

To determine competitive and equitable compensation, Oerlikon uses external and internal benchmarks. The company establishes its external equity by continuously surveying the markets in which it operates, and its internal equity is established by following a Performance Management process. Performance Management is a crucial element in assessing the achievement of expectations and targets in relation to individual and business results.

#### **Determining compensation**

The Human Resources Committee (HRC) supports the Board of Directors in all matters relating to the compensation and Performance Management systems in place at Oerlikon, in particular:

- the compensation policies for members of the Board of Directors, the Executive Committee and Group-wide managerial and non-managerial staff;
- the preparation of the proposals to the AGM regarding the aggregate compensation amounts for the Board of Directors and the Executive Committee;
- the annual pay plan for the Group (including general salary increases):
- the objectives for the CEO and assessment of his performance;
- the performance assessment of Executive Committee members by the CEO.

The compensation policies for the Board of Directors and the Executive Committee require an ongoing review of whether or not the compensation offered is:

- competitive, transparent and fair, by analyzing comparable companies and salary trends in the market;
- commensurate with the company's results and individual performance;
- consistent with Oerlikon's values and long-term strategy.

This review is conducted by the HRC on an annual basis, reported to the Board of Directors following each meeting and forms the basis for the Board of Directors to approve in:

- December, adjustments to compensation policies, if any, for the Board of Directors, CEO and the Executive Committee;
- February, the fixed compensation of the members of the Board of Directors and the Executive Committee for the following year as well as the performance and variable compensation of members of the Executive Committee for the past year;
- February and October, Long-Term Incentive (LTI) grants, i.e. participants in equity programs and share awards allocated to them.

Based on the Compensation Ordinance, the aggregate amounts for compensation of the Board of Directors and the Executive Committee are subject to approval by the AGM. Within these confines, the internal approval and decision processes are as follows:

#### **Approval process**

Decision on	Prepared by	Set by	Approved by
Compensation of members of the Board of Directors, incl. Chairman	Chairman	Human Resources Committee	Board of Directors
Compensation of the CEO, incl. fixed and variable compensation	Chairman	Human Resources Committee	Board of Directors
Compensation of members of the Executive Committee, incl. fixed and variable compensation	CEO	Human Resources Committee	Board of Directors

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The Chairman of the Board of Directors is present at the meeting when decisions are approved by the Board of Directors, including his own remuneration. In his role as Chairman of the HRC, he is also involved in the determination of Board remuneration, but abstains on decisions regarding his own remuneration. Members of the Board of Directors, other than those of the HRC, do not participate in determining the remuneration of Directors.

The CEO is involved in determining the remuneration of members of the Executive Committee and is present when the Board of Directors approves it, except when concerning his own remuneration.

#### Board of directors

#### **Compensation system**

The compensation system applicable to the members of the Board of Directors consists of a fixed cash component and a fixed value of restricted stock units (RSU). The cash component depends on the responsibility, complexity and requirements of the tasks assumed. Each task is remunerated differently and the compensation components are cumulated, depending on the number of tasks assumed by each member, as per the chart below. The level of compensation for each of the components is set by the HRC, taking into account the expenditure of work required from Board and Committee members, and approved by the Board of Directors. The members of the Board of Directors are remunerated for their service from the date of their election and for the duration of their term of office.

#### **Cash compensation**

in CHF 000	Compensation	Expense allowance
Member of the Board of Directors	75	5
Chairman of the Board of Directors	275	10
Chairman of a Committee	50	
Member of a Committee	30	

The compensation is reviewed by the HRC on an annual basis and, if necessary, adjusted by the Board of Directors based on a proposal by the HRC, prior to submitting the aggregate amount to a vote at the AGM.

To align the relative market position of the Chairman to those of other members of the Board of Directors, the Board of Directors decided to increase the Chairman's fee. No other changes were made in 2016.

The value of the RSU is fixed (CHF 125000 per Board member and CHF 280000 for the Chairman of the Board). The number of RSU is determined by the share price at grant date. RSU are blocked from the grant date on the day of the AGM until the following AGM, at which time they are converted into Oerlikon shares. For Directors resigning their mandate prior to the end of the term, the number of RSU converted into Oerlikon shares may be reduced at the sole discretion of the Board of Directors. The RSU program is financed with treasury shares.

No changes to the equity compensation for members of the Board of Directors have been made since 2008.

#### **Compensation 2016**

No member of the Board of Directors served in an executive role in 2016. The Board of Directors consists of six members, of which three were replaced in 2016 and one resigned. Total compensation paid to the nine non-executive members of the Board of Directors in 2016 was CHF 1.9 million. Since all components are fixed, no ratio between fixed and variable compensation is presented.

#### Compensation of non-executive members of the Board of Directors (audited)

in CHF 000	Board of Directors	Strategy Committee	Audit Committee	HR Committee	Cash	RSU <sup>1</sup>	Other <sup>2</sup>	Total compen- sation 2016	Market value per Dec 31, 2016 <sup>3</sup>	Total compen- sation 2015
Prof. Dr. Michael Süss	C	C		C	325	280	10	615	629	418
Gerhard Pegam		M	C <sup>4</sup>		129	125	20	274	280	249
David Metzger			M <sup>5</sup>		78	125	10	213	220	_
Alexey V. Moskov			M <sup>4</sup>	M <sup>5</sup>	80	125	11	216	222	_
Dr. Jean Botti		M <sup>5</sup>			78	125	10	213	220	_
Hans Ziegler <sup>6</sup>		M	С	М	137	125	15	277	283	280
Dr. Mary Gresens <sup>7</sup>			С	М	41			41	41	243
Mikhail Lifshitz <sup>7</sup>			M		28			28	28	249
Johan van de Steen <sup>7</sup>			M		28			28	28	212
Total <sup>8</sup>					924	905	76	1 905	1 951	1 803
Mandatory Employer Cor	ntributions 9							101	103	96

C(hairperson), M(ember)

Members of the Board of Directors did not receive any fees or other remuneration for additional services to OC Oerlikon or its subsidiaries in the 2016 business year. Neither OC Oerlikon nor its subsidiaries granted any guarantees, loans, advances or credit facilities to members of the Board of Directors or related parties in 2016 or 2015.

No compensation was paid to any former members of the Board of Directors of OC Oerlikon Corporation AG, Pfäffikon, or a Group company, or related parties in 2016 or 2015.

<sup>&</sup>lt;sup>1</sup> A total of 95 163 RSU were granted on April 6, 2016 with a fair value at grant date of CHF 9.5.

<sup>&</sup>lt;sup>2</sup> Other compensation consists of social security contributions and an expense allowance which are paid by OC Oerlikon Corporation AG, Pfäffikon.

<sup>&</sup>lt;sup>3</sup> The value per year-end is based on a share price of CHF 10.0.

<sup>&</sup>lt;sup>4</sup> As of December 1, 2016.

<sup>&</sup>lt;sup>5</sup> As of April 5, 2016.

<sup>&</sup>lt;sup>6</sup> Until November 29, 2016. All payments were pro-rated.

<sup>&</sup>lt;sup>7</sup> Until April 5, 2016.

<sup>&</sup>lt;sup>8</sup> The total compensation of 2015 includes also the fees for Directors whose term ended in April 2015 in the amount of CHF 152 000.

<sup>&</sup>lt;sup>9</sup> The Compensation Ordinance requires the disclosure of employer contributions to social security.

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#### Management

#### **Compensation system**

The compensation system for the Executive Committee consists of fixed and variable components. The fixed component entails a base salary commensurate with the role and local market level and, depending on local practice, includes allowances and fringe benefits. The variable component entails a performance-related annual cash bonus (Short-Term Incentive, STI) and a three-year performance-related equity program (Long-Term Incentive, LTI). The mix between these components is defined by the profile, strategic impact and pay level of the role, as described hereinafter.

In 2016, the proportion of variable compensation of members of the Executive Committee was between  $59\,\%$  and  $108\,\%$  of base salary for the target STI and between  $59\,\%$  and  $175\,\%$  of base salary for the target LTI.

No members of the Executive Committee were present when decisions on their respective compensation were made.

#### **Base salary**

The base salary is determined primarily by the executive's tasks, responsibilities, skills and managerial experience, as well as market conditions, and is paid in cash. It was benchmarked with data from Towers Watson and Mercer against comparable positions in companies of comparable size in terms of revenue, employees and geographical scope that are operating in general industry in some of the major markets in which we operate – including Switzerland, Germany, Italy and the USA. Towers Watson and Mercer also provide other compensation services to the Oerlikon Group and its subsidiaries.

#### **Short-Term Incentive (STI) program**

The Oerlikon STI program is a simple and clear annual cash bonus aimed at motivating managers and specialists to focus their efforts on specific financial and individual objectives. It helps them to align their efforts, promotes initiative and contributes to the performance of individuals and the company.

The STI program for the Executive Committee consists of financial as well as strategic and individual objectives. Financial objectives include sales growth, EBITDA margin, operating free cash flow and return on net assets (RONA) and account for  $85\,\%$ , and strategic and individual objectives for  $15\,\%$  of the target bonus.

Financial objectives are set for each business on Group and Segment level and are aimed at increasing the growth, profitability, cash efficiency and return on capital of the respective business.

Strategic and individual objectives focus on the improvement of health, safety and environment throughout the Group as well as medium- and longer-term business objectives.

The Board of Directors approves the financial objectives of members of the Executive Committee at their meeting at yearend for the following year. Strategic and individual objectives are approved at the meeting in February.

Financial targets are based on the annual budget and the payout on the actual financial results. A financial result at target corresponds to a payout of 100% of target bonus, at the lower threshold 50%, and below the lower threshold 0%. No upper threshold exists for financial objectives, while strategic and individual objectives are generally capped at 100% of target bonus. In certain cases, a specific milestone or individual objective can be rewarded with more.

The HRC monitors the STI performance at each of their meetings during the year and endorses the required accruals which form the basis of the disclosure below at the December meeting.

Finally, the HRC determines the overall STI payout, including that for the Executive Committee, based on factual business circumstances and reasonable business judgment in order to achieve a fair result originating from true performance, and makes a recommendation to the Board of Directors for a final decision in February. At this meeting, the HRC also recommends to the Board of Directors, the aggregate amount for variable pay components that are submitted to a vote to the AGM for approval.

For the Executive Committee, the average payout for the STI 2016 is 85%. The average payout of the STI 2015 reached 67%.

#### Long-Term Incentive (LTI) program

OC Oerlikon is a leading global technology Group, with a clear strategy of becoming a global powerhouse in surface solutions, advanced materials and materials processing. To implement this strategy successfully, it is vital for the OC Oerlikon Group to attract, motivate and retain key executives. Therefore, the Board of Directors has decided to implement this long-term performance share plan, which is specifically designed to reward the increase in shareholder value.

To better align the LTI program with the new strategy the Board of Directors decided to replace the previous LTI program which had aimed at rewarding the successful management of a portfolio of businesses. The new program continues to be a performance share plan containing three performance dimensions:

- Absolute Total Shareholder Return measures the value created for shareholders and represents 80% of a grant.
- Relative Total Shareholder Return measures the performance of the Oerlikon share against a group of peer companies and represents 20% of a grant.
- Dividends reflect the ability to distribute profits or funds to shareholders. Dividend equivalents will be added to the effective payout of a grant.

Total Shareholder Return (TSR) is a standard metric used for measuring stock performance. It is defined as the net change in share price plus any dividend distributions over a period of time. In this case, the performance period is three years.

TSR is measured with a starting value of the volume-weighted average share price (VWAP) over the first 30 trading days of the year and an ending value of the VWAP over the last 30 trading days of the year. Absolute TSR results from the cumulated TSR for each of the three years. Relative TSR results from the average percentile amongst a comparator group for each of the three years. The peer group is reviewed every year by the HRC and includes Aalberts, American Axle, Bodycote, BorgWarner, Carraro, Dana, GKN, Kennametal, Praxair, Sandvik and Tocalo.

At the start of the program, the Board of Directors sets target and cap for absolute TSR. A result at or above the cap corresponds to a payout factor of  $200\,\%$ , a result at target corresponds to  $100\,\%$  and a result of 0 corresponds to  $0\,\%$ .

For relative TSR, a result at or above the 90th percentile corresponds to a payout factor of 200%, at the 50th percentile the payout is 100%, at the 20th percentile the payout factor is 50% and below it is 0%.

The number of PSA granted, multiplied by the weighted payout factors of absolute and relative TSR results in the final payout. For each PSA granted, the equivalent of dividends paid per share to shareholders during the vesting period is added to the final payout.

Participants can elect at the beginning of the plan whether the effective number of PSA is fully converted into shares or whether 70% are received in shares and 30% are sold upon vesting to receive the corresponding value in cash. For the shares re-

ceived a two year blocking period applies which is waived if the employment ends earlier.

Since the grants issued under the LTI programs for 2014 and 2015 were still aligned with the objectives of the previous program, they were converted into a pro-rated number of restricted stock units (RSU) for the remaining vesting period.

In 2016, members of the Executive Committee received a portion of their compensation in the form of awards of OC Oerlikon Corporation AG, Pfäffikon, stock. Grants were made to all members of the Executive Committee to the new LTI program 2016 as well as the pro-rated conversion of grants made under the previous program. Both LTI programs are financed with treasury shares

#### **Shareholding requirement**

Members of the Executive Committee are required to build a significant personal shareholding in the business to further align the interests of the management and shareholders. The minimum threshold is a percentage of annual base salary.

Role	% of base salary
CEO	200 %
Other members of the Executive Committee	100 %

Current members of the Executive Committee are required to reach their minimum investment limit within a period of five years. The shareholding of the individuals is reviewed regularly. New members of the Executive Committee have five years during which to reach their minimum investment limit. Members of the Executive Committee are encouraged to retain and use their LTI shares, when vested, to meet this requirement of the remuneration policy.

#### **Employment agreements**

The employment contracts of Executive Committee members are of unlimited duration and end automatically when the member reaches retirement age. The contracts provide for a notice period of 12 months. The contracts of Executive Committee members contain a non-competition clause for the duration of 12 months following termination of employment which is compensated with up to one year's remuneration.

#### **Compensation 2016**

#### **Effective compensation**

The following section discloses the pay components actually received in 2016, including salary and bonus payments, contributions to pension plans, fringe benefits as well as the actual value of equity plans at vesting date. This perspective reflects the income received by members of the Executive Committee in 2016 which amounted to CHF 7.0 million. The highest compensation effectively received by an individual member of the Executive Committee in 2016 was CHF 2.1 million.

#### **Effective Compensation of members of the Executive Committee**

	Fixed compensa	ation		Variable compe	nsation			
in CHF 000	Base salary Pension		Other¹	Bonus <sup>2</sup>	LTI 2013-16 (effective value at vesting date) <sup>3</sup>	Total effective compensation 2016	Total effective compensation 2015	
Total compensation to members of the Executive Committee <sup>4</sup>	3 377	863	158	2 595	C	6 993	12 261	
Thereof highest paid to one individual: Jürg Fedier (CFO) <sup>5</sup> Dr. Brice Koch (former CEO)	1 000	223	13	861	C	2 097	4 040	

- <sup>1</sup> Other compensation includes fringe benefits such as company car, car allowance, contributions to medical insurance or relocation.
- <sup>2</sup> The bonus is determined on Group, Segment and individual level and depends on business and individual performance.
- $^{\rm 3}$  The LTI plan 2013 vested in 2016 with an effective performance upon vesting of 0%.
- <sup>4</sup> The Executive Committee changed during the year with Dr. Roland Fischer replacing Dr. Brice Koch in March 2016, Dr. Roland Herb taking another role outside the Executive Committee in August 2016, Dr. Martin Füllenbach leaving the Oerlikon Group with the divestment of the vacuum business in August 2016 and Anna Ryzhova joining in October 2016.
- <sup>5</sup> Dr. Roland Fischer joined in March 2016. Consequently, his compensation is reflected on a pro-rated basis.

#### **Granted compensation**

The following section discloses the granted pay components in 2016, including salary and bonus payments, contributions to pension plans, fringe benefits as well as the target value of equity programs at grant date. This perspective reflects the compensation potential provided to members of the Executive Committee in 2016 which amounted to CHF 11.0 million. The highest compensation granted to an individual member of the Executive Committee in 2016 was CHF 3.3 million.

#### **Granted Compensation of members of the Executive Committee (audited)**

	rixea compen	sation			variable compe	ensation			
in CHF 000	Base salary	se salary Pension Other¹		RSU <sup>2</sup>	Bonus <sup>3</sup>	LTI 2016-19 (target value at grant date) <sup>4</sup>			Total granted compensation 2015
Total compensation to members of the Executive Committee <sup>6</sup>	3 377	863	158	199	2 595	3 764	10 956	11 058	11 820
Thereof highest paid to one individual: Jürg Fedier (CFO) <sup>7</sup> Dr. Brice Koch (former CEO)	1 000	223	13	113	861	1 066	3 276	3 462	4 415
Estimated Mandatory Employ	yer Contribution	ns <sup>8</sup>					581	586	627

- 1 Other compensation includes fringe benefits such as company car, car allowance, housing or contributions to medical insurance.
- <sup>2</sup> The modification of the LTI plans for 2014 and 2015 from performance share into restricted stock units for the remaining vesting period resulted in additional fair value of CHF 7.7 for the LTI 2014 and 0.0 for the LTI 2015 plan.
- <sup>3</sup> The bonus is determined on Group, Segment and individual level and depends on business and individual performance.
- <sup>4</sup> The share price at grant date in 2016 was CHF 9.6. The performance of the LTI plan per December 31, 2016 is 73.6%. The effective performance of the plan will be determined per December 31, 2018, and the effective value at the time of vesting on April 30, 2019, and disclosed as effective compensation in the remuneration report the following year.
- <sup>5</sup> The market value per year-end is based on a share price on December 31, 2016, of CHF 10.0 and a performance of 73.6%.
- <sup>6</sup> The Executive Committee changed during the year with Dr. Roland Fischer replacing Dr. Brice Koch in March 2016, Dr. Roland Herb taking another role in the organization in August 2016, Dr. Martin Füllenbach leaving the Oerlikon Group with the divestment of the vacuum business in August 2016 and Anna Ryzhova joining in October 2016.
- <sup>7</sup> Dr. Roland Fischer joined in March 2016. Consequently, his compensation is reflected pro-rated.
- <sup>8</sup> The Compensation Ordinance requires the disclosure of estimated employer contributions to social security.

In 2016, former members of the Executive Committee received CHF 4.5 million.

#### Granted Compensation of former members of the Executive Committee (audited)

in CHF 000	Fixed compensation <sup>1</sup>		Total granted compensation 2016	Total granted compensation 2015
Total compensation to former members of the Executive Committee		3 113	4 508	

<sup>&</sup>lt;sup>1</sup> Fixed compensation includes base salary, pension contributions and allowances payable under the respective employment contract.

<sup>&</sup>lt;sup>2</sup> Variable compensation includes a bonus subject to the rules of the STI regulations as well as compensation for contractually agreed non-competition agreements for the duration of one year.

The variable compensation of former members of the Executive Committee will be included in the aggregate amount of variable compensation submitted for approval at the AGM 2017. In 2015, no compensation was paid to former members of the Executive Committee.

Current or former members of the Executive Committee did not receive any fees or other remuneration for additional services to OC Oerlikon or its subsidiaries in the 2016 business year. Neither OC Oerlikon nor its subsidiaries granted any guarantees, loans, advances or credit facilities to members of the Executive Committee or related parties in 2016 or 2015.

During 2016, no compensation was paid to related parties, either by OC Oerlikon Corporation AG, Pfäffikon, or by any other company of the Oerlikon Group.

# Report of the statutory auditor to the General Meeting of OC Oerlikon Corporation AG, Pfäffikon, Freienbach

We have audited the remuneration report of OC Oerlikon Corporation AG, Pfäffikon for the year ended 31 December 2016. The audit was limited to the information according to articles 14–16 of the Ordinance against Excessive Compensation in Stock Exchange Listed Companies (Ordinance) contained in the section "Compensation 2016" of the board of directors on page 58 and sections "Granted compensation of members" and "Granted compensation of former members" of the executive committee labeled 'audited' on pages 61 to 62 of the remuneration report.

#### **Board of Directors' responsibility**

The Board of Directors is responsible for the preparation and overall fair presentation of the remuneration report in accordance with Swiss law and the Ordinance against Excessive Compensation in Stock Exchange Listed Companies (Ordinance). The Board of Directors is also responsible for designing the remuneration system and defining individual remuneration packages.

#### **Auditor's responsibility**

Our responsibility is to express an opinion on the accompanying remuneration report. We conducted our audit in accordance with Swiss Auditing Standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the remuneration report complies with Swiss law and articles 14–16 of the Ordinance.

An audit involves performing procedures to obtain audit evidence on the disclosures made in the remuneration report with regard to compensation, loans and credits in accordance with articles 14–16 of the Ordinance. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatements in the remuneration report, whether due to fraud or error. This audit also includes evaluating the reasonableness of the methods applied to value components of remuneration, as well as assessing the overall presentation of the remuneration report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### **Opinion**

In our opinion, the remuneration report of OC Oerlikon Corporation AG, Pfäffikon for the year ended 31 December 2016 complies with Swiss law and articles 14-16 of the Ordinance.

#### Other matter

The remuneration report of OC Oerlikon Corporation AG, Pfäffikon for the year ended 31 December 2015 was audited by another firm of auditors who expressed an unmodified opinion on that report on 26 February 2016

PricewaterhouseCoopers AG

Stefan Räbsamen Audit Expert

Auditor in charge

Blaženka Kovács-Vujević Audit Expert

Zurich, 24 February, 2017

# Risk management and compliance

#### Oerlikon's Risk Management System

Oerlikon takes a company-wide, holistic approach to the identification, assessment and management of business risks. All organizational units and their business processes and projects are evaluated across the entire spectrum of market, credit and operational risks. The Risk Management System is a management tool that serves to integrate risk management within the company's executive ranks and organizational structure.

#### **Objectives and principles**

The Board of Directors has defined five primary objectives for the Risk Management System. First, it must help secure the company's continued existence and profitability by creating a transparent risk profile and continuously improving and monitoring it. Second, it must contribute to improving planning and supporting a better achievement of targets. Third, it must secure revenue and reduce potential risk-related expenses, which safeguards and enhances the company's value. Fourth, it must align total risk exposure with the company's risk-bearing capacity and ensure that the risk-return ratio of business activities is transparent. Finally, risk management must also help protect the company's reputation.

#### Organization

Roles and responsibilities within the Risk Management System are defined as follows:

- In accordance with Swiss stock corporation law, the Board of Directors has overall responsibility for supervising and monitoring risk management. Supported by the Audit Committee, it monitors the Group's risk profile on the basis of internal reporting. In addition, it reviews the Risk Management System's performance and effectiveness. The Board of Directors also uses internal auditing to fulfill and document its supervisory and monitoring duties.
- Pursuant to Oerlikon's Organizational and Governance Rules, the Chief Executive Officer (CEO), with the support of the Executive Committee, bears overall responsibility for structuring and implementing risk management (delegated management responsibility for risk management). He approves the risk management directive and is responsible for revising it, and also monitors the Group's risk profile and the implementation of risk mitigation actions.
- In accordance with the principle of risk ownership, the Segments and Group Departments (assessment units) bear responsibility for risks and damage/losses in their respective areas. Each is responsible for the implementation of the risk management process. Each assessment unit has a risk management coordinator who coordinates the unit's activities with Group Risk Management. The assessment units conduct risk assessments, establish risk mitigation actions and report the results to Group Risk Management. They continuously monitor their risk profiles and report damage/losses to Group Risk Management.
- As process owner, Group Risk Management is tasked with operation and further development of the Risk Management System. The Head of Group Risk Management assumes technical responsibility for risk management. Group Risk Management provides, among other things, methods and tools, supports the assessment

units in conducting risk assessments and developing mitigation actions, and oversees the implementation of risk mitigation actions. Other responsibilities include calculating the total risk exposure and the risk-adjusted key performance indicators (KPI), monitoring risk-bearing capacity, internal reporting, conducting internal audits and providing training with respect to the Risk Management System. Group Risk Management also coordinates risk-related activities of other units as and when necessary.

Central units and decentralized departments carry out certain risk-related activities. For example: Group Treasury (liquidity, foreign exchange and interest rate risks); Group Tax (tax risks); Group Legal Services (legal risks, compliance risks, including trade control); IT Security (IT risks); Security (security risks); and Insurance Management (insurable risks); etc.

#### **Process and reporting**

The assessment units conduct risk assessments semi-annually and prepare their risk profiles and mitigation action plans. The risk management process is coordinated with the budgeting/planning process and the forecasting process. From a methodological perspective, risk assessments are conducted according to a standard procedure comprising the following steps: preparation of the risk assessment, identification of risks, risk evaluation and planning of risk mitigation actions. The process is Group-wide supported by a risk management software. Internal risk reporting is done semi-annually to the Executive Committee, the Audit Committee and the Board of Directors based on consolidated risk reports.

#### Culture

Oerlikon's risk culture is shaped and developed by the Code of Conduct, training, best-practice sharing, continuous implementation of the risk management process and the Executive Committee and senior management, which act as role models. The risk management directive also contains statements illustrating the desired risk culture.

#### Current situation

Oerlikon operates in markets characterized by various uncertainties. The Segments have different risk profiles contingent upon strategy, the business model and operational implementation. From the perspective of the Group holding company, the following risks might impact Oerlikon's businesses and its performance:

#### Market risks

- Economic slowdown and business cycles: as a result, order intake, sales and profitability could decrease.
- Competition: Competition and overcapacity in various markets could exert pressure on prices or trigger a decline in orders. As a result, order intake, sales and profitability could decrease.
- Foreign currency effects (transaction and translation risk): Unfavorable currency developments, mainly with respect to the euro and US dollar, could trigger higher procurement costs and lower sales figures. In addition, profitability could decline as a result of local currencies being translated into the Group's reporting currency (Swiss franc).

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Country risks: For example, new or higher taxes and fees, currency appreciation or depreciation, higher interest rates, reduced growth, loss of proprietary information (intellectual property), etc., could cause sales to decline and costs to rise. As a result, profitability could decrease.

#### **Credit risks**

Credit risks arise when customers cannot meet their obligations as agreed. At present, there are no significant credit risks for the Group.

#### **Operational risks**

- Additional costs/warranties: Insufficient product quality or machines and equipment that fail to perform as promised could lead to additional costs (contractual warranty obligations). This could reduce profitability.
- Technology risks: If technologies do not prove successful in the market, order intake and sales targets may not be reached. Impairment charges may have to be reported.
- Legal: Oerlikon is exposed to numerous legal risks as a result of its international operations. These include, in particular, risks in the areas of competition and antitrust law, patent law, tax law and environmental protection law. Oerlikon has a valuable portfolio of industrial property rights, such as patents and trademarks. These property rights can become the target of attacks and infringements.
- Loss of key people/shortage of qualified skilled staff and managers: if key people leave the company and qualified skilled staff and managers are not available, sales and profitability targets may not be reached.

#### Compliance and ethics

There is a Group-wide compliance and ethics function to ensure compliance with legal, regulatory and internal regulations as well as the Group's ethical standards, in particular by preventive measures, training, information and consulting.

In 2016, an external review took place, confirming that Oerlikon has a state-of-the-art compliance program. The external assessor attested that Oerlikon has an excellent and robust compliance organization, processes and culture in place. Furthermore, Oerlikon reviewed and streamlined its house of policies, which forms the regulatory backbone of the compliance function. The policies were consolidated and simplified where relevant, enabling employees to better understand the policies, directives and guidelines, and the new structure makes it easier for employees to find the documents of relevance.

The data compliance and data privacy program has been further strengthened through establishing a dedicated organization in each Segment and conducting trainings across all segments.

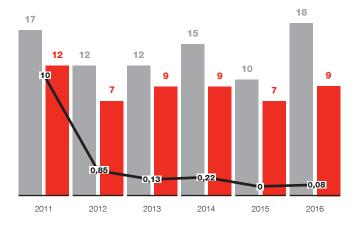
The Compliance program has a three-pillar framework:

■ **Prevention:** through policies, directives, training, the Code of Conduct, risk assessment, maturity assessment, compliance councils, internal controls and metrics, examples and Q&A in all employee meetings.

- **Early detection:** the "whistleblowing" hotline, continuous compliance reviews, controls and internal audits, allegation management process.
- Response: disciplinary action on compliance breaches, process adaptation, resolution plans, remediation of internal control systems, fine-tune policies.

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Following the integration of the Surface Solutions Segment with Group Headquarters, the compliance organization within the Surface Solutions Segment was strengthened. Every legal entity has now a compliance responsible person with defined roles and responsibilities, enabling a stronger local lead across the large number of legal entities and a better cascading of communication and information into the local entities.



Compliance cases 2011-2016 ytd

- Total number of cases
- Number of substantiated cases
- Financial Impact (in CHF million)

# Financial report

# Information for shareholders

#### 2016 capital market development

Overall, 2016 threw an exceptional number of economic and political curveballs at investors, especially at the beginning of the year. US stocks opened the year with their worst two-week performance in recorded history. European stock markets witnessed a similar performance, with the Swiss Market Index (SMI) and the STOXX Europe 600 down 8 % and 10 % respectively. In March, the Bank of Japan stunned the world by selling ten-year government bonds with a negative interest rate for the first time ever. Although the Swiss stock market recovered from the weak start and showed positive growth momentum in the second half of the year for small- and mid-cap companies, the SMI remained at its low level throughout the rest of the year, burdened by, for example, UK's decision to leave the European Union, the continued low oil price and other non-market-friendly geopolitical developments. The SMI closed out the year at 8220 points, a decline of 7% compared to 2015 (8818 points), while the SMI Mid (SMIM) showed more resilience and increased by 5% in 2016 to 1991 points (2015: 1906 points).

#### Oerlikon share performance in 2016

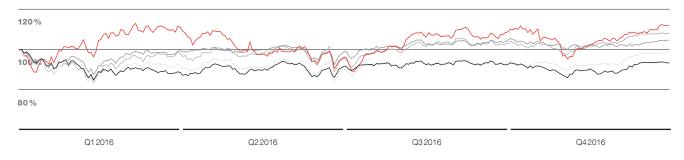
After a weak start to the year in line with developments on the global stock markets, the Oerlikon share price strongly recovered and closed the first quarter 11 % in positive territory, an increase of 37% from its lowest level in the first quarter of 2016. The second quarter was characterized by the uncertainty around UK's decision to leave the European Union. The vote sent shockwaves across global markets, which also affected the Oerlikon share price, which posted a decline of 5% after the second quarter. The second half of the year showed a similar pattern to the first six months. After a sluggish start, the Oerlikon share price steadily increased until another political event, this time the uncertainty around the outcome of the US presidential elections, led to an abrupt stop. Due to a strong year-end rally, the share price closed out 2016 at CHF 10.00 (2015 closing price: CHF 8.95), an increase of 12%. In intraday trading, the share price reached its annual high on March 4, 2016, at CHF 10.10 and its lowest level on January 11, 2016, at CHF 7.76. Average daily trading volume on the 254 trading days in 2016 slightly decreased to around 1.1 million shares (2015: 1.2 million shares).

#### **Analyst recommendations**

Fourteen financial analysts covered Oerlikon in 2016 and published performance estimates and recommendations based on their analysis. Oerlikon provides analysts and investors with market consensus figures in order to facilitate an independent and transparent assessment of performance. This consensus is based purely on analyst estimates and in no way reflects the opinion of Oerlikon.

Oerlikon's portfolio transformations (divestment of the Vacuum Segment), the restructuring in the Drive Systems Segment and the challenging market environment in the Manmade Fibers Segment led to a decrease in the analysts' average target price of 5 %, from CHF 11.02 to CHF 10.48 during 2016. As of December 31, 2016, eight out of fourteen analysts recommended the purchase of Oerlikon shares (buy/accumulate). There were six neutral (hold/neutral) and no negative (underperform/underweight) recommendations.

Oerlikon is seeking to expand the number of financial institutions covering the company, particularly outside of Switzerland, in order to broaden the opinions available in the financial markets and the basis for the consensus figures.



#### Development of the Oerlikon share price

Indexed; 100 % = closing price as of December 31, 2016

- OERL
- SMI **SMIM**
- STOXX Europe 600 STOXX Europe 600 Industrial Goods & Services

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#### **Shareholder earnings**

In 2016, Oerlikon paid a dividend to its shareholders amounting to CHF 0.30 per share for the financial year 2015. Based on a sustainable, strong operational performance and solid financial position, the Board of Directors of Oerlikon will propose a stable dividend of CHF 0.30 per share from the capital contribution reserves for the financial year 2016 at the Annual General Meeting of Shareholders scheduled for April 11, 2017. This will be

equivalent to a payout ratio of 97% based on underlying earnings per share (EPS) of CHF 0.31. Oerlikon's dividend policy allows for a dividend to be paid up to 50% of the Group's underlying net result, subject to available funds. Based on the year-end closing price of CHF 10.00, Oerlikon shares yielded a return of 3.0% in 2016.

#### Key share-related figures<sup>1</sup>

		2016	2015	2014	2013	2012
Year-end	in CHF	10.00	8.95	12.50	13.35	10.35
Year high	in CHF	10.10	12.70	15.65	13.70	10.85
Year low	in CHF	7.76	8.42	10.60	9.91	5.06
Year average	in CHF	9.26	11.02	13.20	11.86	8.20
Average daily trading volume	in thousands	1 107	1 226	1 039	1 2 3 6	1 463
Average daily trading volume	in CHF thousands	10217	13103	13615	14566	11982
Shares outstanding at year-end	number	339758576	339 758 576	339758576	334633258	325 964 498
Market capitalization at year-end	in CHF million	3398	3041	4247	4467	3374
Earnings per share (undiluted)	in CHF	1.14	-1.24	0.59	0.60	1.16
Earnings per share (diluted)	in CHF	1.14	-1.24	0.59	0.59	1.15
Price-earnings ratio		8.77	n/a	21.19	22.25	8.77
Payout ratio		97 %2	49 %³	42 %4	36 %5	29%
Dividend per share	in CHF	0.306	0.307	0.308	0.279	0.2510
Dividend yield		3%	3%	2%	2%	2%
Equity per share <sup>11</sup>	in CHF	5.38	4.58	6.50	6.27	5.75
Cash flow from operating activities per share	in CHF	0.86	0.85	0.76	1.11	1.56

<sup>&</sup>lt;sup>1</sup> Average number of shares with voting and dividend rights.

#### Listing on the stock exchange

The registered shares of OC Oerlikon Corporation AG, Pfäffikon, have been listed on the SIX Swiss Exchange since 1973, and are traded in the main segment.

Securities symbol	OERL
Securities number	81 682
Security type	Registered share
International Securities Identification Number (ISIN)	CH0000816824
Settlement currency	CHF
Stock exchange	SIX Swiss Exchange
Bloomberg ticker symbol	OERL S
Reuters ticker symbol	OERL.S

# Weighting of the Oerlikon share in indices

as of December 31, in %	2016	2015	
SMIM	1.34585	1.24948	
SMI Expanded	0.16909	0.14312	
SPI	0.15846	0.13479	
SPI Extra	0.87736	0.81168	
SPI ex SLI	1.24905	1.19557	
STOXX Europe 600	0.02351	0.02053	
Swiss All Share	0.15695	0.13342	
UBS 100 Index	0.16130	0.13686	

<sup>&</sup>lt;sup>2</sup> Based on underlying EPS of CHF 0.31.

<sup>&</sup>lt;sup>3</sup> Based on underlying EPS of CHF 0.61.

<sup>&</sup>lt;sup>4</sup> Based on underlying EPS of CHF 0.72.

 $<sup>^{\</sup>mbox{\tiny 5}}$  Based on underlying EPS of CHF 0.76.

<sup>&</sup>lt;sup>6</sup> Dividend proposed for financial year 2016, to be paid in 2017.

 $<sup>^{\</sup>scriptscriptstyle 7}$  For financial year 2015, paid in 2016.

<sup>&</sup>lt;sup>8</sup> For financial year 2014, paid in 2015.

<sup>&</sup>lt;sup>9</sup> For financial year 2013, paid in 2014.

<sup>&</sup>lt;sup>10</sup> For financial year 2012, paid in 2013.

 $<sup>^{\</sup>rm 11}$  Attributable to shareholders of the parent.

# Shareholder structure

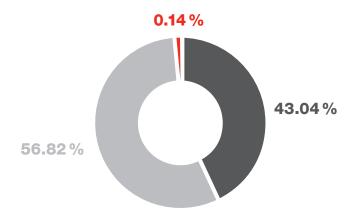
Under the terms of the Financial Market Infrastructure Act (FMIA) shareholders whose holdings reach or exceed/fall short of a certain percentage of the share capital are required to disclose their holdings. There were no changes in the holdings of the Renova Group, which remained Oerlikon's principal shareholder with 43.04% of outstanding shares at the end of the year (2015: 43.04%). On February 15, 2016, Baillie Gifford & Co. disclosed that their voting rights exceeded the threshold of 3% of outstanding shares. At the end of December 2016, Oerlikon held 465473 treasury shares (0.14% of the share capital), which are intended to be used, among other things, as incentive instruments as part of the company's long-term compensation policy (2015: 497116). The free float totaled 56.96% (2015: 56.96%) as of December 31, 2016. The number of registered shareholders decreased from around 15000 in 2015 to about 14500 in 2016.

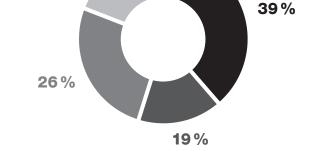
Oerlikon regularly commissions an analysis of its shareholder base in order to track the composition of registered shareholders as well as that of nonregistered investors. The latest study from January 2017 shows that the share capital held by private investors remained at 9% (January 2016: 9%), the vast majority of whom are based in Switzerland. The other 81% is owned by professional investors, which include financial investors such as the Renova Group and institutional investors (investment funds), insurance companies and pension funds. The continued dialogue with the capital markets and the transformation of the

Oerlikon portfolio with the communicated strategic target to become a surface solutions and advanced materials company resulted in increased investments mainly from institutional investors. Their percentage of shares was 41 % compared to 42 % a year ago.

Oerlikon saw an increasing endorsement of institutional investors to take larger positions in the company as a result of acuteness of its strategy, enhanced visibility of market dynamics in key end markets, underlying performance improvement and disciplined use of cash. As a result, the 25 largest shareholders beside the Renova Group increased their proportion of the shares outstanding to almost 32 % compared to 27 % in 2016 and only 8 % in 2012.

The regional distribution of the institutional holdings was also balanced at the beginning of 2017. The majority of institutional holdings remains in Switzerland, making up 39% of all institutional shareholders. One year ago, this percentage was 40%. The percentage of institutional investors from North America slightly decreased to 19% (January 2016: 26%). Institutional shareholders from the UK and Ireland strongly increased to 26% (January 2016: 14%). The portion of institutional investors from the rest of the world decreased from 20% to 16%. These investors were mainly domiciled in Norway, Italy, France, Germany and Scandinavia





Shareholder structure

as of December 31, 2016

OC Oerlikon

Renova Group

Others

#### Regional distribution of institutional investors

as of December 31, 2016

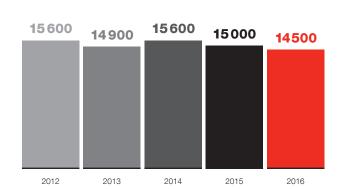
- Switzerland
- North America
- United Kingdom and Ireland

16%

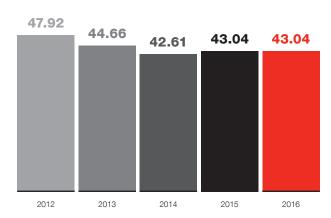
Others

#### **Shareholder structure**

Shareholder	Dec. 2016 No. of shares	in %³	Dec. 2015 No. of shares	in %³	Dec. 2014 No. of shares	in %³
Renova Group¹ (composed of Liwet Holding AG, Zurich, Switzerland; Renova Innovation Technologies Ltd., Nassau, Bahamas; and Lamesa Holding S.A., Panama, Republic of Panama²)	146 222 889 <sup>2</sup>	43.04	146 222 889 <sup>2</sup>	43.04	144764860	42.61
OC Oerlikon Corporation AG, Pfäffikon	465 473	0.14	497 116	0.15	1208319	0.36
Others	193070214	56.82	193 038 571	56.81	193785397	57.03



#### Number of registered shareholders at year-end



 $\label{eq:Renova-along-term oriented main shareholder} \mbox{holding in } \% \mbox{ at year-end}$ 

Beneficial owner (as per disclosure notification): Viktor F. Vekselberg, Zug and Moscow.
 Source: disclosure notification published by SIX Exchange Regulation on December 17, 2015.

<sup>&</sup>lt;sup>3</sup> Basis: shares issued (339 758 576).

# **External financing**

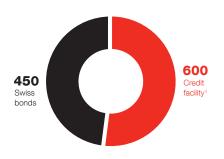
#### New syndicated credit facility agreement

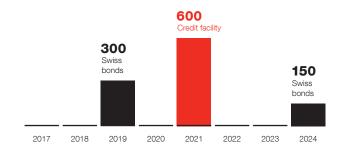
On December 7, 2016, Oerlikon signed an agreement for a new, unsecured syndicated revolving credit facility amounting to CHF 600 million. The facility comprises a revolving credit facility and an ancillary credit facility with a five-year term and two optional one-year extensions. The new credit facility is for general corporate purposes and replaced the former credit facility that was due to expire in July 2017. No liquidity was drawn from the cash facility at the balance sheet date.

On July 13, 2016, Oerlikon redeemed its matured CHF 300 million Swiss bond at nominal value. The bond was issued in 2012 with a coupon rate of 4.25%.

Cash and cash equivalents amounted to CHF 751 million at the balance sheet date. The Group had total net cash of CHF 401 million, as of December 31, 2016.

At the 2016 balance sheet date, the Group had total loans and borrowings amounting to CHF 468 million, attributable primarily to the two outstanding domestic bonds. The creditworthiness of the domestic bonds was BBB- as assessed by UBS AG, BBB as assessed by the Zürcher Kantonalbank, and low BBB as assessed by Credit Suisse (all investment grade), all three assessments with a stable outlook.





#### **Financing instruments**

as of December 31, 2016

- Credit facility CHF 600 million No liquidity was drawn as of balance sheet date.
- Swiss bonds CHF 450 million

#### Maturity of financing instruments

■ Credit facility CHF 600 million ■ Swiss bonds CHF 450 million

#### Outstanding bonds as of December 31, 2016

ISIN	Coupon	Maturity	Volume	Issue price	Price as of Dec. 31, 2016	Price as of Dec. 31, 2015
CH0244692528	1.25 %	June 17, 2019 Redemption at par	CHF 300 million	100%	102.547 %	101.477%
CH0244692536	2.625 %	June 17, 2024 Redemption at par	CHF 150 million	100%	114.749%	107.945%

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# Financial calendar and contacts

#### Financial calendar

**February 28, 2017**Q4/FY 2016 results and publication of Annual Report 2016

April 11, 2017 2017 Annual General Meeting, KKL Lucerne

May 2, 2017 Q1 2017 results

August 8, 2017
Q2/HY 2017 results and publication of Interim Report 2017

October 31, 2017 Q3/9M 2017 results

Dates of roadshows, conferences and other events can be found in the financial calendar on our website at www.oerlikon.com/en/investor-relations/investor-relations-new-financialcalendar

#### **Contacts**

#### **Group Headquarters**

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# Key figures Oerlikon Group

## **Key figures Oerlikon Group**

in CHF million	January 1 to December 31, 2016	January 1 to December 31, 2015
Order intake <sup>1</sup>	2413	2537
Order backlog <sup>1</sup>	447	431
Sales <sup>1</sup>	2331	2671
EBITDA <sup>1, 2</sup>	334	338
- as % of sales	14.3%	12.7%
EBIT <sup>1,3</sup>	158	-306
- as % of sales	6.8%	-11.4%
Result from continuing operations	82	-402
Result from discontinued operations, net of income taxes <sup>4</sup>	306	-16
Net result	388	-418
- as % of equity attributable to shareholders of the parent	21 %	-27 %
Cash flow from operating activities <sup>5</sup>	293	289
Capital expenditure for property, plant and equipment and intangible assets <sup>1</sup>	144	150
Total assets	3825	4097
Equity attributable to shareholders of the parent	1826	1 554
- as % of total assets	48 %	38%
Net cash <sup>1, 6</sup>	401	79
Net operating assets <sup>1,7</sup>	1867	1875
Number of employees <sup>1</sup>	13840	13723
Personnel expense <sup>1</sup>	796	785
Research and development expenditure <sup>1,8</sup>	94	103

<sup>&</sup>lt;sup>1</sup> Continuing operations.

## Key share-related figures<sup>1</sup>

in CHF	January 1 to December 31, 2016	January 1 to December 31, 2015	
Share price			
Year high	10.10	12.70	
Year low	7.76	8.42	
Year-end	10.00	8.95	
Shares outstanding at year-end	339758576	339758576	
Market capitalization at year-end in CHF million	3398	3041	
EBIT per share <sup>2</sup>	0.47	-0.90	
Earnings per share	1.14	-1.24	
Cash flow from operating activities per share	0.86	0.85	
Equity per share <sup>3</sup>	5.38	4.58	
Dividend per share	0.304	0.305	

<sup>&</sup>lt;sup>1</sup> Average number of shares with voting and dividend rights (undiluted).

<sup>&</sup>lt;sup>2</sup> 2015 includes one-time effects of CHF -112 million (restructuring).

<sup>3 2015</sup> includes one-time effects of CHF -588 million (restructuring expenses of CHF -112 million and impairment losses of CHF -476 million).

<sup>&</sup>lt;sup>4</sup> Includes reclassification of translation differences and other items of other comprehensive income amounting to CHF -29 million (previous year: CHF -21 million).

<sup>&</sup>lt;sup>5</sup> Cash flow from operating activities before changes in net current assets amounts to CHF 269 million (previous year: CHF 393 million).

<sup>&</sup>lt;sup>6</sup> Net cash includes cash and cash equivalents, deposits and marketable securities less current and non-current debt.

Net operating assets include current and non-current operating assets (including goodwill and brands and excluding cash and cash equivalents, current financial investments, current income tax receivables and deferred tax assets) less operating liabilities (excluding current loans and borrowings, non-current financial liabilities, current income tax payables and deferred tax liabilities).

<sup>&</sup>lt;sup>8</sup> Research and development expenditure includes expenses recognized as intangible assets in the amount of CHF 22 million (previous year: CHF 22 million).

 $<sup>^{\</sup>rm 2}$  Continuing operations.

 $<sup>^{\</sup>mbox{\tiny 3}}$  Attributable to shareholders of the parent.

 $<sup>^{\</sup>mbox{\tiny 4}}$  Dividend proposal for 2016, to be paid in 2017.

 $<sup>^{\</sup>mbox{\tiny 5}}$  For financial year 2015, paid in 2016.

# Key figures by Segment

in CHF million	January 1 to December 31, 2016	January 1 to December 31, 2015
Oerlikon Group¹		
Order intake	2413	2537
Order Intake Order backlog	447	431
Sales	2331	2671
EBITDA	334	338
- as % of sales	14.3%	12.7%
EBIT	158	-306
- as % of sales	6.8%	-11.4%
Net operating assets <sup>2</sup>	1867	1875
Number of employees	13840	13723
Surface Solutions Segment		
Order intake	1 236	1 233
Order backlog	80	81
Sales	1243	1 234
- thereof sales to third parties	1238	1 229
EBITDA	277	264
- as % of sales	22.2%	21.4%
EBIT	161	157
- as % of sales	13.0%	12.7%
Net operating assets <sup>2</sup>	1372	1 325
Number of employees	6528	6140
Manmade Fibers Segment		
Order intake	577	733
Order backlog	270	237
Sales	481	794
- thereof sales to third parties	481	794
EBITDA	16	85
- as % of sales	3.3%	10.6%
EBIT		67
- as % of sales		8.4%
Net operating assets <sup>2</sup>	163	225
Number of employees	2278	2528
Drive Systems Segment		
Order intake	600	571
Order backlog	97	113
Sales	612	648
- thereof sales to third parties	612	648
EBITDA	51	-19
- as % of sales		-3.0%
EBIT	12	-534
- as % of sales	2.0%	-82.3 %
Net operating assets <sup>2</sup>	360	349
Number of employees	4819	4832

<sup>&</sup>lt;sup>1</sup> Continuing operations.

<sup>&</sup>lt;sup>2</sup> Net operating assets include current and non-current operating assets (including goodwill and brands and excluding cash and cash equivalents, current financial investments, current income tax receivables and deferred tax assets) less operating liabilities (excluding current loans and borrowings, non-current financial liabilities, current income tax payables and deferred tax liabilities).

# Consolidated income statement

in CHF million	Notes	January 1 to December 31, 2016	January 1 to December 31, 2015
Sales of goods		1 479	1774
Services rendered		852	897
Total sales		2331	2671
Cost of sales		-1 699	-1 903
Gross profit		632	768
Marketing and selling			
Research and development		-100	-104
Administration			-220
Impairment of goodwill	13		
Other income	3	46	31
Other expense <sup>1</sup>	3	-32	-152
Result before interest and taxes (EBIT)		158	-306
Financial income	5		10
Financial expense	5	-34	-43
Result before taxes (EBT)		135	-339
Income taxes	6	-53	-63
Result from continuing operations		82	-402
Result from discontinued operations, net of income taxes	2	306	-16
Net result		388	-418
Attributable to:			
Shareholders of the parent		387	-421
Non-controlling interests		1	3
Earnings per share in CHF	7	1.14	-1.24
Diluted earnings per share in CHF	7	1.14	-1.24
Earnings per registered share continuing operations in CHF		0.24	-1.19
Diluted earnings per registered share continuing operations in CHF		0.24	-1.19
Earnings per registered share discontinued operations in CHF	2	0.90	-0.05
Diluted earnings per registered share discontinued operations in CHF	2	0.90	-0.05

<sup>&</sup>lt;sup>1</sup> 2015: thereof CHF -112 million restructuring expense.

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# Consolidated statement of comprehensive income

in CHF million	Notes	January 1 to December 31, 2016	January 1 to December 31, 2015
Net result		388	-418
Other comprehensive income			
Items that will never be reclassified to the income statement			
Remeasurements of defined benefit plans	14	-64	
Income taxes on items that will never be reclassified to the income statement	6	22	-2
		-42	-2
Items that are or may be reclassified subsequently to the income statement		_	
Effective portion of changes in fair value of cash flow hedges		4	-1
Conversion differences		21	-113
Income taxes on items that are or may be reclassified subsequently			
to the income statement	6	<u>-1</u>	_1
			_115
Other comprehensive income for the period, net of taxes		-18	-117
Total comprehensive income for the period		370	-535
Attributable to:			
Shareholders of the parent		370	-537
Non-controlling interests		_	2

# Consolidated balance sheet at December 31

## Assets

in CHF million	Notes	2016	2015
Cash and cash equivalents	8	751	840
Current financial investments and derivatives	9	121	7
Trade and trade notes receivable	10	369	405
Other receivables	10	85	87
Current tax receivables		41	44
Inventories	11	353	360
Prepaid expenses and accrued income		16	12
Assets classified as held for sale	2	_	290
Current assets		1736	2045
Loans and other non-current financial receivables	10	22	23
Non-current financial investments	9	6	6
Property, plant and equipment	12	745	751
Goodwill and intangible assets	13	1 154	1 130
Post-employment benefit assets	14	3	-
Deferred tax assets	6	159	142
Non-current assets		2089	2052
Total assets		3825	4097

# Liabilities and equity

in CHF million	Notes	2016	2015
Trade payables	15	239	242
Current financial liabilities and derivatives	15	6	310
Other current payables	15	60	62
Accrued liabilities	16	178	192
Current customer advances		167	132
Current income taxes payable		44	44
Current post-employment benefit liabilities	14	18	18
Other current provisions	17	71	96
Liabilities classified as held for sale	2	_	233
Current liabilities		783	1329
Non-current loans and borrowings	18	466	458
Non-current post-employment benefit liabilities	14	436	434
Deferred tax liabilities	6	159	157
Other non-current provisions	17	141	147
Non-current liabilities		1202	1196
Total liabilities		1985	2525
Share capital		340	340
Treasury shares		-5	-6
Retained earnings and reserves		1 491	1 220
Equity attributable to shareholders of the parent		1826	1554
Non-controlling interests		14	18
Total equity		1840	1572
Total liabilities and equity		3825	4097

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# Consolidated cash flow statement<sup>1</sup>

Notes	January 1 to December 31, 2016	January 1 to December 31, 2015
	388	-418
		70
		34
12		128
		52
		471
		139
		21
		-99
		-2
	269	393
	31	54
	7	41
	-54	-59
	37	-134
		-6
		-
	24	-104
	293	289
	-112	-122
	-40	-4C
2	-45	-11
2	356	45
2	-4	-
	5	9
	-114	-55
	4	61
	7	6
	57	-107
	-104	-105
		-2
18	-301	_
		6
	-38	-41
	-448	-142
	-2	-15
	-100	25
	851	826
	751	851
	12 13 12 13 2 2 2 2 2 2	Notes   Secember 31, 2016

<sup>&</sup>lt;sup>1</sup> The cash flow statement includes effects from discontinued operations as well as assets and liabilities held for sale. Refer to Note 2 for cash flow from discontinued operations.

<sup>&</sup>lt;sup>2</sup> Includes CHF 11 million (last year: CHF 1 million) which were included in "Assets classified as held for sale" in the balance sheet as of December 31, 2015.

<sup>&</sup>lt;sup>3</sup> 2015: Includes CHF 11 million which were included in "Assets classified as held for sale" in the balance sheet as of December 31, 2015.

# Consolidated statement of changes in equity

in CHF million	Share capital¹	Additional paid-in capital²	Treasury shares <sup>3</sup>	Conversion differences	Retained earnings	Hedge accounting	Income taxes	Total equity attributable to shareholders	Non-controlling interests	Total share- holders' equity
Balance at January 1, 2015	340	1319	-15	-341	795	-4	94	2188	13	2201
Net result					-421			-421	3	-418
Changes in fair value of cash flow hedges							-1	<u>-2</u>		-2
Remeasurement of defined benefit plans	_			_	0	_	-2	-2	_	-2
Conversion differences	_			-112		_		-112	-1	-113
Other comprehensive income for the period				-112			<u>-3</u>	-116	-1	-117
Total comprehensive income for the period				-112	-421	-1	-3	-537	2	-535
Dividend distributions		-102						-102	-3	-105
Share-based payments			11		-4			7		7
Purchase of treasury shares								2		-2
Contributions and distributions	<u> </u>	-102	9	<del></del> -				<u>–97</u>		-100
Foundation of subsidiaries with non-controlling interests									6	6
Changes in ownership interests		-	_			-	_		6	6
Total transactions with owners of the company		-102	9		-4			-97	3	-94
Balance at December 31, 2015	340	1217	-6	-453	370	-5	91	1554	18	1572
Net income					387			387	1	388
Changes in fair value of cash flow hedges						2	-1	1		1
Net change in fair value of cash flow hedges reclassified to the income statement	_	_	_	_	_	2	_	2	_	2
Remeasurement of defined benefit plans					-64		22	-42		-42
Conversion differences	_	_		22		-		22	-1	21
Other comprehensive income for the period				22	-64	4	21	-17	-1	-18
Total comprehensive income for the period				22	323	4	21	370		370
Dividend distributions		-102						-102	-2	-104
Share-based payments			1		6			7		7
Contributions and distributions		-102		<u> </u>	6			<del>-95</del>	-2	-97
Acquisition of non-controlling interests without a change in control				_	-3				-2	-5
Changes in ownership interests		-			-3			-3	-2	-5
Total transactions with owners of the company		-102	1		3			-98	-4	-102
Balance at December 31, 2016	340	1115	-5	-431	696	-1	112	1826	14	1840

<sup>&</sup>lt;sup>1</sup> The share capital of OC Oerlikon Corporation AG, Pfäffikon, consists of 339 758 576 fully-paid registered shares (previous year: 339 758 576) of nominal value CHF 1 each. On December 31, 2016, conditional capital amounted to CHF 47 200 000 (previous year: CHF 47 200 000).

<sup>&</sup>lt;sup>2</sup> As of December 31, 2016, additional paid-in capital includes CHF 889 million (previous year: CHF 990 million) of legal reserves in OC Oerlikon Corporation AG, Pfäffikon.

 $<sup>^{\</sup>rm 3}$  As of December 31, 2016, the Group held 465 473 own shares (previous year: 497 116).

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# Significant accounting principles

#### **Company operations**

OC Oerlikon Corporation AG, Pfäffikon, is a Swiss public company located in Churerstrasse 120, Pfäffikon, canton of Schwyz, Switzerland. It is the ultimate parent company of the Oerlikon Group, a leading high-tech industrial Group which provides innovative industrial solutions and cutting-edge technologies for surface solutions, manmade fibers manufacturing and drive systems.

Apart from its activities in Switzerland, the Oerlikon Group operates primarily in EU member states, North America and Asia, and has a workforce of 13 840 employees (full-time equivalents).

#### **Basis of preparation**

The consolidated financial statements of OC Oerlikon Corporation AG, Pfäffikon, have been prepared in accordance with International Financial Reporting Standards (IFRS) and Swiss company law. These accounting standards have been applied consistently in all periods presented in this report. The consolidated financial statements are presented in Swiss francs (CHF). The consolidated financial statements were approved by the Board of Directors on February 24, 2017, and will be submitted to the Annual General Meeting of Shareholders on April 11, 2017, for approval. All standards issued by the International Accounting Standards Board (IASB) and all interpretations of the IFRS Interpretations Committee (IFRIC) effective at the date of the consolidated financial statements have been taken into account. All line item amounts in the consolidated financial statements are presented in millions of Swiss francs, and all such amounts (including totals and subtotals) have been rounded according to normal commercial practice. Thus, an addition of the figures presented can result in rounding differences. Values of assets and liabilities have been determined in accordance with the historical cost convention, with the exception of derivative financial instruments and financial assets held for trading purposes, which are stated at fair value. These consolidated financial statements are published in English and German. If there is any divergence in the wording, the English original text is authoritative.

#### Judgments, estimates and assumptions

Preparation of the consolidated financial statements in accordance with IFRS requires management to make estimates and assumptions that affect the values of reported revenues, expenses, assets, liabilities and contingent liabilities at the reporting date. These estimates and assumptions are constantly being revised. Depending on the issues involved, revision of such assumptions can have an effect on the current period, as well as potentially on future periods. These estimates, judgments and assumptions are based on historical experience and other factors that are believed to be reasonable and justified as expectations of future events.

However, actual results can differ from these estimates. Moreover, consistent application of the chosen accounting principles can require management to make decisions that may have a material impact on the amounts reported in the annual financial statements. Above all, assessment of business transactions that involve complex structures or legal forms calls for decisions on management's part. The most important accounting estimates are to be found in:

**Business combinations:** Where the Group acquires control of another business, the identifiable assets acquired, the liabilities assumed and any non-controlling interest in the acquired business shall be recognized, separately from goodwill.

This process involves management making an assessment of the fair value of these items. Management judgment is particularly involved in the recognition and measurement of the following items:

- Intellectual property. This may include technologies, patents, licenses, trademarks and similar rights for currently marketed products.
- Customer relationships.
- Contingencies such as legal, tax and environmental matters.
- The recoverability of any accumulated tax losses previously incurred by the acquired company.

In all cases, management makes an assessment based on the underlying economic substance of the items concerned, and not only on the contractual terms, in order to fairly present these items (refer to Note 2 for details).

Impairment of value: At December 31, 2016, the Group had CHF 745 million in property, plant and equipment, CHF 495 million in goodwill and CHF 659 million in intangible assets other than goodwill. A detailed test for impairment of the carrying amount is carried out for goodwill and other intangible assets with indefinite useful life annually or, as for all other assets, if there is any indication of a loss of value. Goodwill is allocated to the cash-generating units (CGUs) that are expected to benefit from the synergies of the business combination which gave rise to the goodwill. The recoverable amount of the CGUs is determined based on fair value less cost to sell calculations. In the same way, future cash flows from the use of tangible fixed assets can be estimated and the carrying value tested, using the same rules. These tests use estimates of future cash flows to be expected from use of the assets concerned, or from their possible sale. Actual cash flows may vary significantly from these estimates following changes of plan for the use of assets such as land and buildings, technological obsolescence or market changes (refer to Note 12 for impairment of property, plant and equipment and Note 13 for impairment of goodwill and intangible assets).

**Provisions and contingent liabilities:** At December 31, 2016, the Group had CHF 212 million in provisions and CHF 6 million in contingent liabilities. In the ordinary course of their business, companies of the Group may become involved in litigious conflict or disagreement with third parties. Provisions are made to cover the Group's exposure in such matters, based on a realistic estimate of the economic

outflow that may result. However, the ultimate resolution of such disputes can give rise to claims against the Group, which may not be fully covered by provisions or insurance. Specific warranty provisions are set up for known warranty claims as required, and also for situations where it is known from recent experience that the company is exposed to claims, usually for technical reasons. Besides this, a general provision is made for other possible claims, based on experience and linked to sales volumes. In cases where the company has entered into contractual obligations whose cost exceeds the economic benefit to be expected, corresponding provisions are made. These are based on management's estimates (refer to Note 17 for provisions and Note 23 for contingent liabilities).

In connection with the sale of the Vacuum Segment, the Group has assumed certain customary obligations such as warranty obligations and indemnifications. To assess the impact of these obligations, management had to make assumptions (refer to Note 2 for details).

**Pensions:** At December 31, 2016, the carrying amount of the Group's defined benefit obligations is CHF 1085 million. The estimates and assumptions used are based on future projections and actuarial calculations that have been determined together with the actuaries (refer to Note 14 for details).

**Taxes on income:** At December 31, 2016, the Group had a current tax receivable of CHF 41 million, a current income tax liability of CHF 44 million, a deferred tax asset of CHF 159 million and a deferred tax liability of CHF 159 million. Estimates are used initially to determine amounts receivable and payable in respect of current and deferred taxes on income. These estimates are based on interpretation of existing tax law and regulation. Many internal and external factors can influence the final determination of amounts receivable or payable, such as changes in tax law, changes in tax rates, the level of future profits and fiscal audits carried out by the tax authorities (refer to Note 6 for details).

#### Adoption of new and revised accounting standards

The adoption of new or amended standards and interpretations which are effective for the financial year beginning on January 1, 2016, did not have a material impact on the Group's consolidated financial statements.

# Newly published accounting standards not early adopted

The IASB has published a number of new and revised standards and interpretations that will come into force later and have not been implemented ahead of their effective dates. Their effects on the Oerlikon Group's financial statements have not yet been fully analyzed, but an initial review has been conducted, all standards with an expected effect on the Group's financial statements are summarized in the following table:

Standard/interpretation	Impact level	Effective date	Planned application by Oerlikon
IFRS 15 - Revenue Recognition	*	January 1, 2018	Reporting year 2018
IFRS 9 – Financial Instruments	*	January 1, 2018	Reporting year 2018
IFRS 16 – Leases	*	January 1, 2019	Reporting year 2019

<sup>\*</sup> The impact on the consolidated financial statements is currently being assessed.

There are no other IFRS standards or interpretations which are not yet effective which would be expected to have a material impact on the Group's financial statements.

## **Principles of consolidation**

#### **Subsidiaries**

December 31 is the uniform closing date for all subsidiaries included in the consolidated financial statements. Subsidiaries are all entities over which OC Oerlikon Corporation AG, Pfäffikon, has control. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the company and has the ability to affect those returns through its power over the entity. The financial statements of subsidiaries are included in the consolidated financial statements of the Oerlikon Group from the date on which control commences until the date on which control ceases.

Non-controlling interests are recorded separately under equity in the consolidated financial statements. Transactions with non-controlling interests that do not result in loss of control are accounted for as equity transactions.

All significant consolidated subsidiaries held are shown in the listing at the end of the notes.

#### **Disposal of subsidiaries**

When the Group ceases to have control over a subsidiary, it derecognizes the assets and liabilities of the subsidiary and any related non-controlling interests and other components of equity. Any resulting gain or loss is recognized in the income statement. Amounts previously recognized in other comprehensive income that may be reclassified to the income statement are reclassified to the income statement. Any retained interest in the former subsidiary is remeasured to its fair value at the date when control is lost.

#### **Associates**

Associates are all entities over which the Group has significant influence, but not control or joint control, over the financial and operating policies (generally accompanying a shareholding of between 20 % and 50 % of the voting rights). Investments in associates are accounted for using the equity method. Under the equity method, the investment is initially recognized at cost, and the carrying amount is

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increased or decreased to recognize the investor's share of the profit or loss and the comprehensive income of the investee after the date of acquisition until the date on which significant influence ceases.

#### Joint arrangements

Investments in joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations of each investor. The Oerlikon Group has assessed the nature of its joint arrangements and determined them to be joint ventures. Joint ventures are accounted for using the equity method (see above under "Associates").

#### **Business combinations and goodwill**

The Oerlikon Group accounts for business combinations using the acquisition method when control is transferred to the Group (see above under "Subsidiaries"). At the date of their initial consolidation, the identifiable assets acquired and liabilities assumed of subsidiaries are measured at fair value. Goodwill is measured at the acquisition date as the fair value of the consideration transferred plus the amount of non-controlling interests in the acquiree less the net recognized assets. Transaction costs are expensed as incurred, except if related to the issue of debt or equity. Goodwill denominated in foreign currencies is translated into Swiss francs at the rates prevailing at the balance sheet date.

#### Translation of foreign currencies

The accounts of foreign entities are prepared in the relevant functional currency and translated into Swiss francs in accordance with IAS 21. An entity's functional currency is the currency of the primary economic environment in which the entity operates, or its local currency. In the consolidation, assets and liabilities of foreign subsidiaries are translated into Swiss francs at the exchange rate prevailing on the balance sheet date, while income, expenses and cash flows are translated using average rates for the year. Differences resulting from the application of different exchange rates are recognized in other comprehensive income. Exchange gains and losses, as recorded in the individual company accounts of subsidiaries, are included in the income statement. Excluded from this rule are specific long-term intercompany monetary items that form part of the net investment in a foreign subsidiary, whose exchange translation differences are recognized in other comprehensive income. In the year that a foreign entity is divested, the cumulative translation differences recorded in other comprehensive income are reclassified to the income statement as part of the gain or loss upon disposal.

## Elimination of intercompany profits

Profits on intercompany sales not yet realized through sales to third parties, as well as profits on transfers of fixed assets and investments in subsidiaries, are eliminated.

#### **Segment information**

The Segment reporting of the Oerlikon Group is in accordance with the "management approach" and based on the internal structure and reporting. The Executive Committee is an advisory body to the Chief Executive Officer (CEO). The CEO performs the function of the Chief Operating Decision Maker (CODM), assesses performance and makes resource allocation decisions. Following the reorganization of the Surface Solutions Segment, the CODM receives information on Business Unit level for the Surface Solutions Segment. In accordance with the aggregation criteria of IFRS 8, these Business Units have been aggregated to one reportable Segment. The internal reporting to the Executive Committee and the Board of Directors is based on uniform Group accounting principles, which correspond to those used in the consolidated financial statements. Intersegment pricing is determined on an arm's length basis.

The Group consists of the following reportable Segments:

- Surface Solutions Segment supplies PVD coatings that increase the performance of tools and precision components and offers specialized components and innovative surface engineering products and services.
- Manmade Fibers Segment develops and manufactures textile machinery.
- Drive Systems Segment manufactures gears and other components for power transmission, mainly in motor vehicles.

#### **Assets**

**Cash and cash equivalents** are placed with various financial institutions with top-quality international ratings. Time deposits included therein mature in three months or less from the date of acquisition. Cash and cash equivalents are stated at nominal value.

**Financial assets and derivative financial instru- ments:** Marketable securities are held at fair values, with their values adjusted as required through the income statement. Gains or losses are measured by reference to fair value.

Regular-way purchases or sales of financial assets are recognized at settlement date. Gains and losses from changes in the fair value of financial investments available for sale are temporarily recorded in other comprehensive income until such investments are sold or disposed of, at which time the gains or losses are transferred to the income statement. Any loss from value impairment is immediately recorded in the income statement.

Forward contracts and options are utilized systematically and mainly for the purpose of reducing business-related foreign currency and interest rate risks. These transactions are concluded with first-rate financial institutions and, as a general rule, have a term to maturity of up to 12 months.

These derivative financial instruments are stated at fair value. If all requirements are fulfilled with regard to documentation, probability of occurrence, effectiveness and reliability of valuation, hedge accounting is applied in accordance with IAS 39. Until the hedged underlying business transactions are accounted for, the unrealized profits and losses resulting from the valuation of derivative financial instruments at fair value are recorded in other comprehensive income, with no impact on the income statement.

**Trade receivables:** Receivables are stated at the original invoiced amount less any necessary value adjustments for default risks. These risks are insured with third parties only in exceptional cases. Value adjustments are set at varying levels corresponding to risks recognized in the different Business Units.

**Inventories:** Inventories of raw materials, purchased components and trade merchandise are carried at the lower of cost or net realizable value, using FIFO and weighted average cost valuation methods. Self-made components, work in progress and finished goods are carried at production cost. This includes all related material and labor costs, as well as a reasonable allocation of indirect production costs. Recognizable reductions in value resulting from excess inventory, reduced replacement cost or sales price and similar are taken into account through appropriate writedowns of inventory items.

**Property, plant and equipment:** Tangible fixed assets are recorded at historical purchase or production costs, less necessary depreciation. Components of PP&E that have a differing useful life are recorded separately and depreciated accordingly (component approach). Depreciation is calculated on a straight-line basis according to the expected useful life of the asset, as follows:

IT hardware	3-7 years
Company cars	4-7 years
Trucks and electric vehicles	5-10 years
Technical installations and machines	5-15 years
Other operating and business equipment	3-15 years
Central building installations	10-25 years
Leasehold improvements	2-20 yeras
Plant and administrative buildings -	
used operationally	20-60 years

Estimated useful lives and residual values are examined annually.

Fixed assets under financial leasing agreements are treated identically to fixed assets owned.

Major spare parts and servicing equipment qualify as property, plant and equipment when an entity expects to use them during more than one period.

Intangible assets and goodwill: Intangible assets are identifiable nonmonetary assets without physical substance from which future economic benefits are expected to flow to the Group. Intangible assets are amortized on a straight-line basis over their useful lives, where these can be clearly determined, for example software over two to three years or development costs generally over five years. In the case of intangible assets with indefinite useful lives, an impairment test of the asset value is conducted annually at the balance sheet date, or earlier on the occurrence of a triggering event. Goodwill and brands are not amortized, but instead tested annually for possible value impairment.

#### Liabilities

**Current and non-current financial liabilities:** Current and non-current financial liabilities are initially valued at fair value less directly attributable costs. Subsequent valuation is at amortized cost adjusted using the effective interest rate method. The financial liabilities consist mainly of two unsecured bonds.

#### **Current and non-current provisions:**

Provisions are set up for obligations arising from past events if the future outflow of resources is more likely than not and can be estimated reliably. Other provisions represent uncertainties, for which a best estimate is made in arriving at the amount reserved. Non-current provisions are discounted at a pretax rate that reflects the current market assessments of the time value of money.

Restructuring provisions: Provisions are established in cases where a detailed restructuring plan exists and the Group has informed those concerned, or the restructuring process has started.

Onerous contracts: Provisions are established when unavoidable estimated costs to fulfill a contract exceed the related contract revenues. The difference is provided against income in the current period. When accounts are prepared, the related risks are reassessed systematically by all Business Units and all costs are adjusted as required. This reassessment is based on the "most likely outcome", which uses assumptions regarding technical feasibility and timely realization of the projects and includes a quantification of the risks. The actual future obligation can vary from these estimates.

Warranty provisions: Provisions are established for known customer claims and also for potential warranty exposure.

Product liability: Provisions are established for known claims; potential exposure is not provided for.

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Acquirees' contingent liabilities: In a business combination, a contingent liability of the acquiree is recognized in acquisition accounting if it is a present obligation that arises from past events and its fair value can be measured reliably. The probability of payment being required is not relevant in determining whether a contingent liability that is a present obligation should be recognized in a business combination, but this probability will impact its fair value. A contingent liability recognized is initially measured at its fair value. Subsequently, it is measured at the higher of its acquisition-date fair value and the amount that would be recognized in accordance with the requirements for provisions above. A contingent liability initially recognized in a business combination is not derecognized until it is settled, cancelled or it expires.

**Post-employment benefits provisions:** The Oerlikon Group operates various post-employment benefit schemes, including both defined benefit and defined contribution plans.

A defined contribution plan is a post-employment benefit plan under which the Group pays fixed contributions into a separate entity. The Group will have no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods.

A defined benefit plan is a post-employment benefit plan other than a defined contribution plan.

The liability (asset) recognized in the balance sheet in respect of defined benefit pension plans is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets, taking into account any asset ceiling. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related pension obligation.

Remeasurements of the net defined benefit liability (asset) are charged or credited to other comprehensive income in the period in which they arise.

Current and past-service costs are recognized immediately in the income statement (operating result).

Net interest on the net defined benefit liability comprises interest income on plan assets, interest cost on the defined benefit obligation and interest on the effect of asset ceiling. The net interest is calculated using the same discount rate that is used in calculating the defined benefit obligation, applied to the net defined liability at the start of the period, taking into account any changes from contribution or benefit payments. Net interest on the net defined benefit liability is recognized in the income statement (financial result).

The contributions to defined contribution plans are recognized in the income statement (operating result) when they are due. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in the future payments is available.

**Treasury shares:** Treasury shares are shown as a reduction of shareholders' equity. Gains or losses arising from the sale of treasury shares are also shown in the consolidated statement of changes in equity, in retained earnings.

#### **Income statement**

## Sales of goods and services:

Sales of goods and services are recognized when the transaction occurs, when the amounts involved are reliably known and when it is considered likely that the related economic benefit will flow to the Oerlikon Group. Sales of goods are booked at such time as the risk and reward of ownership of the goods passes to the customer.

Long-term contracts are accounted for under the "Percentage of Completion" (POC) method. In the Manmade Fibers Segment, the percentage of completion is determined by measuring costs incurred to date as a proportion of extrapolated total contract cost (cost-to-cost method).

Revenues from services that have been rendered are recorded in the income statement, according to the level of completion at the balance sheet date.

**Research and development:** Development costs are recognized as intangible assets if they meet the criteria for such recognition set forth in IAS 38. The cost capitalized comprises all costs directly attributable to the development process. After the development phase is complete, the asset is amortized over its estimated useful life, usually five years.

## Other income and expenses:

Other income consists of income from real estate, investments, licenses, patents, income from a risk and revenue share agreement and non-operating assets. Other expense consists of non-operating expenses, restructuring expenses, taxes not based on income, expenses related to a risk and revenue share agreement and integration and acquisition costs.

**Financial expenses:** Interest expense is charged to the income statement without restriction. In principle, borrowing costs are recognized in the income statement by using the effective interest rate method. Borrowing costs that can be directly allocated to the construction, build-up or purchase of a qualified asset are capitalized through the costs of the assets.

**Current income taxes:** Current income taxes are accrued on the basis of income reported locally for the financial year by the individual Group companies in keeping with the current year taxation principle. The valuation of assets and liabilities pertaining to both current and deferred taxation calls for extensive use of judgment and estimation.

#### **Deferred taxes:**

Wherever local company tax values differ from Group values (temporary differences), deferred taxes are determined and recorded by applying tax rates enacted or substantially enacted at the balance sheet date to the differences (balance sheet liability method). Taxes on dividends from subsidiaries are only accrued when distributions are contemplated. The value of deferred tax assets deriving from tax losses carried forward is subject to annual review. Tax losses are only recognized as assets if they are expected to be realized within the next five years, offset against taxable profits of Group companies individually or in tax groups. In countries or companies where realization of the losses cannot be foreseen, no asset is recognized. Management believes that its estimates are appropriate and that uncertainties in the valuation of tax assets and liabilities have been appropriately addressed. Deferred tax is not recognized for: a) temporary differences arising on the initial recognition of assets or liabilities in a transaction that is not a business combination, and that affects neither accounting profit nor taxable profit or loss; b) temporary differences related to investments in subsidiaries to the extent that it is probable that they will not reverse in the foreseeable future; and c) taxable temporary differences arising on the initial recognition of goodwill.

#### Earnings per share:

Earnings per share (EPS) is based on the portion of consolidated net profit attributable to shareholders of OC Oerlikon Corporation AG, Pfäffikon, divided by the weighted average number of shares outstanding during the reporting period. Diluted earnings per share also take into account additionally all potential equity securities that could have come into existence as the result of an exercise of option rights.

# Discontinued operations and assets and liabilities classified as held for sale

A component of the Group is reclassified into "discontinued operations" if its divestment is intended, and if it fulfills the criteria for being classified as "held for sale" and for being presented as discontinued operations. Non-current assets and disposal groups held for sale are carried at the lower of their carrying amount or fair value less cost to sell, and any value impairments are recognized in the income statement. Depreciation of non-current assets ceases when the respective qualification as assets held for sale is met.

All disclosures in the notes to the consolidated financial statements refer to continuing operations, except where otherwise indicated.

#### **Risks**

#### Financial risk management/financial instruments:

Due to its international activities, the Group is exposed to various financial risks, such as Market risks, (including foreign exchange risk, interest rate risk and pricing risk), credit risk and liquidity risk. The Group's financial risk management aims to limit any adverse effects that the markets may have on the Group's financial health, at an acceptable hedging cost. Risk limitation does not mean complete exclusion of financial risks, rather it means following a policy of economically sensible management of the Group's finances within an agreed framework of documented authority. The Group uses derivative financial instruments to hedge certain risks. Only preapproved instruments are used, and as a fundamental rule, no speculative transactions are conducted in the areas of foreign exchange or interest rates. No hedges are entered into without a corresponding base transaction. Management monitors and steers such risks continuously with the support of Group Treasury, which identifies and evaluates all financial risks, working with the Group's operating companies and hedging the risks as appropriate. The Group has documented guidelines for financial risk management, covering the use of derivative and non-derivative financial instruments and policies for use of surplus funds

**Foreign exchange risks:** Risks related to fluctuations in foreign currencies are in certain instances hedged at Group level (refer to Note 19 "Financial instruments").

**Interest rate risks:** Risks related to fluctuations in interest rates are monitored by Group Treasury and in certain instances hedged at Group level (refer to Note 19 "Financial instruments").

**Credit risks:** Risks of financial loss if a customer or counterparty to a financial instrument fails to meet its contractual obligations are monitored locally by the individual Group companies (refer to Note 19 "Financial instruments").

**Liquidity risks:** The Oerlikon Group supervises and manages the Group's liquidity centrally to ensure that outstanding financial liabilities can at all times be met within their maturity period and at an acceptable financing cost (refer to Note 19 "Financial instruments").

#### **Contingent liabilities**

Contingent liabilities represent potential obligations whose impact depends on the occurrence of one or more future events that cannot be influenced. Contingent liabilities are also existing obligations that are not expected to result in a future outflow of benefits, or where the outflow of benefits cannot reliably be quantified.

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## Participation plans/share-based payments

Members of the Executive Committee and senior management may receive a portion of their compensation as a long-term bonus in the form of awards for OC Oerlikon Corporation AG, Pfäffikon, shares under various plans. The fair value is determined on the day such share-based remuneration is granted and charged to the income statement on a straight-line basis over the vesting period within operating results, with a corresponding increase in equity (equity settled plans).

#### **Related-party transactions**

Members of the Board of Directors or Executive Committee, significant shareholders and companies controlled or jointly controlled by any of those individuals as well as post-employment benefit plans of the Group are deemed to be related parties.

#### Notes to the consolidated financial statements

Group structure Note 1

#### **Subsidiaries**

A list of Oerlikon's subsidiaries can be found on pages 128 and 129.

During the financial year 2016, the following significant changes in the Group structure have occurred:

#### **Acquisition of non-controlling interests**

During 2016, the Group purchased non-controlling interests in Fairfield Atlas Ltd., increasing the ownership from 98.19% to 98.37%. The Oerlikon Group also purchased all non-controlling interests in Vocis Limited, increasing the ownership from 51% to 100%.

#### Acquisitions

On December 28, 2016, the Oerlikon Group completed the acquisition of all outstanding equity interests of DMX and on December 30, 2016, of the citim Group. The following companies were acquired as part of these two transactions: DMX SAS, citim GmbH and citim AM Inc.. Further information can be found in Note 2 "Acquisitions and Divestments".

#### **Divestments**

On November 20, 2015, the Oerlikon Group signed an agreement with Atlas Copco to divest the Vacuum Segment. The transaction was closed on August 31, 2016. The following companies were sold as part of this transaction: Oerlikon Leybold Vacuu do Brasil Ltda., Oerlikon Leybold Vacuum Schweiz AG, Oerlikon Leybold Vacuum (Tianjin) Co. Ltd., Oerlikon Leybold Vacuum Grianjin) International Trade Co. Ltd., Oerlikon Leybold Vacuum Dresden GmbH, Oerlikon Leybold Vacuum GmbH, Oerlikon Real Estate GmbH, Oerlikon Leybold Vacuum Spain S.A., Oerlikon Leybold Vacuum France SAS, Oerlikon Leybold Vacuum UK Ltd., Oerlikon Leybold Vacuum Italia S.r.l., Oerlikon Leybold Vacuum Japan Co. Ltd., Oerlikon Leybold Vacuum Korea Ltd., Oerlikon Leybold Vacuum Nederland B.V., Oerlikon Leybold Vacuum Singapore Pte. Ltd., Oerlikon Leybold Vacuum Taiwan Ltd. and Oerlikon Leybold Vacuum USA Inc.. Further information can be found in Note 2 "Acquisitions and Divestments".

#### **Non-controlling interests**

The following Group companies have non-controlling interests as at December 31:

Company		Non-controlling	interests in %
	Country	2016	2015
Oerlikon Barmag Huitong (Yangzhou) Engineering Co., Ltd.	China	40.00	40.00
Zigong Golden China Speciality Carbides Co., Ltd.	China	40.00	40.00
Oerlikon Balzers Sandvik Coating Oy	Finland	49.00	49.00
Vocis Limited	Great Britain	_	49.00
Fairfield Atlas Ltd.	India	1.63	1.81
Oerlikon Balzers Coating Luxembourg S.à r.l.	Luxembourg	40.00	40.00
Oerlikon Balzers Coating Philippines Inc.	Philippines	0.01	0.01
Oerlikon Balzers Coating Korea Co., Ltd.	South Korea	10.10	10.10
Oerlikon Balzers Sandvik Coating AB	Sweden	49.00	49.00
Oerlikon Balzers Coating (Thailand) Co. Ltd.	Thailand	0.01	0.01
Oerlikon Balzers Kaplama Sanayi ve Ticaret Limited Sirketi	Turkey	0.01	0.01

The share that non-controlling interests have in the Oerlikon Group's activities and cash flows are not material.

#### Interests in joint arrangements and associates

The Oerlikon Group does not hold any significant interests in joint arrangements and associates.

#### Significant prior-year changes in Group structure

#### Divestments

On December 22, 2014, the Oerlikon Group signed an agreement with Evatec AG to divest the Advanced Technologies Segment. The transaction was closed on February 2, 2015. The following companies were sold as part of this transaction: Oerlikon Advanced Technologies AG and Oerlikon Deutschland Vertriebs GmbH. Further information can be found in Note 2 "Acquisitions and Divestments".

#### Foundation of a subsidiary

As of July 9, 2015, OC Oerlikon Textile Holding AG entered into an agreement with Huitong Chemical Engineering Technique Co., Ltd., to found Oerlikon Barmag Huitong (Yangzhou) Engineering Co., Ltd. (Oerlikon's share being 60 %). The agreement provided for the sale of the engineering and EPC-business for certain polymers of Huitong Chemical Engineering Technique Co., Ltd. to the newly founded company. This asset deal was closed on October 31, 2015. Further information can be found in Note 2 "Acquisitions and Divestments".

Note 2

#### **Acquisitions in 2016**

On April 1, 2016, Oerlikon acquired the distribution and after-sales business of I.W.S. Co., LTD., Seoul, South Korea. The Surface Solutions Segment has been previously utilizing I.W.S. as distributor for its materials business as well as after sales service provider for its equipment business in South Korea. As a step of forward integration into the market, the acquisition opens up additional margin and growth potential.

On April 7, 2016, Oerlikon acquired the entire staple fibers technology portfolio of Trützschler Nonwovens & Man-Made Fibers GmbH, Egelsbach, Germany. This portfolio was part of the German Trützschler Group, which is a specialist in fiber preparation for the yarn-spinning and nonwovens industries. The acquisition expands the Manmade Fibers Segment's technology portfolio and opens up access to new customers in the market for synthetic staple fibers.

On December 28, 2016, Oerlikon acquired all equity interests of DMX SAS, Cluses, France. DMX is active in PVD coating. The acquisition strengthens Oerlikon's position in key market segments.

On December 30, 2016, Oerlikon acquired all equity interests of citim GmbH, Barleben, Germany. Citim is a leading company in the design and additive manufacturing of metal components for small-series production and rapid prototyping. The acquisition expands Oerlikon's additive manufacturing technology and service portfolio with established 3D printing capabilities in Europe and in the USA (through its subsidiary citim AM Inc.).

The total consideration for the acquisitions amounts to CHF 51 million, all of which was paid in cash in the reporting period. A further expense of CHF 1 million will be incurred in the next three years for future services to be rendered.

The goodwill of CHF 25 million arising from the acquisitions is mainly attributable to the value of expected synergies and economies of scale expected from combining the operations of the acquired businesses with the Oerlikon Group. Goodwill in the amount of CHF 4 million is expected to be deductible for income tax purposes.

The following table summarizes the consideration paid for the acquisitions and the fair value of assets acquired and liabilities assumed at the acquisition date.

#### Consideration at the date of acquisition

in CHF million	2016
Cash	
Total consideration	51
Recognized amounts of identifiable assets acquired and liabilities assumed	
in CHF million	2016
Cash and cash equivalents	
Trade receivables	
Other receivables, prepaid expenses and accrued income	2
Inventories	2
Property, plant and equipment	15
Intangible assets	16
Trade payables	
Current financial liabilities and derivatives	-2
Other current payables and accrued liabilities	-3
Non-current loans and borrowings	-7
Deferred tax liabilities	-4
Total identifiable net assets	26
Goodwill	25
Total	51

Note 2 (cont.)

The amounts relating to the acquisitions of citim GmbH and DMX SAS represent the preliminary allocation of the purchase price. Due to the timing of the acquisitions, certain information required to complete the final purchase price allocation remains outstanding.

Acquisition-related costs of CHF 1 million have been recognized under other expense in the consolidated income statement for the year ended December 31, 2016.

Since their acquisition, the acquired businesses have contributed CHF 2 million to total sales and CHF 1 million to the net income of the Oerlikon Group. Had the transactions taken place at January 1, 2016, the Group's total sales and net income for the year ended December 31, 2016 would have amounted to approximately CHF 2349 million and CHF 390 million, respectively. These amounts have been determined based on the assumption that the fair-value adjustments at the acquisition date would have been the same at January 1, 2016.

#### **Acquisitions in 2015**

On October 31, 2015, Oerlikon acquired the engineering and EPC-business for certain polymers of Huitong Chemical Engineering Technique Co., Ltd. The business seller is the 40% minority shareholder in Oerlikon's at that time newly founded subsidiary Oerlikon Barmag Huitong (Yangzhou) Engineering Co., Ltd., and the asset purchase was part of the cooperation agreement. The newly founded company strengthens the Manmade Fibers Segment's position in the growing business of designing, setting-up and servicing polycondensation plants.

On November 23, 2015, Oerlikon acquired the business of Laser Cladding Services, LLC., (Houston, Texas, USA). The company specializes in laser cladding applications for the energy industry. The acquisition extends and improves the Surface Solutions Segment's service offering in laser cladding and opens up access to key customers in the US energy sector.

The total consideration for the two acquisitions amounted to CHF 16 million, out of which CHF 11 million was paid in cash in 2015. In the reporting period 2016, CHF 4 million was paid and a further CHF 1 million is payable within the next year. There are no further variable purchase price components.

The goodwill of CHF 3 million arising from the acquisitions is mainly attributable to the value of expected synergies and economies of scale expected from combining the operations of the acquired businesses with the Oerlikon Group. Goodwill in the amount of CHF 2 million is expected to be deductible for income tax purposes.

The following table summarizes the consideration paid for the two acquisitions and the fair value of assets acquired at the acquisition date.

#### Consideration at the date of acquisition

in CHF million	2015
Cash	11
Consideration payable within 2 years following the acquisition	5
Total consideration	16
Recognized amounts of identifiable assets acquired	
in CHF million	2015

Trade and other receivables	
Property, plant and equipment	
Intangible assets	1
Total identifiable net assets	13
Goodwill	
Total	16

Acquisition-related costs amounting to CHF 1 million have been recognized under other expense in the consolidated income statement for the year ended December 31, 2015.

From the date of acquisition until December 31, 2015, the acquired businesses have contributed below CHF 1 million to total sales and below CHF 1 million to the net result of the Oerlikon Group. Had the transactions taken place at January 1, 2015, the Group's total sales and net result for the year ended December 31, 2015, would have amounted to approximately CHF 2690 million and CHF -417 million, respectively. These amounts have been determined based on the assumption that the fair value adjustments at the acquisition date would have been the same at January 1, 2015.

Note 2 (cont.)

#### **Divestment of the Vacuum Segment in 2016**

On November 20, 2015, the Oerlikon Group signed an agreement with Atlas Copco to divest the Vacuum Segment. Consequently, the Vacuum Segment was presented as a disposal group held for sale and as discontinued operations as per December 31, 2015, comprising assets of CHF 290 million and liabilities of CHF 233 million. The transaction closed on August 31, 2016, resulting in the derecognition of assets of CHF 386 million and liabilities of CHF 345 million.

The total consideration amounts to CHF 437 million (including CHF 66 million for the settlement of pre-existing intragroup financing), all of which has been received as cash and cash equivalents in the reporting period.

The Oerlikon Group incurred a gain on disposal from this transaction in the amount of CHF 289 million in 2016, which is included in the result from discontinued operations, net of income taxes. This amount includes a loss from the reclassification of cumulative exchange differences and other items of other comprehensive income that were previously recognized in the equity of CHF 29 million. The gain is fully attributable to the shareholders of the parent.

In connection with this divestment, Oerlikon has assumed certain customary obligations such as warranty obligations and indemnifications. The indemnification obligations cover in particular employment-, intellectual property- and business-related topics. The duration and overall liability caps for these indemnifications vary, but are customary for transactions of this nature.

#### Divestment of the Advanced Technologies Segment in 2015

On December 22, 2014, the Oerlikon Group signed an agreement with Evatec AG to divest the Advanced Technologies Segment. The transaction closed on February 2, 2015, resulting in the derecognition of assets of CHF 82 million and liabilities of CHF 23 million.

The total consideration amounts to CHF 61 million (including CHF 3 million for the settlement of pre-existing intragroup financing). CHF 56 million of the total consideration have been received as cash and cash equivalents in 2015, CHF 5 million were included in an escrow account and have been received in 2016. In this context, the liabilities related to the sale were reassessed, which resulted in a net income of CHF 2 million in 2016.

In 2015, the Oerlikon Group incurred a loss on disposal from this transaction in the amount of CHF 20 million, included in the result from discontinued operations, net of income taxes. This amount includes a loss on the reclassification of cumulative exchange differences up to the closing date previously recognized in other comprehensive income in the equity of CHF 21 million. The loss is fully attributable to the shareholders of the parent.

Note 2 (cont.)

## Result from discontinued operations

	January 1 to December 31, 2016			January 1 to December 31, 2015		
in CHF million	Advanced Technologies Segment	Vacuum Segment	Total	Advanced Technologies Segment <sup>2</sup>	Vacuum Segment	Total
Sales		240	240	1	360	361
Total expenses		-223	-223		-350	-352
Result before taxes (EBT) from operating activities		17	17		10	9
Income taxes		-2	-2		-4	-4
Result from operating activities		15	15		6	5
Gain on sale of discontinued operations before reclassification of translation differences and other items of other comprehensive income	3	326	329	3		3
Reclassification of translation differences and other items of other comprehensive income <sup>1</sup>		 _29	-29	 _21		-21
Income tax on sale of discontinued operations		-8	-9	_3		-3
Gain/loss on sale of discontinued operations, net of income taxes	2	289	291	-21		-21
Result from discontinued operations, net of income taxes	2	304	306	-22	6	-16
Attributable to:						
Shareholders of the parent	2	304	306		6	-16
Earnings per share in CHF	0.01	0.90	0.90		0.02	-0.05
Diluted earnings per share in CHF	0.01	0.90	0.90		0.02	-0.05

<sup>&</sup>lt;sup>1</sup> In the year that a foreign entity is divested, the cumulative translation differences and certain other items of other comprehensive income recorded in other comprehensive income (equity) are reclassified to the income statement as part of the gain or loss upon disposal.

## Cash flow from discontinued operations

	January 1 to December 31, 2010			January 1 to December		r 31, 2016	Janu	ary 1 to Decemb	er 31, 2015
in CHF million	Advanced Technologies Segment	Vacuum Segment	Total	Advanced Technologies Segment	Vacuum Segment	Total			
Cash flow from operating activities	·	20	20		38	38			
Cash flow from investing activities <sup>1</sup>		-7	-7			-9			
Cash flow from financing activities		-2	-2			-4			
Net cash flows from discontinued operations		11	11		25	25			

 $<sup>^{\</sup>mbox{\tiny 1}}$  Excludes proceeds from sale of discontinued operations, net of cash disposed of.

 $<sup>^{2}</sup>$  Includes minor amounts relating to the sale of the Natural Fibers and Textile Components Business Units.

Note 2 (cont.)

#### Effect of the disposal of the Vacuum Segment on the balance sheet

in CHF million	August 31, 2016
Cash and cash equivalents	-81
Trade receivables	-51
Other receivables, prepaid expenses and accrued income	-13
Inventories	-78
Property, plant and equipment	-92
Intangible assets	
Deferred tax assets	
Trade payables	25
Current financial liabilities and derivatives	57
Accrued liabilities	18
Other current liabilities	12
Current post-employment benefit liabilities	6
Other current provisions	9
Non-current post-employment benefit liabilities	208
Other non-current provisions	3
Deferred tax liabilities	
Net assets	
Consideration received (cash and cash equivalents)	371
Settlement of pre-existing intragroup financing	66
Cash and cash equivalents disposed of	-81
Net cash inflow	356

Disposal group classified as held for sale as at December 31, 2015

The assets and liabilities of the disposal group classified as held for sale were measured at the lower of their carrying amount and fair value less cost to sell and were presented separately in the balance sheet. Based on the decision to sell the disposal group, an impairment review was performed which revealed no need for impairment. Fair value less cost to sell has been determined based on the expected sales proceeds as contractually agreed with the third-party buyer. This is a level 3 fair value

At December 31, 2015, the following assets and liabilities have been classified as held for sale:

## Assets classified as held for sale

2015
Vacuum
11
52
10
75
88
20
34
290

#### Liabilities classified as held for sale

	2015
in CHF million	Vacuum
Trade payables	21
Accrued liabilities	14
Other current liabilities	13
Current post-employment benefit liabilities	5
Other current provisions	7
Non-current post-employment benefit liabilities	166
Other non-current provisions	3
Deferred tax liabilities	4
Total liabilities classified as held for sale	233

# Other income and expense

Note 3

in CHF million	2016	2015
Licensing, patent and know-how income		1
Restructuring income <sup>1</sup>	9	
Other income	35	30
Other income	46	31
Taxes not based on income	<del>-7</del>	-6
Impairment of property, plant and equipment	-1	-5
Restructuring expense <sup>1</sup>		-112
Other expense	-19	-26
Other expense	-32	-152
Other income and expense, net	14	-121

 $<sup>^{\</sup>mbox{\tiny 1}}$  Refer to Note 17 "Provisions".

## **Expenses included in EBIT**

Note 4

in CHF million	2016	2015
Personnel expense		
Salaries and wages	616	613
Social security and other employee benefits <sup>1</sup>	180	172
Total	796	785
Depreciation and amortization		
- Property, plant and equipment	120	120
of which in:		
Cost of sales	103	106
Marketing and selling	1	1
Research and development	5	4
Administration	11	9
- Intangible assets	55	48
of which in:		
Cost of sales	_	_
Marketing and selling	17	16
Research and development	28	24
Administration	10	8
Total	175	168

<sup>&</sup>lt;sup>1</sup> Included in the expense for social security and other employee benefits is CHF 21 million (previous year: CHF 37 million) attributable to specific post-employment benefit plans of the individual companies. The remainder includes the legally required benefit contributions of Group companies, as well as other social security expenses.

# Financial income and expense

Note 5

in CHF million	2016	2015
Interest income	6	7
Other financial income	3	1
Foreign currency gain, net	1	_
Net gain on hedging transactions recognized in the income statement	1	2
Financial income	11	10
Interest on financial debt		-26
Interest on liabilities for defined benefit plans, net	-10	-11
Other financial expense	<u> </u>	-4
Foreign currency loss, net		-2
Financial expense	-34	-43
Financial expense, net	-23	-33

Income taxes

			2016			2015
in CHF million	Continuing operations	Discontinued operations	Total	Continuing operations	Discontinued operations	Total
Current income tax expense						-82
Deferred tax income (+)/ expense (-)	12	-5	7	12		12
	-53	-11	-64			-70

#### Analysis of tax expense

in CHF million	2016	2015
Result before taxes from continuing operations	135	-339
Result before taxes from discontinued operations	317	-9
Total	452	-348
Tax expense from continuing operations	-53	-63
Tax expense from discontinued operations		-7
Total	-64	-70
Expected tax expense (-)/ income (+)¹	-140	41
Difference between actual and expected tax expense/income	76	-111

The difference between the tax expense/income is calcuated using the weighted average tax rate of Oerlikon Group (expected tax expense/income) of 31.0 % (previous year expected tax expense: 11.7 %) and the effective tax expense arises from the factors mentioned below:

Difference between actual and expected tax expense/income	76	-111
Other effects	1	
Recognition of previously not recognized tax losses	2	
Income tax for prior years		3
Utilization of not recognized tax loss carry forwards from previous periods	6	
Non-refundable withholding tax		9
Unrecognized deferred taxes on current-year losses	5	31
Non-taxable income and non-deductible expenses	87	_74

<sup>&</sup>lt;sup>1</sup> The expected tax expense/ income is calculated from the various profits and losses of the individual group companies, using local tax rates. From these a composite tax rate is developed, averaged over the whole Group. This composite tax rate in 2016 is influenced by the divestment of the Vacuum Segment.

# Deferred taxes

Composition of deferred taxes	2016		2015	
_	Deferred tax balances		Deferred tax balances	
in CHF million	Assets	Liabilities	Assets	Liabilities
Trade receivables	2		3	1
Other receivables and accruals		2		8
Inventories	24		24	1
Financial assets	_	7	_	9
Property, plant and equipment	24	35	25	41
Assets classified as held for sale	-	-	-34	_
Intangible assets	11	186	10	190
Assets	61	230	28	250
Trade payables			1	_
Other current and non-current liabilities	13	11	19	4
Financial liabilities	1	_	3	_
Liabilities classified as held for sale	_	_	_	-4
Provisions	130	2	151	2
Liabilities	144	13	174	2
Deferred tax asset from recognized tax loss carry forwards <sup>1</sup>	38	_	35	
Offsetting	- 84	- 84	- 95	- 95
Total	159	159	142	157

As per end of 2016 tax loss carry forwards of CHF 205 million for federal taxes and CHF 16 million for state/local taxes were recognized (previous year: CHF 199 million for federal taxes and CHF 84 million for state/local taxes).

#### Movement in deferred tax balances during the year

in CHF million	2016	2015
Balance at January 1		5
Recognized in profit or loss	7	12
Recognized in other comprehensive income	21	-3
Divested in divestment (see Note 2) <sup>1</sup>	-40	_
Acquired in acquisitions (see Note 2) <sup>2</sup>	-4	_
Other	1	1
Balance at December 31		15

<sup>&</sup>lt;sup>1</sup> Effect of disposal of the Vacuum Segment.

## Unrecognized deferred tax liabilities:

At December 31, 2016, there are temporary differences of CHF 382 million (previous year: CHF 446 million) with regard to investments in subsidiaries for which no deferred tax liabilities with a potential tax effect of CHF 50 million (previous year: CHF 50 million) were recognized since the Group controls the timing of the reversal of the related taxable temporary differences and management is convinced that they will not reverse in the foreseeable future.

<sup>&</sup>lt;sup>2</sup> Deferred tax liabilities due to acquisitions.

Deferred taxes

Utilization of tax loss carry forwards is limited as follows:

		2016		2015		2016		2015
	re	ax losses not ecognized as ed tax assets	defe	Tax losses not recognized as rred tax assets		Total tax loss		Total tax loss carry forwards
in CHF million	federal tax	state/local tax	federal tax	state/local tax	federal tax	state/local tax	federal tax	state/local tax
1 year		1		2	3	1		2
2 years	1	29	2	1	9	29	2	1
3 years	4	13	9	47	18	13	29	47
4 years	7	19	9	13	24	19	18	13
5 years	9	19	10	19	10	19	33	94
Over 5 years	334	280	408	319	497	296	555	328
Total	356	361	438	401	561	377	637	485

Compared to the previous year, tax loss carry forwards not recognized decreased (decrease of CHF 82 million for federal taxes and CHF 40 million for state/local taxes). This is mainly due to utilization of not recognized losses and based on positive business outlook, not recognized prior year losses were recognized.

The deferred tax on not recognized tax loss carry forwards would amount to CHF 64 million in 2016 (previous year: CHF 69 million).

Earnings per share of CHF 1.14 (previous year: CHF -1.24) have been calculated on the basis of a net result of CHF 387 million (previous year: CHF -421 million), attributable to shareholders of the parent, and the average weighted number of outstanding shares (issued shares less treasury shares). In 2016, the average weighted number of shares entitled to vote and receive dividends amounted to 339 270 948 (previous year: 339 070 889). Diluted earnings per share amounted to CHF 1.14 (previous year: CHF -1.24). The average weighted number of shares used in the calculation of diluted earnings per share amounted to 339 270 948 (previous year: 339 070 889).

Number of outstanding shares	2016	2015
Total shares issued at year-end	339758576	339758576
Weighted average number of shares outstanding for the year	339270948	339070889
Effect of potential exercise of option rights	_	
Weighted average number of shares diluted for the year	339270948	339070889

# Cash and cash equivalents

Note 8

Total	751	840
Money market funds <sup>1</sup>	68	31
Time deposits	462	517
Cash, postal and bank current accounts	221	292
in CHF million	2016	2015

<sup>&</sup>lt;sup>1</sup> Investment grade rated money market funds available on a daily basis.

CHF 191 million (previous year: CHF 134 million) of total cash and cash equivalents are held in countries in which local exchange control regulations with regards to capital export exist. If the Group complies with legal and tax regulations, such liquid funds are at its disposition within a reasonable period of time.

Cash and cash equivalents are held in the following currencies:

#### Currency

in CHF million	2016	2015
CHF	253	473
EUR	249	59
USD	28	45
CNY	116	132
Other	105	131
Total	751	840

## **Financial investments**

Note 9

in CHF million	2016	2015
Deposits	108	1
Debt and equity securities	10	2
Derivatives used for hedging	3	4
Current financial investments and derivatives	121	7
Investments in associates and joint arrangements	5	5
Other investments	1	1
Non-current financial investments	6	6
Total	127	13

Note 10

#### Loans and receivables

in CHF million	2016	2015
Current		
Trade receivables	349	399
Trade notes receivable	20	6
Other receivables <sup>1</sup>	85	87
Non-current		
Loans and other non-current financial receivables	22	23
Total	476	515

**Inventories** Note 11

			2016			2015
in CHF million	Gross value	Value adjustment	Net value	Gross value	Value adjustment	Net value
Raw material and components			102	129	-18	111
Work in progress	144	-8	136	134	-5	129
Finished goods and trade merchandise	148	-33	115	146	-26	120
Total	409	-56	353	409	-49	360

Amounts charged to the income statement for write-downs of inventories in the reporting year were CHF 7 million (previous year: CHF 4 million). In 2016, inventories of CHF 808 million were recognized as an expense during the period and included in cost of sales.

## Construction contracts according to the percentage of completion method (POC)

The accrued sales under the POC method pertain to customer orders in the Manmade Fibers Segment, summarized as follows:

in CHF million	2016	2015
POC sales recognized as revenue in the period	150	368
Aggregate contract costs incurred and recognized contract profits to date	31	28
Gross amount due from customers for contract work as an asset	5	11
Net amount of customer advances for POC projects <sup>1</sup>	26	27

<sup>&</sup>lt;sup>1</sup> This amount is included in the current customer advances totaling CHF 167 million (previous year: CHF 132 million).

Other receivables include:
 Receivables from Swiss and foreign tax authorities (VAT) and insurance companies.
 Accrued sales under the POC method for orders that are not completely pre-financed by customer advances.

# Property, plant and equipment

Note 12

in CHF million	Plant, equipment and furniture	Production and administration buildings	Developed land	Facilities under construction	2016 Total
Cost					
Balance at January 1, 2016	1381	392	58	24	1 855
Conversion differences		-2	_	_	-4
Changes in the scope of consolidated companies	7	8	_	_	15
Additions	70	3	_	35	108
Disposals		-4	_	_	-9
Transfers	38	-3	_	-36	-1
Balance at December 31, 2016	1 489	394	58	23	1 964
Accumulated depreciation and impairment losses					
Balance at January 1, 2016	-917	-186	-1		-1 104
Conversion differences	1	_	_	_	1
Depreciation	-106	-14	_	_	-120
Impairment losses	-1	_	_	_	-1
Disposals	2	3			5
Balance at December 31, 2016	-1 021	-197	-1		-1219
Net Group values at January 1, 2016	464	206	57	24	751
Net Group values at December 31, 2016	468	197	57	23	745
Of which assets held under finance leases			7		12

Open purchase commitments for property, plant and equipment at the end of 2016 amounted to CHF 21 million (previous year: CHF 9 million).

# Property, plant and equipment

		Production and administration	Developed	Facilities under	2015
in CHF million	and furniture	buildings	land	construction	Total
Cost					
Balance at January 1, 2015	1 468	516	75	30	2 089
Conversion differences		-33	-5		-100
Changes in the scope of consolidated companies	1		_		1
Additions		2	_	43	122
Disposals		-3	-2		-12
Reclassifications to assets held for sale	-133	-96	-10	-3	-242
Transfers	35	6	_	-44	-3
Balance at December 31, 2015	1381	392	58	24	1 855
Accumulated depreciation and impairment losses					
Balance at January 1, 2015	-926	-245	_	_	-1 171
Conversion differences	23	18	_		41
Depreciation					-128
Impairment losses	3		-1		-5
Disposals	4	3			7
Reclassifications to assets held for sale	96	56			152
Balance at December 31, 2015			-1		-1 104
Net Group values at January 1, 2015	542	271	75	30	918
Net Group values at December 31, 2015	464	206	57	24	751
Of which assets held under finance leases	1	1	7		9

# Goodwill and intangible assets

Note 13

. 015 #	0 1 11		Development	Other intangible	2016
in CHF million	Goodwill	Brands	costs	assets1	Total
Cost					
Balance at January 1, 2016	1138	212	94	550	1 994
Conversion differences	5				5
Changes in the scope of consolidated companies	25	-	_	16	41
Additions	_	-	22	14	36
Disposals	_	_	_	-15	-15
Transfers				1	1
Balance at December 31, 2016	1 168	212	116	566	2062
Accumulated amortization and impairment losses					
Balance at January 1, 2016	-669	_	-44	-151	-864
Conversion differences	-4	_	_	_	-4
Amortization		_	-10	-45	-55
Disposals				15	15
Balance at December 31, 2016				-181	-908
Net Group values at January 1, 2016	469	212		399	1130
Net Group values at December 31, 2016	495	212	62	385	1154

 $<sup>^{\</sup>mbox{\tiny 1}}$  Contains mainly acquired technologies and customer relationships.

The capitalized development costs pertain to the Segments as follows:

# Capitalized development costs for the period

Total	22	25
Vacuum Segment (discontinued operations)		3
Drive Systems Segment	1	2
Manmade Fibers Segment	6	10
Surface Solutions Segment	15	10
in CHF million	2016	2015

Note 13 (cont.)

#### Goodwill and intangible assets

Goodwill and brands are attributed to the Segments and Business Units as follows:

Goodwill and brands		Goodwill			
in CHF million	2016	2015	2016	2015	
Surface Solutions Segment	388	365	22	21	
- Balzers Industrial Solutions	245		3		
- Metco Aero & Energy	72		19		
- Automotive Solutions	54		_		
- Additive Manufacturing	17		_		
Manmade Fibers Segment	107	104	124	125	
Drive Systems Segment			66	66	
Total	495	469	212	212	

Goodwill and other intangible assets with indefinite useful life are allocated to those cash-generating units (CGUs) that are expected to benefit from the relevant business combination. The Manmade Fibers and Drive Systems Segment correspond to CGUs and are the lowest level at which goodwill is monitored by management. Following the re-organization of the Surface Solutions Segment, the Chief Operation Decision Maker (CODM) receives information for the businesses Balzers Industrial Solutions, Metco Aero & Energy, Automotive Solutions and Additive Manufacturing on Business Unit level.

As a consequence, the Goodwill recognized through the Metco acquisition in June 2014 was reallocated based on the new organisation of the Surface Solutions Segment. As a basis for the new allocation of the Goodwill generated through the Metco acquisition, the discounted cash flow model was used, based on the underlying business plans acknowledged by the Board of Directors

Goodwill and intangible assets with indefinite useful life are tested annually for possible impairment, using discounted cash flow analysis. Asset values used in the impairment testing are based on fair value less costs to sell (FVLCS) and on the latest forecasts approved by management. The fair value measurement was categorized as a Level 3 based on the inputs in the valuation technique used. The forecast period used for future cash flows covers the years 2017 to 2021. The discount rates used are based on the weighted average cost of capital (WACC), derived from peer groups adjusted to specific risks of the businesses concerned and the countries in which they operate. The capital costs were determined using the capital asset pricing model (CAPM).

The annual goodwill and brand impairment test carried out at Segment level for Manmade Fibers and Drive Systems and on Business Unit level for Surface Solutions, supported the carrying amounts and therefore, no need for impairment was identified.

Detailed results of the impairment testing are presented below for goodwill and brands allocated to the Surface Solutions Business Units, the Manmade Fibers Segment and to the Drive Systems Segment, representing 100% of the net book value at December 31.

The following growth and pre-tax discount rates were used:

G	Discount rates		
2016	2015	2016	2015
	2.0 %		10.6%
2.0%		9.7%	
2.0%		10.4%	
2.0%		10.2%	
2.0%	2.0 %	10.0%	8.8%
2.0%	2.0 %	15.8%	11.3%
	2016 2.0% 2.0% 2.0% 2.0%	2.0 % 2.0 % 2.0 % 2.0 % 2.0 % 2.0 % 2.0 %	2.0% 2.0% 2.0% 2.0% 2.0% 10.4% 2.0% 2.0% 2.0% 10.2% 2.0% 2.0% 2.0% 10.0%

<sup>&</sup>lt;sup>1</sup> For periods following the five-year plan period 2017 to 2021 (previous year: 2016 to 2020).

For the Surface Solutions Business Units as well as the Manmade Fibers Segment, neither a reduction of the growth rate of the terminal value to 0.5 % (previous year: 0.5 %), nor an increase in the discount rate by 1.0 % (previous year: 1.5 %) would give rise to an impairment of goodwill. The same applies for the brands of the Drive Systems Segment.

# Goodwill and intangible assets

Note 13 (cont.)

# **Previous year**

in CHF million	Goodwill	Brands	Development costs	Other intangible assets <sup>2</sup>	2015 Total
Cost					
Balance at January 1, 2015	1214	229	102	566	2111
Conversion differences		<u>–17</u>			-128
Changes in the scope of consolidated companies		<u></u>		11	14
Additions				14	39
Disposals					
Reclassifications to assets held for sale			-28		-44
Transfers				3	3
Balance at December 31, 2015	1138	212	94	550	1 994
Accumulated amortization and impairment losses					
Balance at January 1, 2015	-210	_	-54	-120	-384
Conversion differences	12	_	4	1	17
Amortization		_	-9	-43	-52
Impairment losses <sup>1</sup>		_		_	-471
Disposals		_		1	1
Reclassifications to assets held for sale			15	10	25
Balance at December 31, 2015				-151	-864
Net Group values at January 1, 2015	1 004	229	48	446	1727
Net Group values at December 31, 2015	469	212	50	399	1 130

<sup>&</sup>lt;sup>1</sup> Relates to the Drive Systems Segment.

 $<sup>^{\</sup>rm 2}$  Contains mainly acquired technologies and customer relationships.

# **Post-employment benefits**

Note 14

			2016	2015			
-		due within	due beyond		due within	due beyond	
in CHF million	Total	1 year	1 year	Total	1 year	1 year	
Net defined benefit liability <sup>1</sup>	436	17	419	607	22	585	
Other employee benefit liabilities	15	1	14	17	1	16	
Subtotal	451	18	433	624	23	601	
Net defined benefit liability classified as held for sale	-	_	_	-171		-166	
Other employee benefit liabilities classified as held for sale	_	_	_	-1	_	-1	
Total on the balance sheet	451	18	433	452	18	434	
Post-employment benefit assets	3		3				
Post-employment benefit liabilities	454	18	436	452	18	434	

<sup>&</sup>lt;sup>1</sup> In 2016, net defined benefit liability related to funded plans was CHF 194 million and unfunded plans of CHF 242 million (previous year: funded CHF 208 million, including CHF 8 million classified as held for sale, and unfunded CHF 399 million, including CHF 163 million classified as held for sale).

#### Post-employment benefit expense:

			2016	20			
in CHF million	Total	Defined benefit	Defined contribution	Total	Defined benefit	Defined contribution	
Pension cost (operating) <sup>1</sup>	25	6	19	42	22	20	
Pension cost (financial) <sup>2</sup>	13	13		14	14		
Total post-employment benefit plan cost in the income statement	38	19	19	56	36	20	

<sup>&</sup>lt;sup>1</sup> Pension cost (operating) of CHF 4 million is included in result of discontinued operations (previous year: CHF 5 million).

 $<sup>^{2}</sup>$  Pension cost (financial) of CHF 3 million is included in result of discontinued operations (previous year: CHF 4 million).

#### Post-employment benefits

Note 14 (cont.)

#### **Defined benefit plans**

The Group's material defined benefit pension plans are located in Germany, the USA and Switzerland and account for 94 % of the Group's net defined benefit liability (previous year: 95 %). Usually, the plans are established as trusts independent of the Group and are funded by payments from Group companies and by employees. The cash funding of these plans is designed to ensure that present and future contributions should be sufficient to meet future liabilities. The funding requirements are based on the pension fund's actuarial measurement framework set out in the funding policies of the plan. Most of the major plans in Germany are unfunded and, as the result, the Group pays pensions to retired employees directly from its own financial resources.

#### Pension plans in Germany

12 unfunded and 6 funded defined benefit plans existed in 2016 (previous year: 17 and 6 respectively; the decrease in the number of funded plans is driven by the sale of Vacuum entities in 2016). These pension arrangements are governed by the German Occupational Pensions Act (BetrAVG). The employer is required by German law to increase pension payments every three years according to price inflation, as measured by the Consumer Price Index ("Verbraucherpreisindex – VPI") or according to comparable pay grades. In the case of unfunded pension plans, the Group pays pensions to retired employees directly from its own financial resources. Funded pension plans are administered through a Contractual Trust Agreement (CTA). In a CTA arrangement, the assets are outsourced to an independent entity (e.g. a trust), which has the sole purpose of financing, paying out and ensuring benefits. The transferred assets are completely segregated from the employer's assets to protect these assets against the risk of the employer's insolvency. The employer is free to determine the scope and the kinds of assets that are to be transferred to the Trust and used for funding the pension liabilities. No minimum funding requirements or regular funding obligations apply to CTAs. Based on a special trust agreement between the employer and the Trust, the Trust acquires legal title in the transferred assets while the economic ownership rests with the employer. By creating the CTA, the employer creates additional insolvency protection for the beneficiaries.

#### Pension plans in the USA

2 funded and 2 unfunded defined benefit plans existed in 2016 (previous year: 2 and 2 respectively). The pension plan for members of Fairfield Manufacturing Company hired prior to March 2004 is non-contributory for the employees. The plan is a final-average-pay-design defined benefit plan. A member's benefit is based on a percentage of their final average pay multiplied by service and payable as a monthly life annuity. A lump sum payment is generally not available. The plan does not provide for automatic pension increases. This plan has been closed to new members since 2004. The Oerlikon USA Holding, Inc. Pension Plan is non-contributory for the employees. The plan uses a final-average-pay-based formula, with benefits based on members' years of service and final average pay earned while in the employ of a participating company. This plan has been closed to new members since 2006 and benefit accruals under the plan ceased in January 2010. Participants receive their benefits in the form of monthly annuities, which are actuarially reduced for early retirement and/or election of a form of payment providing for continued payments after the participant's death to a surviving beneficiary. Some participants have the option of receiving their benefits in a single lump-sum payment in lieu of an annuity. The plan does not provide for automatic pension increases. The companies' contributions to the defined benefit plan are made based on US pension funding regulations, in the form of cash. Employees joining Pairfield Manufacturing Company and Oerlikon USA Holding after specified dates participate in a defined contribution pension plan.

#### Pension plans in Switzerland

7 funded defined benefit plans existed in 2016 (previous year: 8 plans). These plans are governed by the Swiss Federal Law on Occupational Retirement, Survivors' and Disability Pension Plans (BVG), which stipulates that pension plans are to be managed by independent, legally autonomous units. The pension plan assets are held within a separate foundation and cannot revert to the employer. The Board of Trustees, the most senior governing body of the collective foundation, is responsible for investment strategy and policy. This Board is composed of equal numbers of employees and employer representatives. The plans provide old age, disability and death-in-service (survivors') benefits to plan participants, their spouses and children, as defined in pension plan rules compliant with the BVG, which specifies the minimum benefits to be provided. Pension funds are financed according to a level premium system, which means that every insured person directly finances his/her own retirement benefits and saves up for his/her retirement. The insured and the employer usually pay equal contributions to the pension fund in case of retirement benefits. The employer must contribute an amount that equals at least the contributions of all employees together. Disability and survivors' benefits are funded via risk contributions; the corresponding benefits are defined based on the current salary.

The following risks arise from the 7 funded defined benefit plans (5 autonomous and 2 partly-autonomous):

The autonomous pension institutions bear the risks from the savings process, the asset management and the demographic risks (longevity, death, disability). The respective pension institution may change the funding system (contributions and future benefits) at any time. In case of a deficit according to BVG and if there are no other measures, the pension institution may require contributions for financial recovery from the employer.

The partly-autonomous pension institutions insure the demographic risks with a life insurance company, but bear the risks from the savings process and asset management. The respective pension institution may change the funding system (contributions and future benefits) at any time. In case of a deficit according to BVG and if there are no other measures, the pension institution may require contributions for financial recovery from the employer. With respect to the insured demographic risks, there are further risks, namely that the insurance coverage is only of a temporary nature (cancellation by the life insurance company) and that the inherent risks of the plan result in variable insurance premiums over time.

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# **Post-employment benefits**

Note 14 (cont.)

#### Movement in net defined benefit liability

The following table shows a reconciliation from the opening balances to the closing balances for net defined benefit liability and its components:

	Defined benefit	tobligation	Fair value of plan assets		Adjustment to asset ceiling		Net defined bene liabil	
in CHF million	2016	2015	2016	2015	2016	2015	2016	2015
Balance at January 1	1 249	1371	-652	-716	10	11	607	666
Included in the income statement								
Current service cost (employer)	24	23		_	_	_	24	23
Past service cost <sup>1</sup>	-18	_	_	_	_	_	-18	_
Gains on settlement		-1			_		_	-1
Interest expense on defined benefit obligation	25	27	_	_	_	_	25	27
Interest income on plan assets		_	-12	-13	_	_	-12	-13
Administration cost (excl. cost for managing plan assets) <sup>2</sup>		_			_		_	_
Total in the income statement <sup>3</sup>	31	49	-12	-13			19	36
Included in other comprehensive								
income Remeasurements gain (-)/ loss (+) arising								
from:	82	-3	-15	4	-3	-1	64	_
- Actuarial gain (-)/ loss (+) arising from:								
- demographic assumptions		-3					3	-3
- financial assumptions	81	2					81	2
- experience adjustments	<del>-2</del>						-2	
Return on plan assets excluding interest income			-15	4	_	_	-15	4
Change in effect of asset ceiling excluding interest expense/income		_	_		-3	-1	-3	-1
Effect of movements in exchange rates	6	-63		8			2	-55
Total in other comprehensive income	88	-66	-19	12	-3	-1	66	-55
Other								
Employer contributions <sup>4</sup>		_	-20	-18	_	_	-20	-18
Employee contributions <sup>5</sup>	8	8	-7	-7	_	_	1	1
Benefits paid/deposited	-61	-47	36	24	_	_	-25	-23
Effect of business combination and disposal	-230	-66	18	66			-212	
Total in other	-283	-105	27	65			-256	-40
Balance at December 31	1 085	1249	-656	-652	7	10	436	607
of which:								
in CHF million								
- Germany	378	519	<del>-62</del>	<del>-65</del>			316	454
- USA	256	266	-178				78	83
- Switzerland	420	430	<u>-411</u>	<u>–103</u> –399	7	10	16	41
Beduction of conversion rates for Swiss plans	120	.50						

<sup>&</sup>lt;sup>1</sup> Reduction of conversion rates for Swiss plans.

 $<sup>^{2}</sup>$  Administration costs are less than CHF 1 million (previous year: less than CHF 1 million).

 $<sup>^{3}</sup>$  Pension costs of CHF 6 million are included in result of discontinued operations (previous year: CHF 9 million).

<sup>&</sup>lt;sup>4</sup> Employer contributions to defined benefit plans for 2017 are expected to be approximately CHF 17 million.

 $<sup>^{\</sup>mbox{\tiny 5}}$  Including employee contributions in unfunded plans in the USA.

## **Post-employment benefits**

Note 14 (cont.)

The plan assets consist of the following:

				2016	2			
in CHF million	Total	Quoted	Unquoted	%	Total	Quoted	Unquoted	%
	400	100		00.0/	400	100		00.0/
Equity instruments, of which in:	133	132		20%	129	129		20%
- Consumer markets	28	28		4 %	29	29		5%
- Energy	9	9		1%	8	8		1 %
- Financial services	24	24		4 %	28	28		4 %
<ul> <li>Industrial and manufacturing</li> </ul>	27	27	-	4 %	25	25	-	4%
- Information technology	25	25	_	4%	23	23	_	4%
- Pharmaceuticals and health care	14	14	_	2%	16	16		2%
- Other	6	5	1	1 %	_	_	_	0%
Debt instruments, of which in:	158	158	_	24%	149	149	_	23%
- Government bonds	48	48	-	7 %	45	45	-	7%
- Corporate bonds - investment grade	110	110	_	17%	104	104		16%
Real estate, of which in:	90	53	37	14%	103	47	56	16%
- Germany <sup>1</sup>	7	_	7	1%	8	_	8	1%
- Switzerland	83	53	30	13%	95	47	48	15%
Cash and cash equivalents	24	24		4%	16	16		2%
Investment funds	201	47	154	31 %	201	54	147	31 %
Other	50	37	13	7%	54	38	16	8%
Total plan assets	656	451	205	100 %	652	433	219	100 %

<sup>&</sup>lt;sup>1</sup> Real estate in Germany with a fair value of CHF 8 million (previous year: CHF 8 million) is rented by a Group company, with an annual rent of CHF 1 million (previous year: CHF 1 million).

## Plan assets

In the Group's financial statements, the difference between the actual return on plan assets and interest income is as remeasurement recorded directly to other comprehensive income. During 2016, the actual return on plan assets was a gain of CHF 27 million (previous year: gain of CHF 9 million). The recognition of a net defined benefit asset is limited to the present value of any economic benefits available out of refunds from the plans or reductions in future contributions to the plans.

#### **Post-employment benefits**

Note 14 (cont.)

#### **Actuarial assumptions**

The following are the principal actuarial assumptions at the reporting date for significant defined benefit plans in Germany, the USA and Switzerland (expressed as weighted averages):

Assumptions used in actuarial calculations		2015				
in percentage	Germany	USA	Switzerland	Germany	USA	Switzerland
Discount rate	1.4	4.0	0.7	2.3	4.2	0.8
Future salary increases	0.1	2.4	1.2	1.0	2.2	1.0
Future pension increases	1.6	_	_	1.7	_	_

The discount rate is determined by reference to market yields at the end of the reporting period on AA- and AAA-rated corporate bonds. The currency and term of the corporate bonds are consistent with the currency and estimated term of the obligations.

#### Longevities

Assumptions regarding future mortality are based on published statistics and mortality tables. The current longevities underlying the values of the defined benefit obligation at the reporting date are provided below:

Longevities			2016	20			
in years	Germany	USA	Switzerland	Germany	USA	Switzerland	
Retiring at the end of the reporting period:							
- Males	20.5	20.0	22.3	20.1	20.6	21.5	
- Females	24.7	22.4	25.3	24.3	23.0	24.9	
Retiring 20 years after the end of the reporting period:							
- Males	23.3	21.7	22.8	22.8	22.3	21.6	
- Females	27.3	24.0	26.2	26.9	24.7	25.4	
			2016			2015	
Weighted average duration of the defined benefit obligation	Germany	USA	Switzerland	Germany	USA	Switzerland	
Number of years	10.7	12.4	15.0	13.0	11.6	15.0	

The Group's major pension plans give members lump sum or annuity benefit payment options. The Group values its pension liabilities on the assumption that the choices made by members who will retire in the future will be consistent with choices made by members who have retired recently.

### Sensitivity analysis

Reasonably possible changes at the reporting date to one of the relevant actuarial assumptions, holding other assumptions constant, would have affected the defined benefit obligation by the amounts shown below.

Defined benefit obli						
Sensitivity analysis			Increase			Decrease
	Germany	USA	Switzerland	Germany	USA	Switzerland
Discount rate (0.5 % movement)		-15		21	16	34
Future salary (0.5 % movement)	_	2	3	_	-2	-3
Future pension (0.5 % movement)	18	_		-13	_	_
Future mortality (1 year movement)	-22	-8	-14	20	7	14

			Define	d benefit obli	gation in 2015		
		Increase		Decreas			
Germany	USA	Switzerland	Germany	USA	Switzerland		
	-16		33	17	35		
4	2	4	-4	-2	-4		
26	_		-23		_		
-30	-7	-13	22	7	14		
	-33 4 26	-33 -16 4 2 26 -	USA   Switzerland	Increase   Germany   USA   Switzerland   Germany	Germany         USA         Switzerland         Germany         USA           -33         -16         -31         33         17           4         2         4         -4         -2           26         -         -         -23         -		

#### **Current financial liabilities**

Note 15

2016	2015
	300
2	6
4	4
6	310
239	242
60	62
305	614
	2 4 6

<sup>&</sup>lt;sup>1</sup> Refer to Note 18 "Loans and borrowings".

#### **Accrued liabilities**

Note 16

Total accrued liabilities	178	192
Other accrued liabilities	64	80
Accrued material expenses	28	29
Accrued personnel expenses	86	83
in CHF million	2016	2015

Provisions Note 17

in CHF million	Product warranties	Acquiree's contingent liabilities <sup>1</sup>		Other provisions <sup>3</sup>	2016 Total
Balance at January 1, 2016	41	70	111	21	243
Conversion differences		1	1	1	2
Additions <sup>4</sup>	17	1	5	24	47
Amounts used	-12		-26	-4	-42
Amounts reversed	-16	-3	9	-10	-38
Balance at December 31, 2016		69	82	32	212
of which:					
Due within 1 year	26	_	24	21	71
Due beyond 1 year	3	69	58	11	141

<sup>&</sup>lt;sup>1</sup> Acquiree's contingent liabilities pertain to the Surface Solutions Segment. Contingent liabilities have been recognized primarily due to environmental liabilities as well as certain litigation and potential tax risks. Any potential cash outflow is estimated to occur during the next 10–15 years. The selling shareholders have contractually agreed to indemnify Oerlikon for an amount up to CHF 20 million related to certain of these environmental liabilities.

<sup>&</sup>lt;sup>2</sup> The restructuring provision pertains to the Drive Systems (CHF 49 million), Manmade Fibers (CHF 29 million) and Surface Solutions (CHF 4 million) Segment. The restructuring of the Manmade Fibers Segment is due to a need to adapt the Segment's structure and lower its cost base measurably. The Drive Systems Segment reorganization includes mainly the resizing of the organization. The restructuring provision relates mostly to personnel expenses.

<sup>&</sup>lt;sup>3</sup> Other provisions cover various risks which occur in the normal course of business. They consist mainly of provisions for pending litigation, technical risks and onerous contracts.

<sup>&</sup>lt;sup>4</sup> Includes unwinding of discount for non-current provisions.

# Loans and borrowings

Note 18

in CHF million	2016	2015
Current		
Bond		300
Loans and borrowings	2	6
Total current loans and borrowings	2	306
Non-current		
Bonds	449	449
Finance lease liabilities	7	5
Other loans and borrowings	10	4
Total non-current loans and borrowings	466	458
Total loans and borrowings	468	764

The terms and conditions of outstanding loans are as follows:

2016

in CHF million	Currency	Nominal interest rate	Year of maturity	Face value	Carrying amount
Syndicated loan/Revolving Credit Facility	CHF	Libor + 0.60 %	2021	_	_
Bond <sup>1</sup>	CHF	1.25%	2019	300	299
Bond <sup>1</sup>	CHF	2.625%	2024	150	150
Finance lease liabilities <sup>2</sup>	var.	var.	2017–2027	7	7
Various current and non-current liabilities <sup>3</sup>	var.	var.	var.	12	12
Total loans and borrowings					468

2015

in CHF million	Currency	Nominal interest rate	Year of maturity	Face value	Carrying amount
Syndicated loan/Revolving Credit Facility	CHE	Libor + 0.65 %	2017		
Bond	CHF	4.25%	2017	300	300
Bond <sup>1</sup>	CHF	1.25%	2019	300	299
Bond <sup>1</sup>	CHF	2.625 %	2024	150	150
Finance lease liabilities <sup>2</sup>	var.	var.	2016–2027	5	5
Various current and non-current liabilities <sup>3</sup>	var.	var.	var.	10	10
Total loans and borrowings					764

<sup>&</sup>lt;sup>1</sup> Face value differs from book value, because CHF 1 million (previous year: CHF 1 million) of directly attributable transaction costs related to the financing of the bonds were deducted and are being expensed over the term of the bonds.

 $<sup>^{\</sup>rm 2}$  The finance leases are secured by contract provisions normal for such leases.

 $<sup>^{\</sup>mbox{\tiny 3}}$  Various currencies including: CHF, EUR, USD.

#### Loans and borrowings

Note 18 (cont.)

#### Syndicated loan facility

In 2016, Oerlikon signed an agreement for a new unsecured syndicated credit facility, comprising of a revolving credit facility and an ancillary credit facility, amounting to CHF 600 million. The initial maturity is in 2021, with two additional one-year extension options and an accordion feature, at the full discretion of the lenders. As of December 31, 2016, the drawn revolving credit facility balance was zero, and out of CHF 190 million allocated to the ancillary credit facility, the amount of CHF 56 million was used for issuing guarantees.

The new facility replaced the previous facility that was due to expire in 2017. The new agreement margin was reduced compared to the previous facility. As per December 31, 2016, the interest rate of the loan under the syndicated credit facility is defined as Libor plus a margin of 0.60 % per year, subject to a margin grid based on the ratio of Net Debt to EBITDA (within a range of 0.60 % and 1.40 %).

As of December 31, 2016, the syndicated credit facility contains the following financial covenants, which are tested quarterly:

- Total Equity
- Total Borrowings/EBITDA

In 2016, the Group was in compliance with all covenants.

#### **Bonds**

On June 17, 2014, the Oerlikon Group issued a 5 year CHF 300 million straight bond with a nominal interest of 1.25% (effective interest: 1.33%) and a 10 year CHF 150 million straight bond with a nominal interest of 2.625% (effective interest: 2.625%). The 4 year CHF 300 million bond issued in 2012 matured in 2016.

#### Financial instruments

Note 19

The carrying amounts and fair values of financial assets and liabilities as of December 31, 2016, including their levels in the fair value hierarchy, are as follows:

	Carrying amount					Fair value			
in CHF million	Fair value – held for trading	Fair value - hedging instruments	Loans and receivables	Other financial liabilities	Total	Level 1	Level 2	Level 3	Total
Financial assets measured at fair value									
Foreign exchange contracts		3		_	3		3		3
Debt and equity securities	10			_	10	10			10
Total	10	3		_	13	10	3		13
Financial assets not measured at fair value <sup>1</sup>									
Cash and cash equivalents			 751		751				
Deposits			108	_	108				
Trade and other financial receivables			374	_	374				
Loans and other non-current financial receivables			22	_	22				
Total			1 2 5 5		1 255				
Financial liabilities measured at fair value									
Foreign exchange contracts	_	4		_	4		4		4
Total		4			4		4		4
Financial liabilities not measured at fair value <sup>1</sup>									
Bonds				449	449	480			480
Finance lease liabilities				7	7				
Trade payables				239	239				
Accrued financial liabilities				91	91				
Other loans and borrowings				12	12				
Total	=	=		798	798				

<sup>&</sup>lt;sup>1</sup> With the exception of the bonds, the Group has not disclosed the fair values for financial assets and liabilities not measured at fair value because their carrying amounts are a reasonable approximation of fair values.

### Financial instruments Note 19 (cont.)

The carrying amounts and fair values of financial assets and liabilities as of December 31, 2015, including their levels in the fair value hierarchy, are as follows:

	Carrying amount				Fair value				
in CHF million	Fair value – held for trading	Fair value - hedging instruments	Loans and receivables	Other financial liabilities	Total	Level 1	Level 2	Level 3	Total
Financial assets measured at fair value									
Foreign exchange contracts		4			4		4		4
Debt and equity securities	2				2	2			2
Total	2	4			6	2	4		6
Financial assets not measured at fair value <sup>1</sup>									
Cash and cash equivalents			840		840				
Deposits		_	1	_	1				
Trade and other financial receivables	_	_	421		421				
Loans and other non-current financial receivables		_	23	_	23				
Total			1 285		1 285				
Financial liabilities measured at fair value									
Foreign exchange contracts	_	4	_	_	4	_	4	-	4
Total		4			4		4		4
Financial liabilities not measured at fair value <sup>1</sup>									
Bonds				749	749	773			773
Finance lease liabilities				5	5				
Trade and other payables			_	247	247				
Accrued financial liabilities				109	109				
Other loans and borrowings				10	10				
Total		_		1120	1120				

<sup>&</sup>lt;sup>1</sup> With the exception of the bonds, the Group has not disclosed the fair values for financial assets and liabilities not measured at fair value because their carrying amounts are a reasonable approximation of fair values.

#### Measurement of fair values

The different levels of fair values have been defined as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: pricing inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (as prices) or indirectly (derived from prices).
- Level 3: valuation inputs for the asset or liability that are not based on observable market data (unobservable inputs).

#### Level 1 fair values

The fair value of financial instruments traded in active markets is based on quoted market prices at the balance sheet date. An active market is a market in which transactions for the asset or liability take place with sufficient frequency and volume providing information on an ongoing basis. Instruments included in level 1 comprise investments in various debt and equity instruments via investment funds.

#### Level 2 fair values

The following table shows the valuation technique used in measuring level 2 fair values:

Type of financial instruments	Valuation technique
Foreign exchange contracts	The fair values of foreign exchange hedging contracts are based on broker quotes. Similar contracts traded in an active market and the quotes reflect the actual transactions in similar instruments.

#### Level 3 fair values

No financial instruments were included in level 3 fair values.

#### Transfers between level 1 and 2

There were no transfers between level 1 and 2 during the year.

Financial instruments Note 19 (cont.)

#### Financial risk management

The Group has exposure to the following risks arising from financial instruments:

- credit risk
- liquidity risk
- market risk

#### Credit risk

Credit risk is the risk of financial loss to the Group, if a customer or counterparty to a financial instrument fails to meet its contractual obligations. Credit risk arises principally from the Group's customer receivables, investment securities and cash placed with banks.

The credit or default risk associated with operating receivables is monitored locally by the individual Group companies. These companies follow a credit policy defined by each operating unit, under which each new customer is analyzed individually for creditworthiness before payment and delivery terms and conditions are offered. Credit ratings are reviewed regularly, and limits are set and monitored on an ongoing basis.

Trade receivables are valued at the original invoiced amount less any necessary value adjustments for default risks. These risks are insured with third parties only in exceptional cases.

As a fundamental principle, the Group places funds only with investment grade rated domestic and foreign banking institutions, and Group Treasury periodically assesses the relevant ratings and credit default spreads of these banking institutions.

The Oerlikon Group's maximum credit risk from financial instruments is reflected in the book values of the individual financial assets as per year-end. There are no commitments or obligations which might lead to an exposure exceeding these book values. The maximum credit risk is therefore:

in CHF million	2016	2015
Cash and cash equivalents	751	840
Deposits	108	1
Debt and equity securities	10	2
Derivatives used for hedging	3	4
Trade and other financial receivables	374	421
Loans and other non-current financial receivables	22	23
Total	1268	1 291

At December 31, trade and trade notes receivable are distributed geographically (by location of the Group company) as follows:

in CHF million	2016	2015
Asia	128	117
Europe	172	211
North America	62	71
Other	7	6
Total	369	405

No concentrations of risk to the Group are expected from the outstanding receivables.

### Financial instruments Note 19 (cont.)

At December 31, the aging of trade and trade notes receivable was as follows:

		2016	2015		
in CHF million	Gross amount	Value adjustment	Gross amount	Value adjustment	
Current (not due)	290		332	-1	
Total past due	92	-13	83	-9	
0-30 days	55	-1	51	-1	
31–60 days	14	_	11	_	
61-90 days	6	-1	7	-1	
91–120 days	3	_	3	_	
Over 120 days	14	-11	11	-7	
Total	382	-13	415	-10	

Allowance for doubtful debts are based on the difference between the nominal value of receivables and the amounts considered collectible. Amounts considered collectible are developed from experience. A receivable is considered to be doubtful if certain facts are known that suggest that a debtor is in significant financial difficulty and that amounts receivable from that source are unlikely to be received at all, or only in part.

Reconciliation of changes in allowance accounts for credit losses:

in CHF million	2016	2015
Balance at January 1	-10	-15
Reclassifications to assets held for sale	-	2
Additional impairment losses charged to income		-2
Reversal of impairment losses	3	3
Write-off		1
Conversion differences		1
<u> </u>		
Balance at December 31	-13	-10

#### Financial instruments Note 19 (cont.)

#### Liquidity risk

Liquidity risk is the risk that the Oerlikon Group may be unable to discharge its financial liabilities in a timely manner or at an acceptable cost. Oerlikon supervises and manages the Group's liquidity centrally, in order to ensure that outstanding financial liabilities can at all times be met within their maturity period and at an acceptable financing cost. Group Treasury prepares and provides the relevant decision support and arranges for the availability of the relevant funds once approval is given.

Oerlikon's liquidity is monitored using short-, medium- and long-term rolling forecasts, about which senior management is kept informed. On the basis of these plans, Oerlikon mobilizes the necessary liquid funds and takes any further steps necessary in a timely manner.

The remaining contractual maturities of financial liabilities as of December 31 are as follows:

Carrying amount	Contractual cash flow	within 1 year	1 to 5 years	more than 5 years	of which secured
239	239	239			_
461	522	12	333	177	_
7	7	_	2	5	_
91	91	91			_
798	859	342	335	182	
	423	423			
_	121	121	_	_	_
	302	302			_
	423	423			
798	1 282	765	335	182	
	239 461 7 91 798	239 239 461 522 7 7 91 91  798 859  - 423 - 121 - 302	239   239   239   461   522   12   7   7   - 91   91   91	239   239   239	239   239   239   -   -

<sup>&</sup>lt;sup>1</sup> Loans and borrowings mainly include two Swiss franc bonds of CHF 450 million, maturing in June 2019 and June 2024, with capitalized transaction costs of CHF 1 million. The contractual cash flows include mainly future interest payments of the Swiss franc bonds until maturity and commitment fees of the syndicated credit facility.

<sup>&</sup>lt;sup>2</sup> Contractual cash flows relate to underlying transactions that cover the contractual cash flows almost completely.

638 304 334 638	678 636 303 333 636	2 1 1	171	- - - -
638 304	636 303		171 	
638	636		171	
			171	<u>-</u>
1177	678	328	171	
109	109			
5		1	4	
816	322	327	167	_
247	247			_
Contractual cash flow	within 1 year	1 to 5 years	more than 5 years	of which secured
	247 816	247 247 816 322	cash flow         1 year         1 to 5 years           247         247         -           816         322         327	cash flow         1 year         1 to 5 years         5 years           247         247         —         —           816         322         327         167

<sup>&</sup>lt;sup>1</sup> Loan and borrowings mainly include three Swiss franc bonds of CHF 750 million, maturing in July 2016, June 2019 and June 2024, with capitalized transaction costs of CHF 1 million. The contractual cash flows include mainly future interest payments of Swiss franc bond until maturity and commitment fees of the syndicated credit facility.

<sup>&</sup>lt;sup>2</sup> Contractual cash flows relate to underlying transactions that cover the contractual cash flows almost completely.

#### Financial instruments Note 19 (cont.)

#### Market risk

Market risk is the risk that the fair value or the future cash flows of a financial instrument may change as a result of fluctuations in market prices. The Oerlikon Group is exposed in particular to fluctuations in foreign exchange and interest rates. The Group also has a minor risk from exposure to fluctuations in raw material prices.

#### Foreign exchange risk

#### Foreign exchange transaction risk

Due to its most significant markets, the Group is primarily exposed to exchange risks versus the USD and EUR. If costs and revenues of Group companies are incurred or earned in differing or in non-functional currencies, the underlying business transactions are hedged on a centrally coordinated basis by means of commonly used financial instruments. Group companies make regular plans for receipt or payment of cash in foreign currencies and advise these to Group Treasury, which hedges the related exchange risks using external contracts with investment grade rated banks.

The Group's hedging strategy for exchange risks distinguishes between the routine business of supplying components or spare parts and the Group's project activities. For the routine business, cash flows in foreign currencies are hedged for a whole year in advance, based on the annual budget. The hedging quota, i.e. the percentage of the base volume to be hedged, is set forth in the related guidelines. Periodically, a check is performed as to whether the latest forecast of business volumes calls for an increase or a reduction in the hedging volume. For projects, the exchange risks are hedged when the contract is entered into. For special transactions that do not fall into either category – routine or project – the hedging strategy can be determined for individual cases.

#### Foreign exchange translation risk

Translation exposure arises from consolidation of foreign currency denominated financial statements of the Group's subsidiaries. The Group's consolidated financial statements are reported in Swiss francs. The translation risk arising from foreign subsidiary balance sheets that affects the consolidated Group equity is not hedged.

#### Foreign exchange economic risk

The Group policy is not to hedge long-term foreign exchange risk.

The following rates were used to convert the most important foreign currencies in the financial statements:

		Average rates	Change		Year-end rates	Change
	2016	2015	15/16	2016	2015	15/16
1 USD	0.985	0.963	2.3%	1.016	0.990	2.6%
1 EUR	1.090	1.069	2.0%	1.075	1.082	- 0.7 %
100 CNY	14.840	15.330	- 3.2 %	14.630	15.260	- 4.1 %
100 HKD	12.690	12.420	2.2%	13.100	12.780	2.5%
100 JPY	0.907	0.796	14.0%	0.870	0.823	5.7%
1 SGD	0.714	0.701	1.8%	0.704	0.701	0.4%

#### Sensitivity analysis

For the sensitivity analysis, the two most important currencies were selected in which the Group holds significant amounts of receivables and payables. Based on a two-year volatility of 9.01 % (USD/CHF) and 9.79 % (EUR/CHF), a corresponding change in exchange rates at December 31, 2016, would have changed the equity and the income statement by the amounts listed below.

December, 31		2016		2015
Effect in CHF million	Equity	Income state- ment	Equity	Income statement
USD		4		4
EUR	-1	2	-1	3

A 9.01% (USD/CHF) and 9.79% (EUR/CHF) weakening of the Swiss franc against the above currencies would have had the same but opposite effect on the above currencies to the amounts shown above, assuming all other variables remain constant. In the previous period, the sensitivity analysis was calculated with 8.68% (USD/CHF) and 9.21% (EUR/CHF).

#### **Financial instruments**

Note 19 (cont.)

The Group's exposure to foreign exchange risk was as follows, based on nominal amounts as of December 31:

			2016			2015
in million	EUR	USD	CHF	EUR	USD	CHF
Trade receivables	15	34	-	9	32	1
Trade payables	8	7	-	3	8	1
Net financial position	27	35		27	33	1
Gross exposure consolidated balance sheet	50	76		39	73	3
Gross foreign exchange risk in business operations	-3	16	-13	-16	67	-10
Open net foreign exchange forward contracts	-16	-45	10	4	-85	7
Net exposure	31	47	-3	27	55	_

#### Interest rate risk

Oerlikon is mainly exposed to interest rate risk in relation to its liquid funds, which are placed at variable rates or held as short-term investments.

Group Treasury prepares and provides the relevant decision support for senior management (Board of Directors, senior financial management) and arranges for hedging against interest rate fluctuations once approval is given. Such hedging is carried out using derivative financial instruments, such as interest rate swaps and interest rate caps.

As of December 31, the interest rate profile of the Group's interest-bearing financial instruments was:

	2016	2015
in CHF million	Net carry- ing amount	Net carrying amount
Fixed rate interest		
Financial assets	2	2
Financial liabilities	-466	-764
Total	-464	-762
Variable rate interest		
Financial assets	867	841
Financial liabilities	-2	_
Total	865	841

#### Cash flow sensitivity analysis for variable rate instruments

A change of 100 basis points (bp) in interest rates at the reporting date would have decreased (increased) profit or loss by the amounts shown below. This analysis assumes that all other variables, in particular foreign currency rates, remain constant.

	Incom	ne statement	
Effect in CHF million	100 bp increase	100 bp decrease	
2016			
Cash flow sensitivity	5	-5	
2015			
Cash flow sensitivity	7	-7	

The assumption in the underlying sensitivity analysis is that an increase as well as a decrease by 100 bp has a full impact on interest income and expense. Due to the overall low interest rate environment, a decrease by 100 bp would lead to a negative average interest rate. The tax impact has been included in all figures regarding interest sensitivity.

A change of 100 basis points in interest rates would have no impact on Group equity.

### Financial instruments Note 19 (cont.)

#### **Derivative assets and liabilities**

			2016				
		Fair value		Fair value			Fair value
in CHF million	Contract volume	positive	negative	Contract volume	positive	negative	
Foreign exchange contracts	423	3	4	638	4	4	

Based on the Group's business activities, the following main currency pairs are hedged: EUR/USD, EUR/CHF, EUR/CNY, USD/CHF, USD/INR, EUR/INR and USD/CNY. Positive and negative changes in fair values of foreign exchange contracts are offset by the corresponding gain or loss on the hedged transactions. The maximum risk of counterparty non-performance is equal to the positive deviation from fair value as per year-end. In view of the reputation of the counterparties, this risk is deemed to be minimal. In principle, the maturities of currency hedges correspond to the maturity of the hedged transactions. If the maturity of the base transaction shifts, the maturity of the hedge contract will be shifted correspondingly (roll-over/swaps). Thus, the cash flows deriving from the hedge contracts are synchronized with the impact of the base transaction in the income statement. The hedging transactions are first recorded in other comprehensive income, then released to the income statement when the base transaction is recorded. For this reason, there is no need for a separate presentation of the maturities of hedge contracts and their underlying transactions.

Maturity structure of open foreign exchange contracts and interest-rate derivatives at December 31:

in CHF million	Carrying amount	Expected cash flows	6 months or less	6-12 months	1-2 years	2-5 years	more than 5 years
Foreign exchange contracts							
2016		423	359	64	_	_	_
2015		638	597	40	1	_	_

#### Netting of financial assets and liabilities

No significant netting of financial assets and liabilities occured in 2016 and 2015.

#### Capital management

Note 20

Oerlikon Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders, and to maintain an optimal capital structure to reduce the cost of capital.

The Group monitors capital using the ratios shown below:

in CHF million	2016	2015
Total assets	3825	4097
Equity attributable to shareholders of the parent	1 826	1 554
Equity ratio in %	48%	38%
Interest-bearing debt	468	764
Total equity	1840	1 572
Debt-to-equity ratio	0.3	0.5
Average equity attributable to shareholders of the parent	1690	1 871
Net result attributable to shareholders of the parent	387	-421
Return on equity	23%	-23%

With an equity ratio of 48 % (previous year: 38 %), the Oerlikon Group is above the target range of its financial strategy. The current outstanding bonds have an investment grade rating.

#### OC Oerlikon participation plans

On December 31, 2016, the following equity-settled plans were open, pursuant to which the holder is entitled to shares of OC Oerlikon Corporation AG, Pfäffikon:

#### **Restricted Stock Units (RSU)**

Members of the Board of Directors of OC Oerlikon Corporation AG, Pfäffikon, receive a portion of their compensation by means of Restricted Stock Units (RSU) which are allocated on the day of the Annual General Meeting of Shareholders and vest upon the next Annual General Meeting of Shareholders, at which time they are converted into Oerlikon shares. For Directors resigning their mandate prior to the end of the term, the number of RSU converted into shares is determined at the sole discretion of the Board of Directors. The fair value for the 2016 plan is based on the stock price at grant date of CHF 9.51.

Additional RSU grants were made in 2016 to members of the Executive Committee and senior management to replace the PSA grants issued under the 2014 and 2015 plans (see below). They were allocated as of September 1, 2016 and vest mainly on May 1, 2017 (for RSU to replace 2014 PSA grants) and May 1, 2018 (for RSU to replace 2015 PSA grants). The incremental fair values are CHF 7.70 (for RSU that vest in 2017) and CHF 0 (for RSU that vest in 2018), measured based on the CHF 9.55 stock price as of September 1, 2016, less estimated dividend of CHF 0.30 for one and two years, respectively.

Year of allocation	Outstanding on 1.1.	Granted in 2016	Forfeited in 2016	Exercised in 2016	Outstanding on 31.12.	at grant date in CHF <sup>1</sup>	2016 in CHF million	Vesting period <sup>2</sup>
2015	76049			76049		n.a.	0.3	09.04.15- 06.04.16
2016		450389	11913	_	438 476	3.8	0.9	06.04.16- 01.05.19
Total	76049	450389	11913	76 049	438476		1.2	

<sup>&</sup>lt;sup>1</sup> The fair values relate to the units granted in 2016.

#### Performance Share Awards (PSA)

Members of the Executive Committee and senior management may receive a portion of their compensation as long-term bonus in the form of awards for OC Oerlikon Corporation AG, Pfäffikon, shares that are based on performance conditions and a vesting period of three years. Their achievement determines the effective number of total Performance Share Awards (PSA). Upon vesting, the effective number of PSA is converted into shares.

PSA grants issued under the 2014 and 2015 plans were converted into a pro-rated number of RSU for the remaining vesting period (see above).

Performance conditions for the 2016 plan are based on the absolute and relative Total Shareholder Return (TSR) of Oerlikon over a three-year period. TSR is measured with a starting value of the volume-weighted average share price (WWAP) over the first 30 trading days of the year and an ending value of the VWAP over the last 30 trading days of the year. Absolute TSR results from the cumulated TSR for each of the three years. Relative TSR results from the average percentile amongst a peer group of 11 companies for each of the three years. At the start of the program, the Board of Directors sets target and cap for absolute TSR. A result at or above the cap corresponds to a payout factor of 200%, a result at target corresponds to 100% and a result of 0 corresponds to 0%. For relative TSR, a result at or above the 90th percentile corresponds to a payout factor of 200%, at the 50th percentile the payout is 100%, at the 20th percentile the payout factor is 50% and below it is 0%. The number of PSA granted, multiplied by the weighted payout factors of absolute and relative TSR results in the final payout. For each PSA granted, the equivalent of dividends paid per share to shareholders during the vesting period is added to the final payout. The shares received are subject to a two year blocking period.

For the 2016 plan, the fair value at grant date was CHF 11.6 and was calculated using a Monte Carlo Simulation. Main assumptions include a stock price of CHF 9.55 and an average expected volatility of the peer group of 34.02 %.

Year of allocation	Outstanding on 1.1.	Granted in 2016	Forfeited in 2016	Exercised in 2016	Converted in 2016	Outstanding on 31.12.	Fair Value at grant date¹	2016 in	Vesting period <sup>3</sup>
2013	429739		12217	417 522			n.a.	0.9	01.05.13– 30.04.16
2014	461 952	33 638	84395	120276	290919		1.1	1.9	01.05.14- 30.04.17
2015	632749	85976	179642	68947	470 136		5.2	1.8	01.05.15– 30.04.18
2016		739540	75 999	4921		658 620	11.6	1.6	01.05.16– 30.04.19
Total	1524440	859 154	352253	611666	761 055	658620		6.2	

<sup>&</sup>lt;sup>1</sup> The fair values relate to the awards granted in 2016.

Note 21

<sup>&</sup>lt;sup>2</sup> RSU allocated to the Board of Directors on April 6, 2016, will vest on April 12, 2017. RSU allocated to members of the Executive Committee and senior management in 2016 will vest on May 1 during the next three years.

<sup>&</sup>lt;sup>2</sup> The total expense of CHF 6.2 million (previous year: CHF 7.4 million) includes income related to discontinued operations in the amount of below CHF 0.1 million (previous year: income of CHF 0.1 million).

<sup>3 2014</sup> and 2015 plan awards were converted to RSU in 2016.

Related parties include members of the Board of Directors, the Executive Committee, employee benefit plans or important share-holders as well as companies under their control. Transactions with related parties are generally conducted at arm's length.

#### **Primary shareholder**

The share capital of CHF 339 758 576 consists of 339 758 576 registered shares, each with a par value of CHF 1.00. On December 31, 2016, conditional capital amounted to CHF 47 200 000.

The shareholders registered as holding more than 5% of the shares as at December 31, 2016, were:

	Share owners			
Shareholder	Number of shares	in %		
Renova Group <sup>2</sup>	146 222 889 <sup>3</sup>	43.04%		

<sup>&</sup>lt;sup>1</sup> Source: Disclosure notification by Renova Group (published by SIX Exchange Regulation on December 17, 2015).

### Share ownership, options and related instruments

The disclosure below follows Art. 663c Para. 3 of the Swiss Code of Obligations, which requires disclosure of share ownership, options and related instruments individually for each member of the Board of Directors and Executive Committee, including shares, options and related instruments held by persons closely related to, and by companies controlled by members of the Board of Directors and Executive Committee.

Gerhard Pegam       11 407       13         Dr. Jean Botti (since April 5, 2016)       none       13         David Metzger (since April 5, 2016)       none       13         Alexey V. Moskov (since April 5, 2016)       none       13         Dr. Mary Gresens (until April 5, 2016)       none       none         Mikhail Lifshitz (until April 5, 2016)       23 407       none         Johan Van de Steen (until April 5, 2016)       7 855       none         Hans Ziegler (until November 29, 2016)       204 609¹       8²	Members of the Board of Directors	Number of shares	Restricted Stock Units (RSU)	
Gerhard Pegam       11 407       13         Dr. Jean Botti (since April 5, 2016)       none       13         David Metzger (since April 5, 2016)       none       13         Alexey V. Moskov (since April 5, 2016)       none       13         Dr. Mary Gresens (until April 5, 2016)       none       none         Mikhail Lifshitz (until April 5, 2016)       23 407       none         Johan Van de Steen (until April 5, 2016)       7 855       none         Hans Ziegler (until November 29, 2016)       204 609¹       8²				
Dr. Jean Botti (since April 5, 2016)         none         13           David Metzger (since April 5, 2016)         none         13           Alexey V. Moskov (since April 5, 2016)         none         13           Dr. Mary Gresens (until April 5, 2016)         none         none           Mikhail Lifshitz (until April 5, 2016)         23 407         none           Johan Van de Steen (until April 5, 2016)         7 855         none           Hans Ziegler (until November 29, 2016)         204 609¹         8²	Prof. Dr. Michael Süss	18323	29 443	
David Metzger (since April 5, 2016)         none         13           Alexey V. Moskov (since April 5, 2016)         none         13           Dr. Mary Gresens (until April 5, 2016)         none         none           Mikhail Lifshitz (until April 5, 2016)         23 407         none           Johan Van de Steen (until April 5, 2016)         7 855         none           Hans Ziegler (until November 29, 2016)         204 609¹         8²	Gerhard Pegam	11407	13 144	
Alexey V. Moskov (since April 5, 2016)       none       13         Dr. Mary Gresens (until April 5, 2016)       none       none         Mikhail Lifshitz (until April 5, 2016)       23 407       none         Johan Van de Steen (until April 5, 2016)       7 855       none         Hans Ziegler (until November 29, 2016)       204 609¹       8²	Dr. Jean Botti (since April 5, 2016)	none	13144	
Dr. Mary Gresens (until April 5, 2016)         none         none           Mikhail Lifshitz (until April 5, 2016)         23 407         none           Johan Van de Steen (until April 5, 2016)         7 855         none           Hans Ziegler (until November 29, 2016)         204 609¹         8²	David Metzger (since April 5, 2016)	none	13144	
Mikhail Lifshitz (until April 5, 2016)         23407         no           Johan Van de Steen (until April 5, 2016)         7855         no           Hans Ziegler (until November 29, 2016)         204609¹         8³	Alexey V. Moskov (since April 5, 2016)	none	13144	
Johan Van de Steen (until April 5, 2016)         7 855         n.           Hans Ziegler (until November 29, 2016)         204 609¹         8 3	Dr. Mary Gresens (until April 5, 2016)	none	none	
Hans Ziegler (until November 29, 2016) 2046091 8	Mikhail Lifshitz (until April 5, 2016)	23407	none	
	Johan Van de Steen (until April 5, 2016)	7855	none	
Total 265601 907	Hans Ziegler (until November 29, 2016)	2046091	8763	
	Total	265 601	90782	

<sup>&</sup>lt;sup>1</sup> In addition, Mr. Ziegler holds 100 000 options (ratio 5:1).

Prof. Dr. Michael Süss (Chairman), David Metzger (Board Member) and Alexey V. Moskov (Board Member) are also in senior positions at Renova Group. Prof. Dr. Süss is a Director of Renova Management AG. Mr. Metzger is Managing Director Investments of the Renova Management AG. Mr. Moskov is Chief Operating Officer of Renova Management AG.

Members of the Executive Committee	Number of shares	Number of Per- formance Share Awards (PSA)	Number of Restricted Stock Units (RSU)	
Dr. Roland Fischer (since March 1, 2016)	none	127812	44 904	
Jürg Fedier	450270	102249	61 227	
Anna Ryzhova (since October 10, 2016)	none	5 8 5 0	none	
Dr. Bernd Matthes	16709	40 900	22 532	
Georg Stausberg	396941	24414	12051	
Dr. Brice Koch (until February 29, 2016)	130473	none	none	
Dr. Martin Füllenbach (until August 31, 2016)	2594	none	none	
Dr. Roland Herb (until August 1, 2016)	13001	38 855	21 583	
Total	652741	340 080	162297	

<sup>&</sup>lt;sup>1</sup> These shares were not published in the Annual Report 2015.

<sup>&</sup>lt;sup>2</sup> Beneficial owner (as per disclosure notification): Viktor F. Vekselberg, Zug and Moscow. Renova Group is composed of Liwet Holding AG, Zurich, Switzerland; Renova Innovation Technologies Ltd., Nassau, Bahamas; Lamesa Holding S.A., Panama, Republic of Panama.

<sup>&</sup>lt;sup>3</sup> At the end of 2015, the Renova Group held (as per disclosure notification) 146222889 shares (43.04% of the issued Oerlikon shares).

Note 22 (cont.)

#### **Related party transactions**

#### Overview on the compensation of the Board of Directors and the Executive Committee

	Execut	ive Committee	Board of Directors		
in CHF thousand	2016	2015	2016	2015	
Object towns and beautiful	0.100	0740	000	000	
Short-term employee benefits	6130	6748	999	898	
Post-employment benefits	863	921			
Share-based payments	3962	4382	905	913	
Total	10 955	12051	1904	1811	

Disclosures required by the Swiss Ordinance against Excessive Compensation in Stock Exchange Listed Companies on Board and Executive compensation are shown in the Remuneration Report.

#### **Group and associated companies**

An overview of the Group subsidiary companies can be found on pages 128 and 129. Transactions between the parent company and its subsidiaries as well as between the Group subsidiaries themselves have been eliminated in the consolidated annual financial statements.

In Germany, a Group company rents property from its pension fund. The fair value of the real estate included in the fair value of the assets of the pension fund is CHF 8 million (previous year: CHF 8 million) and the annual rent is CHF 1 million (previous year: CHF 1 million).

In 2016, OC Oerlikon sold goods and services to other related parties in the amount of CHF 13 million, from these transactions accounts receivables in the amount of CHF 3 million were outstanding as of December 31, 2016.

See Note 21 for participation plans.

During the year under review, there were no other related party transactions.

#### **Contingent liabilities**

Note 23

Contingent liabilities as of December 31, 2016, amount to CHF 6 million (previous year: CHF 4 million) mostly for excise duties and debt guarantees.

### Payments under non-cancellable operating leases

Note 24

in CHF million	2016	2015	
Due in 1st year	28	30	
Due in 2nd year	19	18	
Due in 3rd year	14	16	
Due in 4th year	11	15	
Due in or beyond 5th year	49	59	
Total	121	138	

The expenses of operating leases charged to the income statement amount to CHF 28 million (previous year: CHF 21 million).

# Pledged assets

Note 25

As of December 31, 2016, CHF 9 milion assets were pledged as a security (previous year: no assets).

Subsequent events Note 26

No events occurred between the balance sheet date and the date on which this report was approved by the Board of Directors that could have a significant impact on the consolidated financial statements 2016.

# Segment information

		Surfac	e Solutions Segment	Manm	nade Fibers Segment	Dri	ve Systems Segment	Total Segments		
in CHF million		2016	2015	2016	2015	2016	2015	2016	2015	
Order intake		1236	1233	577	733	600	571	2413	2537	_
Order backlog		80	81	270	237	97	113	447	431	_
Sales										
Sales to third parti	ies	1238	1229	481	794	612	648	2331	2671	
Sales to other seg			5					5	5	_
Eliminations	mone		<u>-</u> 5					<u>_</u>	<u>-</u> 5	
Liiriii ddiorio		1238	1229	481	794	612	648	2331	2671	
Sales by marks	et region to third parties									_
Asia/Pacific	et region to tima parties	364	331	287	595	100	81	751	1 007	
		582				289	324	973		_
Europe			595	102	104 65			496	<u>1 023</u> 520	_
North America		236	243	59		201	212			_
Other regions		56 1238	1 <b>229</b>	33 481	30 <b>794</b>	612	31 <b>648</b>	2331	2671	_
0-1 hl	and the Albitud or anti-									_
Asia/Pacific	on to third parties	334	295	181	265	126	103	641	663	
thereof	China	109	88	175	260	33	25	317	373	_
Europe	Offina	613	640	279	508	299	275	1 191	1 423	_
thereof	Switzerland	87	101					87	101	_
LI IEI EOI	Germany	322	351	275	508			597	859	_
	Italy	37	35			292	268	329	303	_
North America	Italy	253	256			187	270	461	547	
thereof	USA	226	230	21	21	187	270	434	521	_
Other regions	USA	38	38			107		38	38	
Other regions		1238	1229	481	794	612	648	2331	2671	_
										_
Capital expend and intangible	liture for property, plant and equip assets4	ment								
Asia/Pacific		19	17	2	1	12	9	33	27	
Europe		58	46	14	20	15	20	87	86	
North America		15	25	_	1	4	5	19	31	
Other regions		4	3	_				4	3	
		96	91	16	22	31	34	143	147	
EBITDA		277	264	16	85	51	-19	344	330	_
EBIT		161	157	-3	67	12	-534	170	-310	
Other material	items									
	velopment expense	-69	<del>-70</del>	-19	-24	-12	-10	-100	-104	_
Depreciation and a			-107	-19	-18	-39	-39	-173	-164	
	perty, plant and equipment						<u>-5</u>	-1		_
Impairment of goo							<del>-471</del>	<u></u>	<del>-471</del>	
Restructuring expe			-1	3	-43	5	-68	4	-112	_
Net operating a		31.12.16		31.12.16		31.12.16		31.12.16	31.12.15	
Operating assets <sup>2</sup>		1641	1583	515	586	578	577	2734	2746	
Operating liabilities	S <sup>3</sup>		-258 <b>1325</b>	-352 <b>163</b>	<u>-361</u>	<u>-218</u>	-228 <b>349</b>	-839 <b>1895</b>	<u>-847</u> <b>1899</b>	_
	ployees (full-time equivalents)	31.12.16		31.12.16		31.12.16		31.12.16	31.12.15	
Asia/Pacific		1 646	1 565	858	909	2398	2133	4902	4607	
Europe		3486	3256	1 3 6 6	1 569	1782	1 927	6634	6752	
North America		1 094	1036	54	50	639	772	1787	1 858	
Other regions		302	283					302	283	_
		6528	6140	2278	2528	4819	4832	13625	13500	

<sup>&</sup>lt;sup>1</sup> Discontinued operations include in 2016 the Vacuum Segment and the Advanced Technologies Segment. In 2015, discontinued operations include the Vacuum Segment, the Advanced Technology Segment and the Natural Fibers and Textile Components Business Units.

<sup>&</sup>lt;sup>2</sup> Operating assets include current and non-current operating assets (including goodwill and brands), whereas cash and cash equivalents, current financial investments, current income tax receivables as well as deferred tax assets are not included.

<sup>&</sup>lt;sup>3</sup> Operating liabilities include current and non-current operating liabilities, whereas current loans and borrowings, non-current financial liabilities, current income tax payables and deferred tax liabilities are not included.

Group/E	liminations		Total from continuing operations		scontinued operations <sup>1</sup>	di	Total incl. scontinued operations
2016	2015	2016	2015	2016	2015	2016	2015
		2413	2537	252	381	2665	2918
		447	431		62	447	493
		2331	2671	240	361	2571	3032
<b>-</b> 5	-5				_		_
5	5						
		2331	2671	240	361	2571	3032
		751	1007	83	123	834	1 130
		973	1023	103	154	1076	1177
		496	520	46	72	542	592
		2331	2671	<b>240</b>	12 <b>361</b>	2571	133 <b>3032</b>
		641	663	75	105	716	768
		317	373	37	55	354	428
		1 191	1 423	114	177	1 305	1 600
_		87	101	_	_	87	101
		597	859	114	177	711	1 036
_		329	303		_	329	303
		461	547	50	78	511	625
_		434	521	50	78	484	599
_		38	38	1	1	39	39
		2331	2671	240	361	2571	3032
		33	27	1	2	34	29
1	3	88	89	7	10	95	99
	_	19	31	_	_	19	31
_		4	3		_	4	3
1	3	144	150	8	12	152	162
-10	8	334	338	323	5	657	343
-12	4	158	-306	323	-7	481	-313
		-100	-104	-13	-24	-113	-128
-2		-175	<u>-168</u>		-12	-175	-180
- <del></del>	<u>_</u>	-1	<del>-5</del>			-1	
		<u></u>	<del>-471</del>				-471
		4	-112		_	4	-112
21 12 16	21 10 15	31.12.16	21 10 15	21 12 16	21 10 15	31.12.16	01 10 15
<b>31.12.16</b>	19			31.12.16	244		31.12.15
		<u>2751</u> <u>-884</u>	<u>2765</u> –890		-63	<u>2751</u> –884	3 009 -953
-28	<b>-24</b>	1867	1875		181	1867	2056
31 10 16	21 10 15	21 12 46	21 10 15	21 12 46	21 10 15	31 12 16	21 10 15
31.12.16	31.12.15	<b>31.12.16</b> 4902	4607	31.12.16	421	<b>31.12.16</b> 4902	31.12.15 5028
209	220	6843	6972		1140	6843	8112
		1787	1858		90	1787	1948
6	3		286		9	308	295
215	223	13840	13723		1660	13840	15383

 $<sup>^{\</sup>rm 4}\,{\rm Does}$  not include non-current assets acquired through business combinations.

### Reconciliation to the consolidated income statement and balance sheet

in CHF million	2016	2015
EBIT	158	-306
Financial income	11	10
Financial expense	-34	-43
ЕВТ	135	-339
Operating assets (continuing operations)	2751	2765
Non-operating assets <sup>1</sup>	1 074	1 332
Total assets	3825	4097
Operating liabilities (continuing operations)	884	890
Non-operating liabilities <sup>2</sup>	1 101	1 635
Total liabilities	1 985	2525

 $<sup>^{\</sup>mbox{\tiny 1}}$  For 2015 including assets relating to discontinued operations.

 $<sup>^{\</sup>rm 2}$  For 2015 including liabilities relating to discontinued operations.

# Geographical information on non-current assets

n CHF million		2016	2015
Asia/Pacific		269	276
thereof	China	99	111
Europe		1401	1374
thereof	Switzerland	849	830
	Germany	309	307
	Italy	125	131
North America		245	250
thereof	USA	234	241
Other regions		12	10
Total		1927	1910

Non-current assets as shown in the table above do not include deferred tax assets and post-employment benefit assets.

# Information about major customers

In 2016 and 2015, no customer represented 10 % or more of the company's third-party sales.

# Companies by country

Country	Name, registered office of consolidated companies by country	Currency	Share capital <sup>1</sup>	Group owns %	Number of employees
A 1 1	O III AA A A I II BUUU AA			100.00	
Australia	Oerlikon Metco Australia Pty Ltd., Bella Vista, NSW/AU	AUD	500 000	100.00	4
Austria	Oerlikon Balzers Coating Austria GmbH, Kapfenberg/AT	EUR	350 000	100.00	130
Belgium	Oerlikon Balzers Coating Benelux N.V., StTruiden/BE	<u>EUR</u> _	620 000	100.00	53
Brazil Brazil	Oerlikon Balzers Revestimentos Metálicos Ltda., Jundiaí, SP/BR	BRL BRL	30 662 100 4418 300	99.99	108 32
	Oerlikon Friction Systems do Brasil Ltda., Diadema, SP/BR		16385000		
Brazil Canada	Oerlikon Textile do Brasil Máquinas Ltda., Porto Alegre, RS/BR	BRL CAD	100	100.00	
China	Oerlikon Metco (Canada) Inc., Fort Saskatchewan, AB/CA  Oerlikon (China) Technology Co. Ltd., Suzhou/CN	USD	30 000 000	100.00	339
China	Oerlikon Balzers Coating (Suzhou) Co. Ltd., Suzhou/CN	USD	6150000	100.00	413
China	Oerlikon Barmag Huitong (Yangzhou) Engineering Co. Ltd., Yangzhou/CN		100 000 000	60.00	30
China	Oerlikon China Equity Ltd., Hong Kong/CN	HKD	253910000	100.00	
China	Oerlikon Drive Systems (Suzhou) Co. Ltd., Suzhou/CN	USD	12000000	100.00	
China	Oerlikon Metco Surface Technology (Shanghai) Co. Ltd., Shanghai/CN	CHF	9500000	100.00	280
China	Oerlikon Textile China Investments Ltd., Hong Kong/CN	HKD	266 052 500	100.00	
China	<del></del>	HKD —	100000	100.00	10
China	Oerlikon Textile Far East Ltd., Hong Kong/CN  Oerlikon Textile Machinery (Wuxi) Co. Ltd., Wuxi/CN	USD	700000	100.00	140
China			250 000	100.00	
China	Oerlikon Textile Systems Far East Ltd., Hong Kong/CN  Oerlikon Textile Technology (Beijing) Co. Ltd., Beijing/CN	USD	1112200	100.00	 185
China		HKD	94380000	100.00	
China	Transmission Trading Limited, Hong Kong/CN  Zigong Golden China Specialty Carbides Co., Ltd., Zigong/CN	CNY	10000000	60.00	 13
Finland			2500	51.00	7
	Oerlikon Balzers Sandvik Coating Oy, Helsinki/FI				
France	DMX SAS, Cluses/FR  Oarlikon Palzon Franco, SAS, Forrières en Prio/FD	<u>EUR</u> EUR	450 000	100.00	18
France	Oerlikon Balzers France SAS, Ferrières-en-Brie/FR		4000000	100.00	158
Germany	citim GmbH, Barleben/DE	EUR	51000	100.00	109
Germany	Dr. Schippers Unterstützungskasse GmbH, Remscheid/DE	<u>EUR</u> _	26000	100.00	
Germany	Oerlikon Balzers Coating Germany GmbH, Bingen/DE	EUR	511300	100.00	810
Germany	Oerlikon Business Services GmbH, Remscheid/DE	<u>EUR</u> _	25000	100.00	7
Germany	Oerlikon Deutschland Holding GmbH, Remscheid/DE	EUR	30680000	100.00	
Germany	Oerlikon Friction Systems (Germany) GmbH, Bremen/DE	EUR	1 000 000	100.00	113
Germany	Oerlikon Metaplas GmbH, Bergisch Gladbach/DE	EUR	1 000 000	100.00	135
Germany	Oerlikon Metco Coatings GmbH, Salzgitter/DE	EUR _	1 000 000	100.00	66
Germany	Oerlikon Metco Europe GmbH, Kelsterbach/DE	EUR	1 000 000	100.00	112
Germany	Oerlikon Metco WOKA GmbH, Barchfeld/DE	<u>EUR</u> _	1 000 000	100.00	128
Germany	Oerlikon RS GmbH, Remscheid/DE	<u>EUR</u> _	25000	100.00	
Germany	Oerlikon Surface Solutions Holding GmbH, Kelsterbach/DE	<u>EUR</u>	17345100	100.00	1000
Germany	Oerlikon Textile GmbH & Co. KG, Remscheid/DE	<u>EUR</u> _	41 000 000	100.00	1366
Germany	Oerlikon Vermögens-Verwaltungs GmbH, Remscheid/DE	EUR	25000	100.00	
Germany	W. Reiners Verwaltungs-GmbH, Remscheid/DE	<u>EUR</u> _	38346900	100.00	
Great Britain	Graziano Trasmissioni UK Ltd., St. Neots/UK	<u>GBP</u>	40 000	100.00	8
Great Britain	Oerlikon Balzers Coating UK Ltd., Milton Keynes/UK	<u>GBP</u>	2000000	100.00	51
Great Britain	Oerlikon Metco (UK) Ltd., Cwmbran/GB	GBP	500 000	100.00	21
Great Britain	Oerlikon Metco Coatings Ltd., Dukinfield/GB	GBP	57 100	100.00	45
Great Britain	Oerlikon Neomet Ltd., Stockport/GB	<u>GBP</u> _	292700	100.00	35
Great Britain	Vocis Limited, Warwick/UK	<u>GBP</u>	200	100.00	26
Hungary	Oerlikon Eldim (HU) Kft, Debrecen/HU	HUF _	161 000 000	100.00	99
India	Fairfield Atlas Ltd., Kolhapur/IN	INR	273 205 400	98.37	977
India	Graziano Trasmissioni India Pvt. Ltd., New Delhi/IN	<u>INR</u> _	267 124 900	100.00	1354
India	Oerlikon Balzers Coating India Ltd., Pune/IN	<u>INR</u> _	70000000	100.00	248
India	Oerlikon Friction Systems (India) Ltd., Chennai	INR _	7100000	100.00	116
India	Oerlikon Textile India Pvt. Ltd., Mumbai/IN	INR _	57360000	100.00	154
Italy	Oerlikon Balzers Coating Italy S.p.A., Brugherio/IT	EUR	129 100	100.00	78
Italy	Oerlikon Friction Systems (Italia) S.r.I., Caivano/IT	EUR _	250 000	100.00	43
Italy	Oerlikon Graziano S.p.A., Cascine Vica Rivoli/IT	EUR	58 697 400	100.00	1741
Japan	Oerlikon Metco (Japan) Ltd., Tokyo/JP		180 000 000	100.00	41
Japan	Oerlikon Nihon Balzers Coating Co. Ltd., Hiratsuka/JP		100000000	100.00	148
Liechtenstein	OC Oerlikon Balzers AG, Balzers/LI	CHF	1 000 000	100.00	87
Liechtenstein	Oerlikon (Liechtenstein) Holding AG, Balzers/LI	CHF	120 000	100.00	
Liechtenstein	Oerlikon Balzers Coating AG, Balzers/LI	CHF	1 000 000	100.00	192
Luxembourg	Oerlikon Balzers Coating Luxembourg S.à.r.l., Differdange-Niederkorn/LU	EUR _	1 000 000	60.00	22
Malaysia	Oerlikon Balzers Coating Malaysia Sdn. Bhd., Kuala Lumpur/MY	MYR _	2000000	100.00	22
Mexico	Oerlikon Balzers Coating Mexico S.A. de C.V., Querétaro/MX	MXN	71 458 000	100.00	126
Netherlands	Oerlikon Eldim (NL) B.V., Lomm/NL	EUR _	396400	100.00	250
Netherlands	SAC Oerlikon Automotive Components B.V., Rotterdam/NL	EUR	11500000	100.00	_

Country	Name, registered office of consolidated companies by country	Currency	Share capital¹	Group owns %	Number of employees
Philippines	Oerlikon Balzers Coating Philippines Inc., Muntinlupa/PH		15000000	99.99	11
Poland	Oerlikon Balzers Coating Poland Sp. z o.o., Polkowice Dolne/PL		5000000	100.00	107
Russia	Oerlikon Metco Rus LLC/RU	RUB	18600000	100.00	20
Russia	Oerlikon Rus LLC, Moscow/RU	RUB	1700000	100.00	6
Russia	OOO Oerlikon Balzers Rus, Elektrostal/RU	RUB	1 000 000	100.00	11
Singapore	Oerlikon Balzers Coating Singapore Pte. Ltd., Singapore/SG	SGD	6000000	100.00	23
Singapore	Oerlikon Metco (Singapore) Pte. Ltd., Singapore/SG	SGD	600 000	100.00	23
Slovakia	Oerlikon Balzers Coating Slovakia s.r.o., Bratislava/SK	EUR	11 060 000	100.00	102
South Korea	Oerlikon Balzers Coating Korea Co. Ltd., Pyongtaek/KR	KRW	6300000000	89.90	196
Spain	Oerlikon Balzers Coating Spain S.A.U., Antzuola/ES	EUR	150300	100.00	77
Sweden	Oerlikon Balzers Sandvik Coating AB, Stockholm/SE	SEK	11 600 000	51.00	53
Switzerland	InnoDisc AG, Windisch/CH	CHF	100000	100.00	_
Switzerland	OC Oerlikon Corporation AG, Pfäffikon, Freienbach SZ/CH	CHF	339758600	100.00	_
Switzerland	OC Oerlikon Management AG, Pfäffikon, Freienbach SZ/CH	CHF	2000000	100.00	86
Switzerland	OC Oerlikon Textile Holding AG, Pfäffikon, Freienbach SZ/CH	CHF	112019600	100.00	_
Switzerland	OC Oerlikon Textile Schweiz AG, Pfäffikon, Freienbach SZ/CH	CHF	14160000	100.00	_
Switzerland	Oerlikon Balzers Coating SA, Brügg, Brügg/CH	CHF	100 000	100.00	27
Switzerland	Oerlikon Drive Systems GmbH, Pfäffikon, Freienbach SZ/CH	CHF	20 000	100.00	7
Switzerland	Oerlikon IT Solutions AG, Pfäffikon, Freienbach SZ/CH	CHF	500 000	100.00	30
Switzerland	Oerlikon Metco AG, Wohlen, Wohlen/CH	CHF	5000000	100.00	197
Switzerland	Oerlikon Surface Solutions AG, Pfäffikon, Freienbach SZ/CH	CHF	10000000	100.00	248
Switzerland	OT Textile Verwaltungs GmbH, Arbon/CH	CHF	20 000	100.00	_
Switzerland	Unaxis GmbH, Freienbach SZ/CH	CHF	20 000	100.00	_
Thailand	Oerlikon Balzers Coating (Thailand) Co. Ltd., Chonburi/TH	THB	80 000 000	99.99	58
Turkey	Oerlikon Balzers Kaplama Sanayi ve Ticaret Limited Sirketi, Bursa/TR	TRY	2500000	99.99	54
USA	citim AM Inc., Atlanta, GA/US	USD	1 000	100.00	8
USA	Fairfield Manufacturing Company Inc., Wilmington, DE/US	USD	10 000	100.00	639
USA	Melco Industries Inc., Denver, CO/US	USD	2407100	100.00	-
USA	Oerlikon Balzers Coating USA Inc., Wilmington, DE/US	USD	20 000	100.00	421
USA	Oerlikon Friction Systems (US) Inc., Dayton OH/US	USD	1 000	100.00	193
USA	Oerlikon Management USA Inc., Pittsburgh, PA/US	USD	500 000	100.00	
USA	Oerlikon Metco (US) Inc., Westbury NY/US	USD	1 000	100.00	398
USA	Oerlikon Textile Inc., Charlotte, NC/US	USD	3000000	100.00	54
USA	Oerlikon USA Holding Inc., Wilmington, DE/US	USD	40 234 000	100.00	
USA	TH Licensing Inc., Wilmington, DE/US	USD	10	100.00	_

<sup>1</sup> Share capital partly rounded to full hundred. Some articles of association and trade registers still contain old European currencies that are converted to EUR.

# Report of the statutory auditor to the General Meeting of OC Oerlikon Corporation AG, Pfäffikon, Freienbach

# Report on the audit of the consolidated financial statements

### **Opinion**

We have audited the consolidated financial statements of OC Oerlikon Corporation AG, Pfäffikon and its subsidiaries (the "OC Oerlikon Group"), which comprise the consolidated income statement, consolidated statement of comprehensive income, consolidated balance sheet as at 31 December 2016, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements (pages 76 to 129) give a true and fair view of the consolidated financial position of the Group as at 31 December 2016 and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with the International Financial Reporting Standards (IFRS) and comply with Swiss law.

#### **Basis for opinion**

We conducted our audit in accordance with Swiss law, International Standards on Auditing (ISAs) and Swiss Auditing Standards. Our responsibilities under those provisions and standards are further described in the "Auditor's responsibilities for the audit of the consolidated financial statements" section of our report.

We are independent of the Group in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession, as well as the IESBA Code of Ethics for Professional Accountants, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### Our audit approach

#### **Overview**

Overall Group materiality: CHF 10'500'000

- We concluded full scope audit work at 24 reporting units across 8 countries
- Our audit scope addressed over 66% of the Group's revenue and 73% of the Group's total assets

As key audit matters the following areas of focus have been identified:

- Discontinued Operations
- Impairment assessment: Goodwill and intangible assets with infinite useful lives

#### **Audit scope**

We designed our audit by determining materiality and assessing the risks of material misstatement in the consolidated financial statements. In particular, we considered where subjective judgements were made; for example, in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. As

in all of our audits, we also addressed the risk of management override of internal controls, including among other matters consideration of whether there was evidence of bias that represented a risk of material misstatement due to fraud.

We tailored the scope of our audit in order to perform sufficient work to enable us to provide an opinion on the consolidated financial statements as a whole, taking into account the structure of the Group, the accounting processes and controls, and the industry in which the Group operates.

The Group financial statements are a consolidation of over 136 reporting units (incl. Vacuum Segment), each of which is considered to be a component. We identified 24 reporting units across 8 countries that, in our view, required a full scope audit due to their size or risk characteristics. This addressed over 66 % of the Group's revenue and 73 % of the Group's total assets. The remaining 34 % of the Group's revenue and 27 % of the Group's total assets was represented by a large number of smaller reporting units. None of these reporting units individually contributed more than 4 % to consolidated revenue or total assets.

Where the work was performed by component auditors, we determined the level of involvement we needed to have in the audit work at those reporting units. 4 components were visited by senior members of the Group audit team in Germany, China and the United States. These visits included discussing the risks identified and any issues arising from our work, challenging the audit approach on significant risk areas as well as meeting local management. In addition to this, the group audit team attended all clearance meetings either in person or by call.

For those components in Group audit scope where a site visit was not undertaken, our involvement included review of the component auditors' work and results and attendance of clearance calls and meetings.

Further specific audit procedures over central functions, the Group consolidation and areas of significant judgement (including M&A transactions, goodwill, intangible assets, taxation, treasury, post-retirement benefits and litigations) were directly led by the Group audit team.

Not considered in above coverage is our audit evidence from performing audit work at the Group and Segment levels, including testing of monitoring controls and disaggregated analytical review procedures, which covers a significant portion of the Group's smaller and lower risk components that were not directly included in our Group audit scope. In addition, we obtained audit evidence over certain out-of-scope components as part of our group analytical procedures.

Preparing to change auditors – PwC first year audit: Before commencing audit work, PwC member firms, their partners and staff, ensured that we were independent from OC Oerlikon Group and to meet key staff in order to understand the business and complex or significant management judgements which are made. We also met with the former group

auditor and reviewed the working papers, to help familiarise ourselves with the audit work performed, controls on which they relied for the purpose of issuing their opinion, and to understand the evidence they obtained over key judgements.

#### Materiality

The scope of our audit was influenced by our application of materiality. Our audit opinion aims to provide reasonable assurance that the consolidated financial statements are free from material misstatement. Misstatements may arise due to fraud or error. They are considered material if individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the consolidated financial statements.

Based on our professional judgement, we determined certain quantitative thresholds for materiality, including the overall Group materiality for the consolidated financial statements as a whole as set out in the table below. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, both individually and in aggregate on the consolidated financial statements as a whole.

#### **Overall Group materiality**

CHF 10'500'000

#### How we determined it

5% of an average of 3 years profit before tax, adjusted for 2015 impairment and restructuring.

#### Rationale for the materiality benchmark applied

- We have applied this benchmark, which is a generally accepted auditing practice, based on our analysis of the common information needs of users of the financial statements.
- On this basis we believe that it is the appropriate benchmark given the fluctuation in the Company's performance.

We agreed with the Audit Committee that we would report to them misstatements above CHF 525'000 identified during our audit as well as any misstatements below that amount which, in our view, warranted reporting for qualitative reasons.

### **Key audit matters**

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

### **Discontinued operations**

#### **Key audit matter**

The accounting for discontinued operations requires a clear segregation of ongoing and discontinuing operating activities in order to report associated income statements items separately and correctly.

In 2016, the Vacuum Segment was disposed for an overall consideration amount of CHF 437 million.

It requires management identifying the closing date when the business is to be deconsolidated.

Management judgment is involved in the identification, recognition and measurement of the assets and liabilities of the discontinued operation including any potentially remaining provision or contingency.

Furthermore, management must ensure that the discounted operations are reported in accordance with the requirements of IFRS 5 – Assets held for sale and discontinued operations.

#### How our audit addressed the key audit matter

We have reviewed the share purchase agreement and verified the closing date. We have further tested the material adjustment to the book values and agreed the reported values per closing date with the corresponding underlying accounting data.

At group level, we reviewed the deconsolidation entries including the recycling of the associated currency translation adjustments and the corresponding deferred taxes.

Finally, we tested the calculation of the results of the discontinued operation and the split between the result from operating and discontinued activities.

Based on the work done, we have come to the conclusion that the deconsolidation was performed appropriately and that the results from discontinued operations are disclosed in line with the requirements of IFRS 5 – Assets held for sale and discontinued operations.

#### Impairment assessment: Goodwill and intangible assets with infinite useful lives

#### **Key audit matter**

The impairment assessment for goodwill and intangible assets with infinite useful lives is considered as a key audit matter due the size of balance (goodwill: CHF 495 million; brands: CHF 212 million) and the significant assumptions involved by management. The main assumptions relate to the future cash flows of the underlying businesses as well as the discount rates applied to derive the associated net present values. Refer to pages 102 to 104 (note 13). Goodwill and other intangible assets with indefinite useful life are allocated to the operating segments that are expected to benefit from the associated business combination and at which level the performance is monitored by the Chief Operation Decision Maker (CODM). These operating segments correspond to the cash-generating units (CGUs).

In 2016, and following a reorganization of the Surface Solutions Segment (OSS), the associated goodwill was reallocated to OSS' business units Balzers Industrial Solutions, Metco Aero & Energy, Automotive Solutions and Additive Manufacturing.

Goodwill and intangible assets with indefinite useful life are tested annually for possible impairment.

**How our audit addressed the key audit matter**We have obtained all impairment tests provided by management and performed following tests:

- We ensured that the recoverable amount calculations are based on the latest business plans. Management follows a clearly documented process for estimating future cash flow. The forecast period used for future cash flows covers the years 2017 to 2021. The 5 year business plan used to determine the recoverable amount is approved by the Board of Directors.
- We have assessed the reasonableness of the business plan by comparing the implicit growth rates to the market and analyst forecasts and assessed that overall the growth rates appear to be reasonable.
- We have further compared the current year actual results with the forecast figures included in the prior year impairment tests and assessed that the prior year assumptions have been proven to be reasonable.
- We assessed the extent to which management has reflected the result from the comparison of budgeted versus actual numbers in its current assessment and adjusted to actual revenue growth rates and operating margins in this year's model and we are satisfied with the incorporation into the current growth rates.
- We performed procedures to ensure that model inputs such as the weighted average cost of capital, the long term growth rate and other assumptions are consistent with observable market data and did not note material deviations.
- We reperformed thorough sensitivity analyses on the key assumptions to ascertain the extent of change in those assumptions that would be required for the goodwill to be impaired. We discussed the headroom of the sensitivity analyses with management and are of the view that no impairment is necessary.

Overall, based on our review of the impairment testing model, the supporting evidence consulted as well as our own sensitivity analyses we conclude that the results of the impairment tests are reasonable.

We have further reviewed and assessed the reallocation of Goodwill in the OSS segment to the newly defined operating segments. In our view the reallocation was performed in line with the respective accounting standards.

#### Other matter

The financial statements of OC Oerlikon Corporation AG, Pfäffikon for the year ended 31 December 2015 were audited by another firm of auditors whose report, dated 26 February 2016, expressed an unmodified opinion on those statements.

#### Other information in the annual report

The Board of Directors is responsible for the other information in the annual report. The other information comprises all information included in the annual report, but does not include the consolidated financial statements, the stand-alone financial statements and the remuneration report of OC Oerlikon Corporation AG and our auditor's reports thereon.

Our opinion on the consolidated financial statements does not cover the other information in the annual report and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information in the annual report and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

# Responsibilities of the Board of Directors for the consolidated financial statements

The Board of Directors is responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRS and the provisions of Swiss law, and for such internal control as the Board of Directors determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Board of Directors is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

# Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Swiss law, ISAs and Swiss Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

A further description of our responsibilities for the audit of the consolidated financial statements is located at the website of EXPERTsuisse: http://expertsuisse.ch/en/audit-report-for-public-companies. This description forms part of our auditor's report.

#### Report on other legal and regulatory requirements

In accordance with article 728a paragraph 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists which has been designed for the preparation of consolidated financial statements according to the instructions of the Board of Directors.

We recommend that the consolidated financial statements submitted to you be approved.

PricewaterhouseCoopers AG

Stefan Räbsamen Audit expert

Audit expert
Auditor in charge

Blaženka Kovács-Vujević Audit expert

Zurich, 24 February 2017

# Five-year summary of key figures

in CHF million	2016	2015	2014	2013	2012
Order intake <sup>1</sup>	2413	2537	2647	2779	2802
Order backlog <sup>1</sup>	447	431	643	800	834
Sales <sup>1</sup>	2331	2671	2825	2770	2906
EBITDA <sup>1, 2</sup>	334	338	475	483	547
- as % of sales	14%	13%	17%	17%	19%
EBIT <sup>1,3</sup>	158	-306	323	359	421
- as % of sales	7 %	-11%	11%	13%	14%
Net result	388	-418	202	201	380
- as % of equity attributable to shareholders of the parent	21 %	-27 %	9%	10%	20%
Cash flow from operating activities <sup>4</sup>	269	393	427	435	414
Capital expenditure for property, plant and equipment and intangible assets <sup>1</sup>	144	150	151	177	181
Total assets	3825	4 097	4966	4094	4158
Equity attributable to shareholders of the parent	1 826	1 554	2188	2072	1860
- as % of total assets	48 %	38%	44%	51%	45 %
Net cash <sup>1, 5</sup>	401	79	114	981	339
Net operating assets <sup>1, 6</sup>	1 867	1 875	2486	1 586	1575
Number of employees <sup>1</sup>	13840	13723	14039	12660	12708
Personnel expense <sup>1</sup>	796	785	780	737	765
Research and development expenditure <sup>1,7</sup>	94	103	96	101	106

 $<sup>^{\</sup>rm 1}$  2016 continuing operations, 2015, 2014, 2013 and 2012 as reported.

<sup>&</sup>lt;sup>2</sup> 2015 includes one-time effects of CHF -112 million (restructuring).

<sup>&</sup>lt;sup>3</sup> 2015 includes one-time effects of CHF -588 million (restructuring expenses of CHF -112 million and impairment losses of CHF -476 million).

<sup>&</sup>lt;sup>4</sup> Before changes in net current assets.

<sup>&</sup>lt;sup>5</sup> Net cash includes cash and cash equivalents, deposits and marketable securities less current and non-current debt.

<sup>&</sup>lt;sup>6</sup> Net operating assets include current and non-current operating assets (including goodwill and brands and excluding cash and cash equivalents, current financial investments, current income tax receivables and deferred tax assets) less operating liabilities (excluding current loans and borrowings, non-current financial liabilities, current income tax payables and deferred tax liabilities).

 $<sup>^{\</sup>scriptscriptstyle 7}$  Research and development expenditure includes expense recognized as intangible assets.

# OC Oerlikon Corporation AG, Pfäffikon

# Income statement of OC Oerlikon Corporation AG, Pfäffikon

in CHF Notes	2016	2015
Income from investments 2.1	44941353	116521449
Financial income 2.2	25710200	20 293 447
Other income 2.3	37818356	47 165 145
Total income	108469909	183980041
Financial expense 2.4	-21 600 669	-65 675 835
Personnel expense	-1 763 648	-1758078
Other expense 2.5	-35 682 793	-29626643
Result before taxes and adjustment on loans and investments	49422799	86919485
Valuation adjustments on loans and investments 2.6	11 665 449	-195746430
Result before taxes	61 088 248	-108826945
Direct taxes	-76307	-162697
Result for the year	61011941	-108 989 642

# Balance sheet at December 31 of OC Oerlikon Corporation AG, Pfäffikon

### **Assets**

in CHF	Notes	2016	%	2015	%
Cook and cook aguitalante	3.1	454570040	13.3	616160746	17.2
Cash and cash equivalents Receivables	3.1	454570343	13.3	616160746	17.2
- from third parties		119940	0.0	180925	0.0
from companies in which the entity holds an investment	3.2	462366863	13.5	655317472	18.3
Other current receivables	3.3	107 460 000	3.1	_	0.0
Prepaid expenses and accrued income		328596	0.0	344778	0.0
Current assets		1024845742	29.9	1272003921	35.5
Non-current financial assets					
- from third parties		217883	0.0	289620	0.0
<ul> <li>from companies in which the entity holds an investment</li> </ul>	3.4	645 491 533	18.9	575210984	16.1
Investments	3.5	1 755 240 745	51.2	1732261588	48.4
Non-current assets		2400950161	70.1	2307762192	64.5
Total assets		3425795903	100.0	3579766113	100.0

in CHF No	otes 20	)16 %	2015	%
Current interest-bearing payables				
- due to third parties	3.6	- 0.0	300 000 000	8.3
due to companies in which the entity     holds an investment	3.7 5893804	17.2	234308362	6.6
Current payables				
- due to third parties	2154	0.0	243671	0.0
<ul> <li>due to companies in which the entity holds an investment</li> </ul>	999	911 0.0	146338	0.0
Accrued liabilities and deferred income	99477	228 0.3	20606927	0.7
Current liabilities	5996435	23 17.5	555 305 298	15.6
Non-current interest-bearing payables				
- due to third parties	3.8 4500000	000 13.1	450 000 000	12.5
<ul> <li>due to companies in which the entity holds an investment</li> </ul>	3.9 255 602 3	385 7.5	404 163 924	11.3
Provisions 3	.10 408269	1.2	50117482	1.3
Non-current liabilities	7464293	56 21.8	904 281 406	25.1
Total liabilities	13460728	79 39.3	1 459 586 704	40.7
Share capital 3	.11 3397585	576 9.9	339758576	9.5
Legal capital reserves				
- Reserves from capital contributions 3	.12 8180184	116 23.9	919799445	25.7
Legal retained earnings				
- General legal retained earnings	705937	<sup>'</sup> 65 2.1	70593765	2.0
Voluntary retained earnings				
- Free reserves and statutory reserves	2939108	850 8.6	293910850	8.2
- Available earnings				
- Profit brought forward	5018129	956 14.6	610980916	17.1
- Result for the year	610119	941 1.8	-108 989 642	-3.0
Treasury shares 3	.13 –53834	-0.2	-5874501	-0.2
Total equity	20797230	24 60.7	2 120 179 409	59.3
Total liabilities and equity	34257959	03 100.0	3579766113	100.0

### Notes to the financial statements of OC Oerlikon Corporation AG, Pfäffikon

# Principles (1) General aspects (1.1)

These financial statements were prepared according to the provisions of the Swiss Law on Accounting and Financial Reporting (32nd title of the Swiss Code of Obligations). Where not prescribed by law, the significant accounting and valuation principles applied are described below.

#### Financial assets (1.2)

Financial assets include non-current loans from third parties and from companies in which the entity holds an investment. Loans granted in foreign currencies are translated at the rate at the balance sheet date, whereby unrealized losses are recorded but unrealized profits are not recognized.

#### Treasury shares (1.3)

Treasury shares are recognized at acquisition cost and deducted from shareholders' equity at the time of acquisition. In case of a resale, the gain or loss is recognized directly in the equity in the position profit brought forward.

#### Non-current interest-bearing payables (1.4)

Interest-bearing payables are recognized in the balance sheet at nominal value.

# Foregoing a cash flow statement and additional disclosures in the notes (1.5)

As OC Oerlikon Corporation AG, Pfäffikon, has prepared its consolidated financial statements in accordance with a recognized accounting standard (IFRS), it has decided to forego presenting additional information on interest-bearing payables and audit fees in the notes, as well as a cash flow statement, in accordance with the law.

# Information on income statement items (2) Income from investments (2.1)

The income from investments consists only of dividend income from companies in which the entity holds an investment.

### Financial income (2.2)

Financial income mainly includes interest income from loans from companies in which the entity holds an investment.

#### Other income (2.3)

Other income consists mainly of trademark fees.

### Financial expense (2.4)

Financial expense includes interest expenses due to companies in which the entity holds an investment and due to third parties as well as net exchange losses.

#### Other expense (2.5)

Other expense consists mainly of management fees charged by OC Oerlikon Management AG, Pfäffikon.

# Valuation adjustments on loans and investments (2.6)

The valuation adjustments in 2015 on loans and investments result from the weakness in key markets, impacting the medium-to-long-term outlook in the Drive Systems Segment and the principle of individual valuation required by Swiss Law on Accounting and Financial Reporting.

# Information on balance sheet items (3) Cash and cash equivalents (3.1)

This item consists of current balances denominated in Swiss francs, Euros and US dollars and is held with European banks.

# Current receivables from companies in which the entity holds an investment (3.2)

The current receivables from companies in which the entity holds an investment consists mainly of cash pool deposits in Swiss francs, Euros and US dollars.

#### Other current receivables (3.3)

The other current receivables consists mainly of deposits in Euros with European banks.

# Non-current financial assets from companies in which the entity holds an investment (3.4)

The non-current financial assets from companies in which the entity holds an investment consists mainly of non-current deposits in Swiss francs, Euros and US dollars. A subordination agreement in the amount of CHF 88.8 million has been issued to a group company.

#### Investments (3.5)

OC Oerlikon Corporation AG, Pfäffikon, holds on the balance sheet date significant investments, which are listed in the table on page 142. These investments are recorded at historical costs less any valuation adjustments.

# Current interest-bearing payables due to third parties (3.6)

In 2015, the current interest-bearing payables due to third parties contained a current bond.

# Conditions on outstanding bond:

	CHF thousand
	2012–2016
Nominal value at December 31, 2016	
Nominal value at December 31, 2015	300 000
Interest	4.250%
Duration in years	4
Maturity	July 13, 2016

Additional information about the bond can be found in Note 18 of the Group's consolidated financial statements on pages 111 and 112.

# Current interest-bearing payables due to companies in which the entity holds an investment (3.7)

The current interest-bearing payables due to companies in which the entity holds an investment contains mainly cash pool debts in Swiss francs, Euros, US dollars, British pound and Japan yen.

### Notes to the financial statements of OC Oerlikon Corporation AG, Pfäffikon

# Non-current interest-bearing payables due to third parties (3.8)

The non-current interest-bearing payables due to third parties contains the following non-current bonds:

#### **Conditions on outstanding bonds:**

	CHF thousand	CHF thousand
	2014–2019	2014-2024
Nominal value at December 31, 2016	300 000	150 000
Nominal value at December 31, 2015	300 000	150 000
Interest	1.250%	2.625%
Duration in years	5	10
Maturity	June 17, 2019	June 17, 2024

Additional information about the bonds can be found in Note 18 of the Group's consolidated financial statements on pages 111 and 112.

# Non-current interest-bearing payables due to companies in which the entity holds an investment (3.9)

The non-current interest-bearing payables due to companies in which the entity holds an investment contains long-term loans mainly in Swiss francs, Euros, US dollars and Hong Kong dollars.

#### Provisions (3.10)

Provisions cover mainly risks related to investments and other risks.

#### Share capital (3.11)

The share capital of CHF 339758576 (previous year: CHF 339758576) consists of 339758576 registered shares (previous year: 339758576), each with a par value of CHF 1.00. On December 31, 2016, conditional capital amounted to CHF 47200000 (previous year: 47200000).

#### Reserves from capital contributions (3.12)

OC Oerlikon Corporation AG, Pfäffikon, shows as of December 31, 2016, reserves from capital contributions of CHF 818 018 416. Thereof CHF 268 706 303 are not yet available for distribution due to the current practice of the Swiss Federal Tax Authorities. Dividend distributions can be made from available reserves from capital contributions first. Available reserves from capital contributions amount to CHF 549 312 113. In 2016, the value of available reserves from capital contributions has changed due to dividend payment of CHF 101 781 029.

#### **Reserves from capital contributions:**

in CHF	available	not available yet	Total
Balance at January 1, 2016	651 093 142	268706303	919799445
Dividend payment	-101 781 029		-101 781 029
Balance at December 31, 2016	549312113	268706303	818018416

#### Treasury shares (3.13)

Treasury shares are shown directly in equity. All reserves for treasury shares were reversed at January 1, 2015.

in CHF	Amount	Number of treasury shares	Lowest rate	Highest rate	Average rate of treasury shares
Balance at January 1, 2016	5874501	497116			
Acquisitions	496724	53760	8.313	9.917	9.115
Allocation to Board members	-721 596	-62391			11.566
Allocation to management	-266149	-23012	_		11.566
Balance at December 31, 2016	5383480	465 473			

in CHF	Amount	Number of treasury shares	Lowest rate	Highest rate	Average rate of treasury shares
Balance at January 1, 2015	14847377	1208319			
Acquisitions	1563126	146247	8.716	12.379	10.548
Allocation to board members	-688 695	-56048			12.288
Allocation to management	-9847307	-801 402	_	_	12.288
Balance at December 31, 2015	5874501	497 116			

# Other information (4) Joint and several liability in favor of group companies (4.1)

**VAT** group

OC Oerlikon Corporation AG, Pfäffikon, belongs to a VAT group and therefore all participants are jointly liable to the Swiss Federal Tax Administration for the value added tax debts of the whole group.

#### **Cash Pooling group**

All participants are jointly liable for any liabilities related to the Cash Pooling.

# Full-time equivalents (4.2)

OC Oerlikon Corporation AG, Pfäffikon, does not have any employees.

#### **Contingent liabilities (4.3)**

The contingent liabilities relate primarily to corporate guarantees and bank guarantees in favor of companies in which the entity holds an investment and amount to CHF 216 million (previous year: CHF 256 million).

### Notes to the financial statements of OC Oerlikon Corporation AG, Pfäffikon

#### Significant shareholders (4.4)

Significant shareholders registered as holding more than 5% of the shares as at December 31, 2016, were:

#### Share ownership<sup>1</sup>

		2016		2015
Shareholder	Number of shares	in%	Number of shares	in%
Renova Group <sup>2</sup>	146222889	43.04 %	146 222 889	43.04%

<sup>&</sup>lt;sup>1</sup> Source: disclosure notification by Renova Group (published by SIX Exchange Regulation on December 17, 2015).

# Equity owned by Executive Committee and the Board of Directors, including any related parties (4.5)

#### **Members of the Board of Directors:**

	2016	2015
	Number of shares	Number of shares
Prof. Dr. Michael Süss	18323	none
Gerhard Pegam	11 407	15004
Dr. Jean Botti (since April 5, 2016)	none	none
David Metzger (since April 5, 2016)	none	none
Alexey V. Moskov (since April 5, 2016)	none	none
Dr. Mary Gresens (until April 5, 2016)	none	none
Mikhail Lifshitz (until April 5, 2016)	23 407	15004
Johan Van de Steen (until April 5, 2016)	7 855	none
Hans Ziegler (until November 29, 2016)	204 6091	194 105
Tim Summers (until April 8, 2015)	none	none
Kurt J. Hausheer (until April 8, 2015)	none	8100
Carl Stadelhofer (until April 8, 2015)	none	200
Total	265 601	232413

<sup>&</sup>lt;sup>1</sup> In addition, Mr. Ziegler holds 100 000 options (ratio 5:1).

Prof. Dr. Michael Süss (Chairman), David Metzger (Board Member) and Alexey V. Moskov (Board Member) are also in senior positions at Renova Group. Prof. Dr. Michael Süss is a Director of Renova Management AG. David Metzger is Managing Director Investments of the Renova Management AG. Mr. Alexey V. Moskov is Chief Operating Officer of Renova Management AG.

#### **Members of the Executive Committee:**

	2016	2015
	Number of shares	Number of shares
Dr. Roland Fischer (since March 1, 2016)	none	none
Jürg Fedier	450270	450270
Anna Ryzhova (since October 10, 2016)	none	none
Dr. Bernd Matthes	16709	16709
Georg Stausberg	396941	none
Dr. Brice Koch (until February 29, 2016)	130473	120124
Dr. Martin Füllenbach (until August 31, 2016)	2594	2594
Dr. Roland Herb (until August 1, 2016)	13001	13001
Andreas Dill (until February 2, 2015)	none	24890
Total	652741	627 588
1 Those shares were not published in the Appuel Den	ort 2015	

<sup>&</sup>lt;sup>1</sup> These shares were not published in the Annual Report 2015.

# Shares or options on shares for members of the Board of Directors, Executive Committee and Senior Management (4.6)

Shares or options on shares are used for share-based compensation of members of the Board of Directors compensated by OC Oerlikon Corporation AG, Pfäffikon, as well as of the Executive Committee and Senior Management employed by other companies of the Group. The number of Restricted Stock Units (RSU) and Performance Share Awards (PSA) is calculated based on fair value at grant date.

The allocation was as follows:

		2016		2015
in CHF thousand	Number of RSU and PSA	Amount	Number of RSU and PSA	Amount
Allocated to authorized members	1309543	10774	781 381	8972

For year 2016 a total of 1309543 Restricted Stock Units (RSU) and Performance Share Awards (PSA) are allocated and the total granted value for share-based-programms amounts to CHF 10.8 million. Thereof, 95163 allocated Restricted Stock Units (RSU) and a granted value of CHF 0.9 million relates to the Board of Directors. Another 501879 allocated Restricted Stock Units (RSU) and Performance Share Awards (PSA) and a granted value of CHF 4 million is attributed for the Executive Committee.

For year 2015781381 Restricted Stock Units (RSU) and Performance Share Awards (PSA) are allocated in total and the granted value for share-based-programms amounts to CHF 9.0 million. Thereof, 76049 allocated Restricted Stock Units (RSU) and a granted value of CHF 0.9 million relates to the Board of Directors. Another 362635 allocated Performance Share Awards (PSA) and a granted value of CHF 4.6 million is attributed for the Executive Committee.

<sup>&</sup>lt;sup>2</sup> Beneficial owner (as per disclosure notification): Viktor F. Vekselberg, Zug and Moscow, Renova Group is composed of Liwet Holding AG, Zürich, Switzerland; Renova Innovation Technologies Ltd., Nassau, Bahamas and Lamesa Holding S.A., Panama, Republic of Panama.

# Significant events after the balance sheet date (4.7)

There were no significant events after the balance sheet date that could impact the book value of the assets or liabilities or that should be disclosed here.

# Investments

		_	2016	2015	2016	2015
Company	Place of business	Currency		Share Capital	Capital a	nd share of votes in %
InnoDisc AG	Windisch AG/CH	CHF	100 000	100000	100.00	100.00
OC Oerlikon Management AG, Pfäffikon	Freienbach SZ/CH	CHF	2000000	2000000	100.00	100.00
OC Oerlikon Textile Holding AG, Pfäffikon	Freienbach SZ/CH	CHF	112019600	112019600	100.00	100.00
Oerlikon Balzers Coating India Ltd.	Pune/IN	INR	70000000	70 000 000	78.40	78.40
Oerlikon Balzers Coating (Thailand) Co. Ltd.	Chonburi/TH	THB	80 000 000	80 000 000	99.99	99.99
Oerlikon Balzers Coating Korea Co. Ltd.	Pyongtaek/KR	KRW	6300000000	6300000000	89.10	89.10
Oerlikon Balzers Coating Luxembourg S.à.r.l.	Differdange- Niedercorn/LU	EUR	1 000 000	1 000 000	60.00	60.00
Oerlikon Balzers Coating Poland Sp. z o.o.	Polkowice Dolne/PL	PLN	_	5000000	_	100.00
Oerlikon Balzers Kaplama Sanayi ve Ticaret Limited Sirketi	Bursa/TR	TRY	2500000	2500000	99.99	99.99
Oerlikon Balzers Sandvik Coating AB	Stockholm/SE	SEK	11600000	11600000	51.00	51.00
Oerlikon Deutschland Holding GmbH	Remscheid/DE	EUR	30680000	30680000	6.00	6.00
Oerlikon Drive Systems GmbH, Pfäffikon	Freienbach SZ/CH	CHF	20 000	20 000	100.00	100.00
Oerlikon Balzers France SAS	Ferrières-en- Bris/FR	EUR	4000000	4000000	100.00	100.00
Oerlikon IT Solutions AG, Pfäffikon	Freienbach SZ/CH	CHF	500 000	500 000	100.00	100.00
Oerlikon Surface Solutions AG, Pfäffikon	Freienbach SZ/CH	CHF	10000000	10000000	100.00	100.00
Oerlikon USA Holding Inc.	Wilmington DE/USA	USD	40234000	40 234 000	62.00	62.00
Oerlikon Vermö- gens-Verwaltungs GmbH	Remscheid/DE	EUR	25 000	25 000	100.00	100.00
OOO Oerlikon Balzers Rus	Elektrostal/RU	RUB	1 000 000	1 000 000	100.00	100.00
OT Textile Verwaltungs GmbH	Arbon TG/CH	CHF	20 000	20 000	100.00	100.00
PT Oerlikon Balzers Artoda Indonesia	Bekasi/ID	IDR	18000000000	18000000000	42.00	42.00
Unaxis GmbH	Freienbach SZ/CH	CHF	20 000	20 000	90.00	90.00
Oerlikon Graziano S.p.A.	Cascine Vica Rivoli/IT	EUR	58 697 400	58 697 400	16.34	16.34

# Changes in equity of OC Oerlikon Corporation AG, Pfäffikon

in CHF million	Share capital	Reserves from capital contributions	General legal retained earnings	Free reserves and statutory reserves	Available earnings	Treasury shares	Total equity
Balance at January 1, 2014	334.6	1 086.1	70.6	293.9	563.1	-10.4	2337.9
Changes in capital increase	5.2	25.3	0.0	0.0	0.0	0.0	30.5
Changes in treasury shares	0.0	0.0	0.0	0.0	0.0	-4.5	-4.5
Dividend payment	0.0	-90.1	0.0	0.0	0.0	0.0	-90.1
Result for the year	0.0	0.0	0.0	0.0	47.9	0.0	47.9
Balance at December 31, 2014	339.8	1021.3	70.6	293.9	611.0	-14.9	2321.7
Changes in treasury shares	0.0	0.0	0.0	0.0	0.0	9.0	9.0
Dividend payment	0.0	-101.5	0.0	0.0	0.0	0.0	-101.5
Result for the year	0.0	0.0	0.0	0.0	-109.0	0.0	-109.0
Balance at December 31, 2015	339.8	919.8	70.6	293.9	502.0	-5.9	2120.2
Changes in treasury shares	0.0	0.0	0.0	0.0	-0.2	0.5	0.3
Dividend payment	0.0	-101.8	0.0	0.0	0.0	0.0	-101.8
Result for the year	0.0	0.0	0.0	0.0	61.0	0.0	61.0
Balance at December 31, 2016	339.8	818.0	70.6	293.9	562.8	-5.4	2079.7

# Proposal of the Board of Directors

The available earnings amount to:

in CHF	2016
Retained earnings brought forward	501 991 274
Loss on Treasury Shares	-178318
Result for the year	61 011 941
Available earnings	562 824 897

The Board of Directors proposes to the Annual General Meeting of Shareholders that the available earnings are to be appropriated as follows:

Balance to be carried forward	562 824 897
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The Board of Directors proposes to the Annual General Meeting of Shareholders a distribution of a dividend, distributed from reserves from capital contributions:

on dividend bearing shares with a nominal value of CHF 1.00 each	103000000
en anidona podring charco min a normila rado or chi inocoden	

The company will not pay dividend on treasury shares held by OC Oerlikon Corporation AG, Pfäffikon.

Pfäffikon SZ, February 24, 2017

On behalf of the Board of Directors

Chairman

Prof. Dr. Michael Süss

# Report of the statutory auditor to the General Meeting of OC Oerlikon Corporation AG, Pfäffikon, Freienbach

#### Report on the audit of the financial statements

#### **Opinion**

We have audited the financial statements of OC Oerlikon Corporation AG, Pfäffikon (following "Oerlikon" or "the Company"), which comprise the balance sheet as at 31 December 2016, income statement and notes for the year then ended, including a summary of significant accounting policies.

In our opinion, the financial statements (pages 136 to 143) as at 31 December 2016 comply with Swiss law and the company's articles of incorporation.

#### **Basis for opinion**

We conducted our audit in accordance with Swiss law and Swiss Auditing Standards. Our responsibilities under those provisions and standards are further described in the "Auditor's responsibilities for the audit of the financial statements" section of our report. We are independent of the entity in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### Our audit approach

#### **Overview**

Overall materiality: CHF 3'600'000

We tailored the scope of our audit in order to perform sufficient work to enable us to provide an opinion on the financial statements as a whole, taking into account the structure of the entity, the accounting processes and controls, and the industry in which the entity operates.

As key audit matter the following area of focus has been identified:

■ Valuation of investments

#### **Audit scope**

We designed our audit by determining materiality and assessing the risks of material misstatement in the financial statements. In particular, we considered where subjective judgements were made; for example, in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. As in all of our audits, we also addressed the risk of management override of internal controls, including among other matters consideration of whether there was evidence of bias that represented a risk of material misstatement due to fraud.

Preparing to change auditors – PwC first year audit: Before commencing audit work, PwC member firms, their partners and staff, ensured that we were independent from OC Oerlikon and to meet key staff in order to understand the business and complex or significant management judgements which are made. We also met with the former group auditor and reviewed the working papers, to help familiarise ourselves with the audit work performed, controls on which they relied for the purpose of issuing their opinion, and to understand the evidence they obtained over key judgements.

#### Materiality

The scope of our audit was influenced by our application of materiality. Our audit opinion aims to provide reasonable assurance that the financial statements are free from material misstatement. Misstatements may arise due to fraud or error. They are considered material if individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

Based on our professional judgement, we determined certain quantitative thresholds for materiality, including the overall materiality for the financial statements as a whole as set out in the table below. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, both individually and in aggregate on the financial statements as a whole.

#### **Overall materiality**

CHF 3'600'000

#### How we determined it

Consistent with the level of materiality used as part of the group audit.

#### Rationale for the materiality benchmark applied

We initially chose total assets as the benchmark because OC Oerlikon Corporation AG, Pfäffikon is a holding company that mainly holds investments in subsidiaries. The profit of the holding company fluctuates from year to year depending on whether investees pay dividends. Furthermore total assets is a generally accepted benchmark for determining the materiality according to auditing standards. We chose 1% which is within the range of acceptable quantitative materiality thresholds in auditing standards. This calculation results in an overall materiality of CHF 34'000'000.

However, because the materiality allocated as part of the group audit (CHF 3'600'000) was lower, the audit was performed using this lower materiality threshold.

We agreed with the Audit Committee that we would report to them misstatements above CHF 525'000 identified during our audit as well as any misstatements below that amount which, in our view, warranted reporting for qualitative reasons.

# Report on key audit matters based on the circular 1/2015 of the Federal Audit Oversight Authority

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

#### **Valuation of investments**

#### **Key audit matter**

The valuation of investments is considered a key audit matter due the size of the balance (CHF 1'755 million) as well as the degree of estimating uncertainty around the future profitability of the individual investments held as well as the Group as a whole.

#### How our audit addressed the key audit matter

- We have tested material movements in the investment balance by agreeing the underlying transactions to relevant supporting documentation such as contracts and bank advices.
- We have further performed our own valuation assessment. This assessment included the evaluation of the investments' intrinsic value as well as, in some cases, their capitalized earnings value.
- The evaluation of the capitalized earnings value included an evaluation of the appropriateness of the discount rates applied.
- We also considered the results of the Goodwill impairment testing performed at level of the Oerlikon group.
- Overall, and based on our procedures performed, we have not identified a requirement for a valuation adjustment.

#### **Other matter**

The financial statements of OC Oerlikon Corporation AG, Pfäffikon for the year ended 31 December 2015 were audited by another firm of auditors whose report, dated 26 February 2016, expressed an unmodified opinion on those statements.

# Responsibilities of the Board of Directors for the financial statements

The Board of Directors is responsible for the preparation of the financial statements in accordance with the provisions of Swiss law and the company's articles of incorporation, and for such internal control as the Board of Directors determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors is responsible for assessing the entity's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the entity or to cease operations, or has no realistic alternative but to do so.

# Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Swiss law and Swiss Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located at the website of EX-PERTsuisse: http://expertsuisse.ch/en/audit-report-for-public-companies. This description forms part of our auditor's report.

# Report on other legal and regulatory requirements

In accordance with article 728a paragraph 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists which has been designed for the preparation of financial statements according to the instructions of the Board of Directors.

We further confirm that the proposed appropriation of available earnings complies with Swiss law and the company's articles of incorporation. We recommend that the financial statements submitted to you be approved.

PricewaterhouseCoopers AG

Stefan Räbsamen

Audit expert Auditor in charge

Zurich, 24 February 2017

Blaženka Kovács-Vujević Audit expert

# Legal structure

Legal structure of consolidated companies as per December 31, 2016

OC Oerlikon Corporation AG, Pfäffikon, Freienbach SZ/CH
-InnoDisc AG, Windisch/CH
OC Oerlikon Management AG, Pfäffikon, Freienbach SZ/CH
-Oerlikon Balzers Coating India Pvt. Ltd., Pune/IN
· Oerlikon Friction Systems (India) Ltd., Chennai/IN
-Oerlikon Balzers Coating (Thailand) Co. Ltd., Chonburi/TH
-Oerlikon Balzers Coating Korea Co. Ltd., Pyongtaek/KR
-Oerlikon Balzers Coating Luxembourg S.à r.l., Differdange-Niedercorn/LU
-Oerlikon Balzers Kaplama Sanayi ve Ticaret Limited Sirketi, Bursa/TR
-Oerlikon Balzers Sandvik Coating AB, Stockholm/SE
Oerlikon Balzers Sandvik Coating Oy, Helsinki/FI
-Oerlikon Balzers France SAS, Ferrières-en-Brie/FR
-Oerlikon IT Solutions AG, Pfäffikon, Freienbach SZ/CH
-Oerlikon Drive Systems GmbH, Pfäffikon, Freienbach SZ/CH
· Transmission Trading Ltd., Hongkong/CN
· Oerlikon Drive Systems (Suzhou) Co. Ltd., Suzhou/CN
-Oerlikon Surface Solutions AG, Pfäffikon, Freienbach SZ/CH
· Oerlikon (Liechtenstein) Holding AG, Balzers/LI
· Oerlikon Balzers Coating AG, Balzers/LI
· OC Oerlikon Balzers AG, Balzers/LI
Oerlikon Nihon Balzers Coating Co. Ltd., Hiratsuka/JP
Oerlikon Balzers Coating (Suzhou) Co. Ltd., Suzhou/CN
Oerlikon Balzers Coating Austria GmbH, Kapfenberg/AT
Oerlikon Balzers Coating Singapore Pte. Ltd., Singapore/SG
· Oerlikon Balzers Coating Spain S.A.U, Antzuola/ES
Oerlikon Balzers Coating Poland Sp.z o.o., Polkowice Dolne/PL
· Oerlikon Balzers Coating Mexico S.A. de C.V., Querétaro/MX
· Oerlikon Balzers Coating Malaysia Sdn. Bhd., Kuala Lumpur/MY
· Oerlikon Balzers Coating Philippines, Inc., Muntinlupa/PH
· Oerlikon Balzers Coating UK Ltd., Milton Keynes/GB
· Oerlikon Metco Coatings Ltd., Dukinfield/GB
· Oerlikon Balzers Revestimentos Metálicos Ltda., Jundiaí, SP/BR
Oerlikon Friction Systems do Brasil Ltda., Diadema, SP/BR
· Oerlikon Metco Australia Pty Ltd., Bella Vista, NSW/AU
· Oerlikon Metco (Canada) Inc., Fort Saskatchewan, AB/CA
· Oerlikon Metco (Japan) Ltd., Tokyo/JP
· Oerlikon Eldim (NL) B.V., Lomm/NL
· Oerlikon Eldim (HU) Kft., Debrecen/HU
· Oerlikon Metco Rus LLC, Lyubertsy/RU
· Oerlikon Metco (Singapore) Pte. Ltd., Singapore/SG
Zigong Golden China Speciality Carbides Co. Ltd., Zigong/CN
· Oerlikon Metco AG, Wohlen, Wohlen/CH
· Oerlikon Balzers Coating SA, Brügg, Brügg/CH
· Oerlikon Metco (UK) Ltd., Cwmbran/GB
· Oerlikon Neomet Ltd., Stockport/GB
Oerlikon Balzers Coating Slovakia s.r.o., Bratislava/SK
- DMX SAS, Cluses/FR
-Oerlikon USA Holding Inc., Wilmington, DE/US
· Oerlikon Balzers Coating USA Inc., Wilmington, DE/US
· Oerlikon Metco (US) Inc., Westbury NY/US
· Oerlikon Friction Systems (US) Inc., Dayton OH/US

#### Legal structure of consolidated companies as per December 31, 2016

· Oerlikon Rus LLC, Moscow/RU

· Oerlikon Management USA Inc., Pittsburgh, PA/US
· Fairfield Manufacturing Company Inc., Wilmington, DE/US
· TH Licensing Inc., Wilmington, DE/US
· Fairfield Atlas Ltd., Kolhapur/IN
· Melco Industries Inc., Denver, CO/US
· Oerlikon Textile Inc., Charlotte, NC/US
-Oerlikon Vermögens-Verwaltungs GmbH, Remscheid/DE
-OOO Oerlikon Balzers Rus, Elektrostal/RU
-OT Textile Verwaltungs GmbH, Arbon/CH
-OC Oerlikon Textile Holding AG, Pfäffikon, Freienbach SZ/CH
OC Oerlikon Textile Schweiz AG, Pfäffikon, Freienbach SZ/CH
Oerlikon Textile China Investments Ltd., Hongkong/CN
· Oerlikon (China) Technology Co. Ltd., Suzhou/CN
Oerlikon Metco Surface Technology (Shanghai) Co. Ltd., Shanghai/CN
· Oerlikon Textile Machinery (Wuxi) Co. Ltd., Wuxi/CN
· Oerlikon China Equity Ltd., Hongkong/CN
W. Reiners Verwaltungs-GmbH, Remscheid/DE
· Oerlikon Textile GmbH & Co. KG, Remscheid/DE
· Oerlikon Deutschland Holding GmbH, Remscheid/DE
· Oerlikon Balzers Coating Benelux N.V., StTruiden/BE
· Oerlikon Surface Solutions Holding GmbH, Kelsterbach/DE
· Oerlikon Balzers Coating Germany GmbH, Bingen/DE
· Oerlikon Metco Europe GmbH, Kelsterbach/DE
Oerlikon Metaplas GmbH, Bergisch Gladbach/DE
· Oerlikon Metco Coatings GmbH, Salzgitter/DE
· Oerlikon Friction Systems (Germany) GmbH, Bremen/DE
· Oerlikon Metco WOKA GmbH, Barchfeld/DE
· citim GmbH, Barleben/DE
· citim AM Inc., Atlanta, GA/USA
· Oerlikon Business Services GmbH, Remscheid/DE
Oerlikon Textile Far East Ltd., Hongkong/CN
· Oerlikon Textile Technology (Beijing) Co. Ltd., Beijing/CN
· Oerlikon Textile India Pvt. Ltd., Mumbai/IN
Dr. Schippers Unterstützungskasse GmbH, Remscheid/DE
· Oerlikon RS GmbH, Remscheid/DE
Oerlikon Textile do Brasil Máquinas Ltda., Porto Alegre, RS/BR
Oerlikon Textile Systems Far East Ltd., Hongkong/CN
Oerlikon Barmag Huitong (Yangzhou) Engineering Co., Ltd, Yangzhou/CN
SAC Oerlikon Automotive Components B.V., Rotterdam/NL
Oerlikon Graziano S.p.A., Cascine Vica Rivoli/IT
Graziano Trasmissioni India Pvt. Ltd., New Delhi/IN
· Graziano Trasmissioni UK Ltd., St. Neots/GB
Vocis Limited, Warwick/GB
Oerlikon Balzers Coating Italy S.p.A., Brugherio/IT
Oerlikon Friction Systems (Italia) S.r.l., Caivano/IT
- Unaxis GmbH, Freienbach SZ/CH
- Oralize Bright C. Macon 92/01

# Glossary

# Corporate

A O N A	Accord Occord Modifier
AGM	Annual General Meeting
CAGR	Compound Annual Growth Rate
CAPEX	Capital expenditure
EBIT(DA)	Earnings before interest and tax (depreciation and amortization)
EMEAR	Europe, Middle East, Africa, Russia
EPS	Earnings per share
HSE	Health, Safety and Environment
KPI	Key performance indicator
LTAFR	Lost time accidents frequency rate
OOE	Oerlikon Operational Excellence
ROCE	Return on capital employed
SMI	Swiss Market Index: Switzerland's blue-chip stock market index. It is made up of 20 of the largest and most liquid Swiss Performance Index (SPI) large- and mid-cap stocks.
SMIM	Swiss Market Index Mid: consists of 30 biggest mid-cap Swiss companies which are not already covered in the SMI.
STOXX Europe 600	Stoxx Europe 600 Index: represents large, mid and small capitalization companies across 18 countries of the European region
STOXX Europe 600 Industrial Goods & Services	Derived from STOXX Europe 600. Constitutes the largest stocks of the industrial goods and services industry in Europe

### **Surface Solutions Segment**

anufacturing: the process of joining materials to make objects, usually layer by layer. A common subtype of rinting.  Itant, extremely smooth coatings, based on Oerlikon Balzers' S3p technology, with revolutionary for a unique spectrum of applications.  Inatrix composites: a subgroup of composite materials and a subgroup of technical ceramics, of ceramic fibres embedded in a ceramic matrix  made from two or more constituent materials with significantly different physical or chemical that, when combined, produce a material with characteristics different from the individual its  description of PVD for Design Parts: an environmentally friendly coating technology for metallization of plastic.  Intal Barrier Coatings: to provide turbine engines effective protection against vapor and environmental
for a unique spectrum of applications.  natrix composites: a subgroup of composite materials and a subgroup of technical ceramics, of ceramic fibres embedded in a ceramic matrix  made from two or more constituent materials with significantly different physical or chemical that, when combined, produce a material with characteristics different from the individual its  d PVD for Design Parts: an environmentally friendly coating technology for metallization of plastic.
of ceramic fibres embedded in a ceramic matrix made from two or more constituent materials with significantly different physical or chemical that, when combined, produce a material with characteristics different from the individual its  4 PVD for Design Parts: an environmentally friendly coating technology for metallization of plastic.
that, when combined, produce a material with characteristics different from the individual its  B PVD for Design Parts: an environmentally friendly coating technology for metallization of plastic.
, , , , , , , , , , , , , , , , , , , ,
ntal Barrier Coatings: to provide turbine engines effective protection against vapor and environmental
asma Diffusion: a cost-effective and environmentally friendly technology to harden and provide g protection of large manufacturing production tools and dies. Using hydrogen and nitrogen in an discharge, this technology uses no hazardous chemicals, and is an alternative to hard chrome-plating.
apor deposition: a variety of methods used to deposit thin films onto various workpiece surfaces ondensation of the desired thin film material vapourized in vacuum.
rulsed Power Plasma: a coating technology that combines the advantages of arc and sputtering es, with high ionisation and virtually no droplets. This results in extremely smooth and dense coatings variety of applications.
ng system for tools with extremely high throughputs.
process utilizing an infinitely controllable laser beam as its heat source.
naterials (superalloy powders) of the AM business unit of the Surface Solutions Segment
usma Diffusion: a cost-effective and environmentally friendly technology to harden and provide g protection of large manufacturing production tools and dies. Using hydrogen and nitrogen in an discharge, this technology uses no hazardous chemicals, and is an alternative to hard chrome-plating.
apor deposition: a variety of methods used to deposit thin films onto various workpiece surfaces undensation of the desired thin film material vapourized in vacuum.
rulsed Power Plasma: a coating technology that combines the advantages of arc and sputtering es, with high ionisation and virtually no droplets. This results in extremely smooth and dense coatings variety of applications.
aser melting: an additive manufacturing process that uses 3D CAD data as a digital information d energy in the form of a high-power laser beam, to create three-dimensional metal parts by fusing powders together
roduce superalloys, or high-performance alloys, which exhibit excellent mechanical strength and

# **Manmade Fibers Segment**

BCF	Bulked Continuous Filament: yarn for carpet production, usually polypropylene or polyester
Manmade Fibers	Chemical or synthetic fibers
POC	Plant operation center, a complete software solution that manages the entire spinning and texturing production process.
POY	Pre-oriented yarn: spun yarn that is not completely drawn
WINGS	Winding INtegrated Godet Solution: a family of winder technology by Manmade Fibers Segment
POY	Pre-oriented yarn: spun yarn that is not completely drawn
RoTac <sup>3</sup>	Rotating tangle unit: an energy-saving yarn component used in the tangling or intermingling step in the production of BCF yarn
WINGS	Winding INtegrated Godet Solution: a family of winder technology by Manmade Fibers Segment
WINGS FDY PLUS	Latest winder technology for fully drawn yarn
WINGS POY XS	Latest winder technology for partially oriented yarn

# **Drive Systems Segment**

4SED	4-Speed Electric Drive: four-speed seamless shift electric transmission
PTU	Power transfer unit applied in automotives
Torque Hub	Drive for industrial machinery and off-highway mobile equipment

This annual report is also available in German.

The English language version of Oerlikon's Annual Report is the binding version.

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