Oerlikon Eldim
Empowers Your Ambition

Issue 2
Successful long-term OEM relationships

Empowering your ambition
Forward-thinking OEMs develop strong partnerships with trusted suppliers to achieve the competitive advantage critical to their success. Oerlikon Eldim, an Oerlikon Metco Company, is such a supplier. As a preferred partner for all major OEMs involved in the design, development and manufacture of aerospace and industrial gas turbine components, we take pride in establishing reliable and long-term relationships. With a mindset of delivering continuous improvement, we create and add value for our customers. As a leading high-tech manufacturer of gas turbine components, Oerlikon Eldim offers a secured on time delivery, flexibility in supply of goods, customer integrated project teams and an infrastructure to perform according customers’ expectations.

Ever since Oerlikon Eldim was established in 1970, our behavior has been customer-focused. We take a proactive approach with our involvement at the earliest phase of development to improve the manufacturability of critical engine components and assure part-to-part repeatability.
Unique scope of in-house manufacturing capabilities

Successful technology and road-mapping
Over the course of 40 years, Oerlikon Eldim has selectively added in-house production processes to produce a focused range of critical engine components. This comprehensive portfolio of manufacturing capabilities allows Oerlikon Eldim to develop and manufacture as a “one stop shop”. This strategy limits the risks towards our customers with regard to:

- On time delivery
- Managing design modifications
- New part introduction

The various components are processed in a cellular manufacturing environment in which our philosophy of autonomous units is implemented. This empowers Oerlikon Eldim to fulfill our customers ambitions.
Our core business is to serve our customers with the supply of build-to-print honeycomb outer air seals, interstage seals or seals with a similar function applicable for the HPT, LPT or HPC in the aero engine. In cooperation with our customers, we develop and execute the development plan, the ramp-up plan and part-to-part repeatability manufacturing. These integrated customer project teams have proven to be a success whether it is about new part introduction, transferring parts from our Netherlands facility to our Hungary facility, or value-improving projects.

The complexity of seals design, including the use of high temperature resistant superalloys, has evolved over the last decades. These changed requirements have been adapted in our manufacturing capabilities; in the Netherlands as well as in Hungary.

As a result of the successful performance in the supply of seals, Oerlikon Eldim has been requested by our customers to support them in the supply of other engine-related critical components such as, baffles, inserts and compressor vane assemblies. Oerlikon Eldim takes pride in our ability to develop a reliable supply chain and manufacturing capabilities and as such deliver engine-ready parts as a “one stop shop” supplier.
Oerlikon Eldim as a service provider
At Oerlikon Eldim, we understand that every OEM is challenged to improve gas turbine efficiencies. By gaining an intimate understanding of each customer’s requirements and assessing their design goals, we are capable of providing our customers with a best in class service. Working closely together with our customers, in combination with our in-depth technical knowledge, enables us to develop exclusive technologies such as electrochemical drilling of cooling holes of various diameters and lengths in complex airfoil structures. As a result, the cooling efficiency and airflow for critical engine parts are improved. Due to customer-integrated MRP systems, Oerlikon Eldim services short cycle times for production batches, whether for short runs or high volumes.

Airfoil processing
Oerlikon Eldim excels at applying features on gas turbine airfoils that include film-cooling holes, internal cooling holes, seal slots, tip cavities, root notches, tip closures and coatings. Oerlikon Eldim can also deliver engine ready parts as a “one stop shop” supplier with responsibilities for casting, conventional machining, non-conventional machining and coating.

Baffles and vane inserts
Oerlikon Eldim is active in the design, development and production of baffles, vane inserts, core plugs and related sheet metal products for hot section turbine applications.
Customer value creation
Operational excellence is one of Oerlikon’s core values and is driven via the Oerlikon LEAN initiative. An action orientated management philosophy, adopted throughout our organization by all Oerlikon employees, with the objective of creating value for our customers and stakeholders through the maximum elimination of waste and our desire to effect continuous improvement. With Oerlikon LEAN we align our key company processes towards responding faster and better to the needs of our customers. These efforts are supported by sharing LEAN knowledge and best practices throughout Oerlikon.

Product Development Engineering
Our broad expertise in production engineering covers a wide variety of products and processes. Often our engineers collaborate with OEM design engineers at the earliest phases of product development. Our project managers support this concurrent engineering concept with communication and coordination. We have the ability to rapidly design and manufacture the necessary tools and fixtures to meet tight development cycles and our extensive production engineering knowledge supports subsequent high volume production requirements. This expertise results in decreased time-to-market for our customers’ products.
Cellular manufacturing maximizes efficiency

Cellular manufacturing
Oerlikon Eldim production is organized according the cellular manufacturing concept. We process families of components in dedicated cells using semi-autonomous teams. These teams focus on operating as efficiently and effectively as possible to provide a flawless supply of components. Each team is supported by in-cell manufacturing engineers driving continuous process improvement. In-cell key performance indicators provide each team with continuous feedback on their performance. This approach allows us to maximize the use of our internal resources.

Zero defects
Key to the performance of Oerlikon Eldim’s cellular manufacturing concept is our Zero Defects policy. This policy maximizes our yield and enables us to maintain our excellent delivery performance. Within this policy, we set objectives to decrease scrap, increase “First Time Right” production and perform root cause analysis that structurally improves our internal processes. Furthermore, we continue to deepen the working knowledge of our operators by providing them with recurring process training using experienced, in-house trainers.
Oerlikon Metco enhances surfaces that bring benefits to customers through a uniquely broad range of surface technologies, equipment, materials, services, specialized machining services and components. The surface technologies such as Thermal Spray, Thin Film, Plasma Heat Treatment and Laser Cladding improve the performance and increase efficiency and reliability. Oerlikon Metco serves industries such as aviation, power generation, automotive, oil & gas, industrial and other specialized markets and operates a dynamically growing network of more than 50 sites in EMEA, Americas and Asia Pacific. Oerlikon Metco, together with Oerlikon Balzers, belongs to the Surface Solutions Segment of the Switzerland-based Oerlikon Group.

Information is subject to change without prior notice.