

# S3p – Innovation That Opens Horizons in ThinFilm Coating Technology for Tools and Components

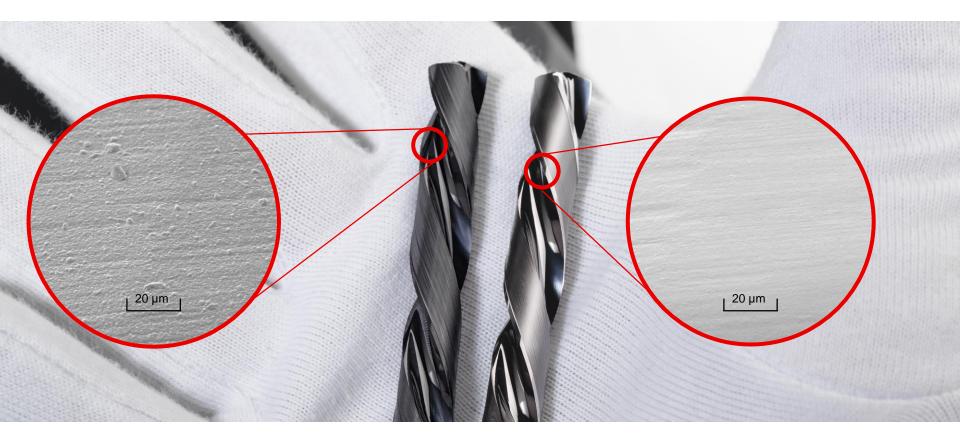
Lucerne, April 10, 2018

Marc Desrayaud - Head of Balzers Industrial Solutions Business Unit



#### The Bold and The Beautiful

#### œrlikon



## Transcend Technological Limitations with S3p and its BALIQ Coatings: No Limitations, Just Unique Properties

#### **œrlikon**

#### ARC EVAPORATION



- ✓ High density, high hardness
- ✓ Excellent adhesion.
- Less smooth, droplets

#### **SPUTTERING**



- Low density, low hardness
- Moderate adhesion
- Smooth surface



SCALABLE
PULSED POWER PLASMA
TECHNOLOGY



**COATINGS** 

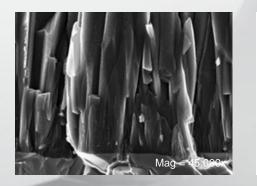
### Ultra-smooth Surfaces and Exceptional Performance: Being Bold AND Beautiful





## **Endless Flexibility in Coating Design to Match the Functional Expectations of Our Customers**





**ENDLESS POSSIBILITIES** in shaping the coating structure



LARGE VARIETY of coating materials

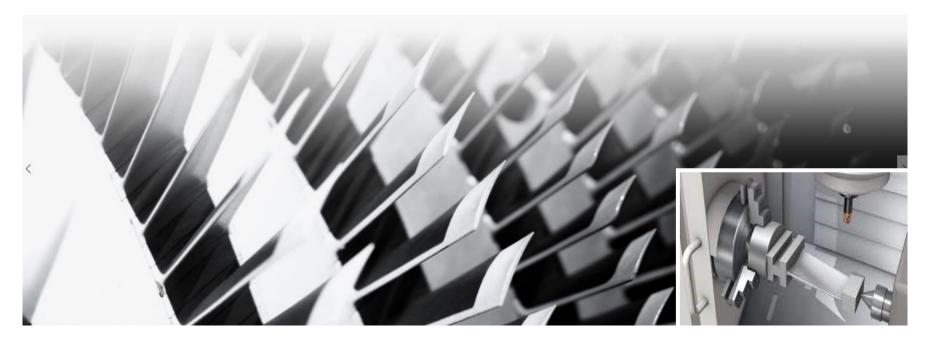
## **Targeting New Markets and Applications: Revolutionary Small Holes**





### **Revolutionary Performance Increase** in Key Applications





Milling of steam turbine blades. Tool life increase: +90%

#### **Protecting High-demand Precision Components: Revolutionary Increase in Wear Protection**





From high-end motorsports to off-highway vehicles: protection against abrasive wear

+300 %

### **Protecting High-demand Precision Components: Revolutionary Increase in Wear Protection**





Protection against abrasive wear during weaving

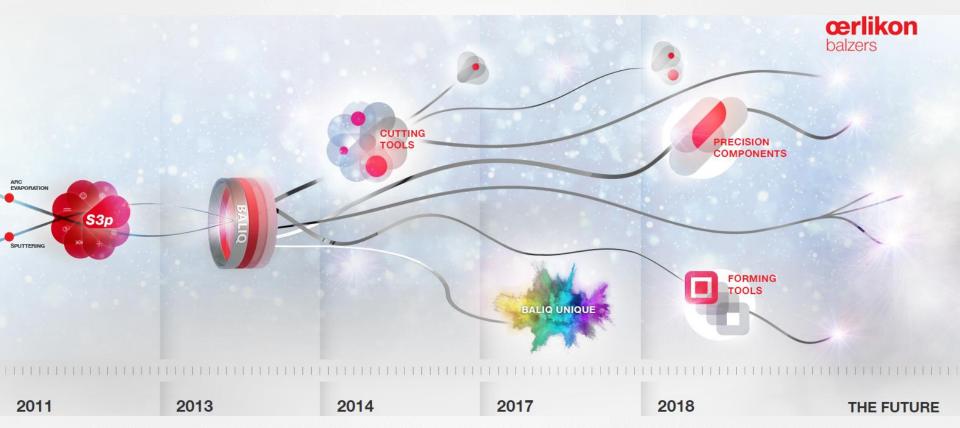
+300%

#### Differentiation, Classification and Visualisation with Coloured High Performance Coatings

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# Sustainable Enhancement of S3p and more Application-specific BALIQ Coatings



#### S3p's Market Potential





Breakthrough technology as combination of 2 state-of-the-art thin-film coating technologies

Offering new application opportunities to tools and precision components

Potential CHF 500 m new market on top of existing traditional coatings

**CHF 500** m



Thank you.

