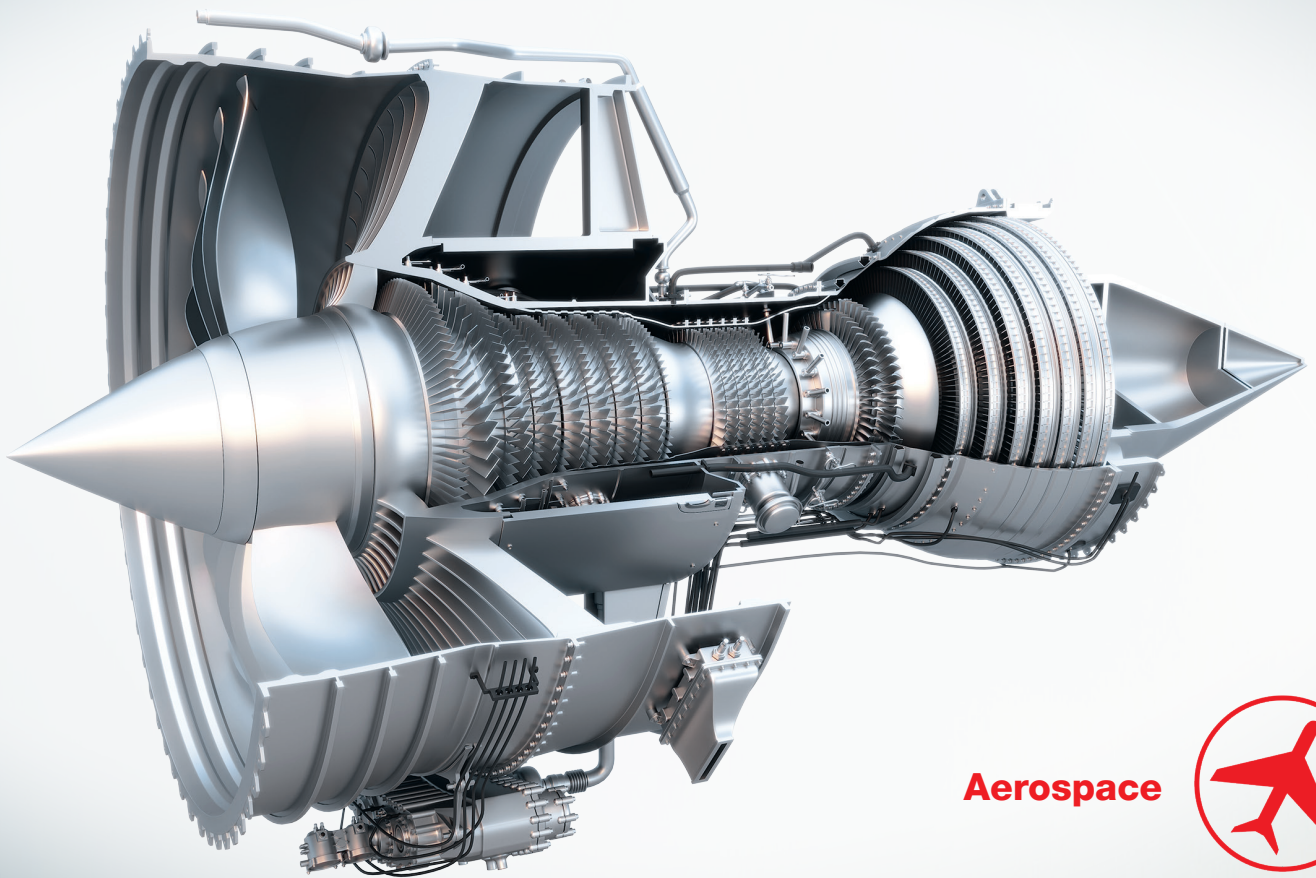


BALORA TECH PRO

Advanced coating for high-temperature oxidation and wear resistance



Aerospace



Power Generation



BALORA™ TECH PRO - For enhanced efficiency, reliability, and extended service life of critical components.

OEMs in the aerospace and power generation industries require solutions to protect complex materials from environmental factors and high temperatures.

BALORA™ TECH PRO is an aluminum chromium oxide coating with a corundum crystal structure, ensuring excellent adhesion to metallic and oxide materials. It is applicable to a variety of substrates, including aluminum, titanium, aluminides, steel, nickel alloys, and super alloys.

Stable at temperatures up to 1400°C, depending on the substrate, BALORA™ TECH PRO enhances component efficiency and reliability. It provides superior barriers against diffusion, hot corrosion, oxidation, and mechanical wear, maintaining uniformity even on complex part geometries.

BALORA™ TECH PRO also complies with REACH regulations.

Coating properties BALORA™ TECH PRO

Coating material	AlCrO-based
Coating technology	Arc
Coating color	dark grey
Coating hardness H_{IT} [GPa]	11 +/- 1.5
Max. service temperature [°C]	1400°C (*)
Process temperature [°C]	600°C
Typical coating thickness (µm)	10-17

*depending on substrate material

Key properties

- Superior protection of sensitive materials from environmental influences and high temperatures
- Extended component service life stability up to 1,400°C
- Excellent adhesion to a variety of materials
- Thin and uniform coating on complex geometries

A variety of applications

- Low- and high-pressure turbine blades (LPT / HPT)
- Low- and high-pressure compressor blades (LPC/HPC)
- Turbine discs
- Turbine blade roots
- Static seal rings
- Variable stator vane bushings
- Nozzle guide vanes



Contact us!

And discover how our solutions can be tailored to your unique needs.

Balzers Headquarters

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For our global locations,
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www.oerlikon.com/balzers

ISO 9001

for all our worldwide
coating centers

AS9100

Bingen (Germany)
Brugherio (Italy)
Elgin, IL (USA)
Ferrières-en-Brie (France)
Milton Keynes (UK)



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