



Wieland AFC®

AFC – Anti friction coating

Wieland AFC is a solid-based bonded coating. This coating enables reliable and maintenance-free permanent lubrication of highly loaded machine elements. It has very good emergency running properties and also improves poor lubrication conditions.

Properties

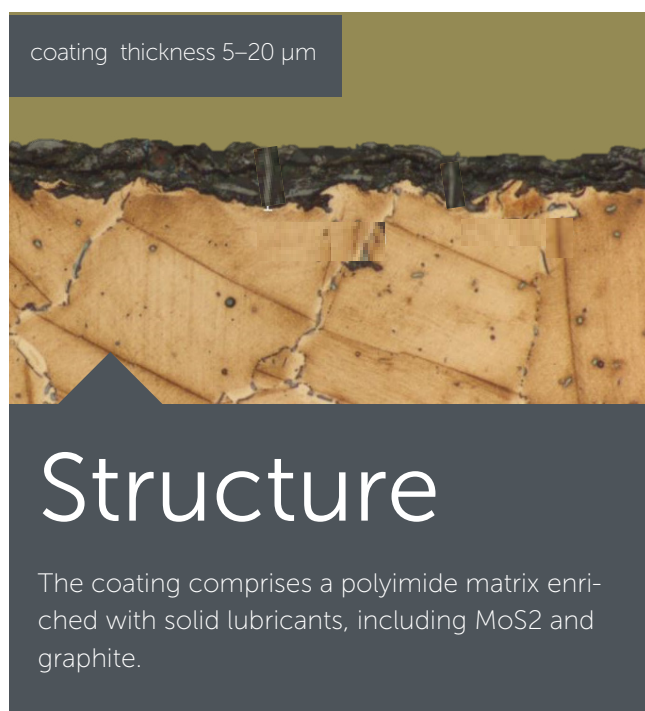
The AFC anti-friction coating, formulated with polyamideimide and enhanced with MoS₂ (molybdenum disulfide) and graphite lubricants, offers dual benefits. It facilitates an effective running-in process while enabling a maintenance-free design when combined with the initial greasing of the bearing system.

Application

Material	Metals / composites
Layer thickness	5–20 µm
Pretreatment	application-specific
Temperature range permanently	–40 °C to 250°C
Temperature range short-term	400 °C
Process temperature	215°C

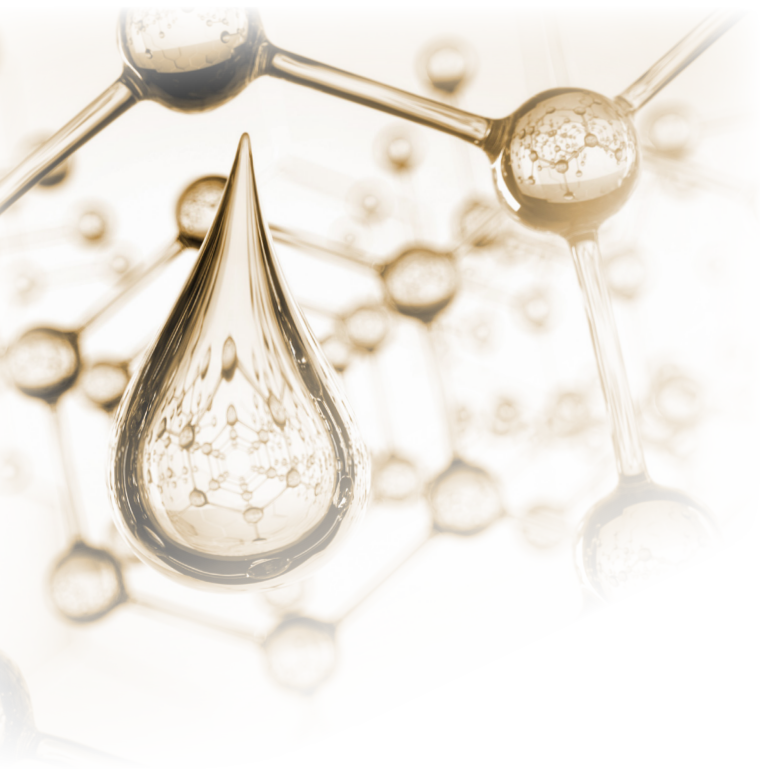
Comparison with high-strength wear coatings

- High pressure resistance
- Excellent temperature resistance
- Low friction coefficient due to metallic separation of the sliding partners
- Very good adhesion to metallic surfaces
- Good corrosion protection
- Resistant to oil, grease and solvents

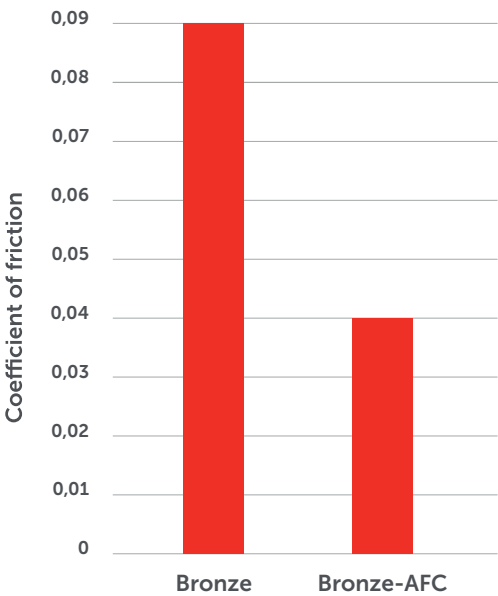


Technical properties

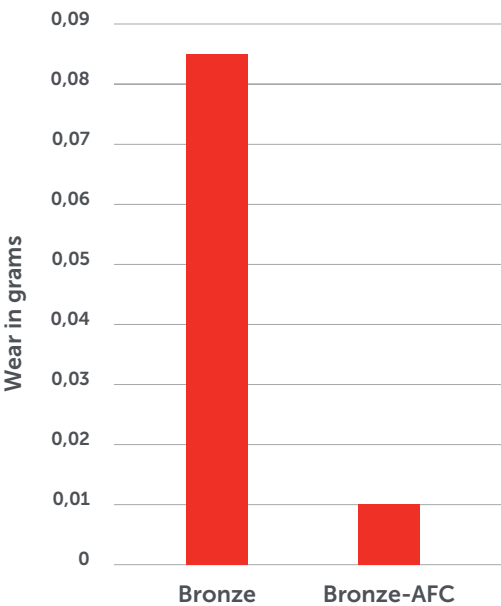
- **High Strength Across Wide Temperature Range:**
Exhibits exceptional strength from -40°C to +250°C, with short-term resistance up to +400°C.
- **High Permissible Surface Pressure:**
Capable of withstanding surface pressures up to approximately 400 MPa.
- **Nearly Wear-Free:**
Ensures minimal wear, enhancing longevity and performance.
- **PFAS-Free:**
Compliant with future EU regulations, ensuring long-term viability and environmental safety.



Friction values endurance test



Wear endurance test



Endurance test 6 hours at a surface pressure of 9 MPa / 1m/s
Rotary tribometer (specimen: ring/disk)

Do you want to learn more about Wieland AFC?:
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