

SISTRAL®

AlTiXN (nanostructured) –
The standard for hard metal cutting

The nanostructured high-performance coating SISTRAL® of voestalpine eifeler is the new standard for hard, dry and high-speed machining. SISTRAL® is characterized by an extremely high oxidation resistance and hot hardness. This is all thanks to its special layer structure and composition, which was developed on the new voestalpine eifeler alpha400P coating system. These special characteristics allow a significant increase in performance with applications where standard AlTiN coatings were previously favoured.

APPLICATIONS

Cutting	Developed for metal cutting tasks (milling, drilling, turning, sawing, etc.) under usage conditions where other coatings reach their thermal and mechanical limits. High-performance cutting of very abrasive or hard materials (steel > 54 HRC) in dry, high-speed applications.
Punching	This nanostructured coating is also well suited to punching, e.g. in stainless steel qualities.

COATING PROPERTIES

Hardness	2,500 ± 300 HV (possible increase of hardness up to >3,000 HV in application)
Max. application temperature	900 °C / 1,650 °F
Coefficient of friction against steel	<0.7
Coating thicknesses	1 – 4 µm
Colour	anthracite

PRODUCT FEATURES

- » Very high oxidation resistance
- » High hot hardness
- » Chemical resistance
- » Low tendency to cracking
- » Low thermal conductivity coefficient
- » Extremely high wear resistance
- » Higher cuttingspeeds
- » Longer service life
- » Improved surface quality
- » Dry machining

