

ZrN – ZIRCONIUM NITRIDE

ZrN offers excellent resistance towards corrosion and abrasive wear.

The improved ZrN coating is especially suitable for working aluminium alloys and is also a good choice for working non-ferrous metals.

The ZrN coating is also recommended for machining fibreglass, nylon and the majority of polymer materials.

PRODUCT FEATURES

- » Resistance towards wear
- » Very hard
- » Excellent resistance towards corrosion
- » Low friction coefficient
- » Good coating adhesion
- » Attractive colour
- » Biocompatible

APPLICATIONS

Cutting	General high-performance cutting Hobbing Dry broaching
Punching and forming	Precision cutting Hot pressing Al die casting For applications where the TiN coating could lead to cold welds
Decorative applications	The ZrN coating stands out due to its attractive colour and effectively protects against abrasive and adhesive wear.
Medical applications	The ZrN coating meets all biocompatibility requirements. Thanks to its resistance towards corrosion and chemical stability, ZrN can be used for medical components coming into direct contact with bones, skin, tissue or blood.

COATING PROPERTIES

Hardness	2,800 ± 300 HV
Max. application temperature	600 °C / 1,110 °F
Coefficient of friction against steel	0.5
Coating thicknesses	1 - 4 µm
Colour	light yellow

