

# CRN MULTILAYER

The coating for protection against corrosion and oxidation

CrN coatings are the best choice for applications where resistance to abrasion, corrosion and oxidation is required. The high hardness and very low brittleness allow thicker CrN coatings with very good adhesion to the substrate.

## PRODUCT FEATURES

- » High hardness and adhesive strength
- » Very good chemical resistance
- » Low friction coefficient against steel
- » High temperature resistance in air
- » Low residual stress
- » Thicker layers possible
- » Significantly improved corrosion resistance due to multilayer structure (e.g. plastic injection: treatment of PVC or flame protection)

## APPLICATIONS

<b>Plastic injection</b>	Tools which are subject to corrosive and abrasive wear, e.g. through aggressive and hard filling materials. Significantly reduced formation of deposits.
<b>Forming</b>	Drawing, stamping, pressing and forming tools for the working of non-ferrous metals, especially Ti and Cu alloys.
<b>Magnesium die casting</b>	Mould inserts and cores which are subjected to corrosive stress. Significantly improved demoulding (in connection with polishing).



## COATING PROPERTIES

<b>Hardness</b>	2,000 ± 200 HV
<b>Max. application temperature</b>	600 °C / 1,110 °F
<b>Coefficient of friction against steel</b>	0.3 - 0.4
<b>Coating thicknesses</b>	2 - 6 µm
<b>Colour</b>	silver grey