

TiN

Titanium nitride – The all-round and high-performance coating

TiN displays very low reactivity to ferrous metals. This greatly reduces tool wear due to cold welding. Its attractive golden colour combined with the high resistance towards abrasion means TiN is often used as a coating in decorative applications.

Its high chemical inertness means TiN is especially suitable for use in the foodstuffs and medical technology industries.

APPLICATIONS

Cutting	Machining and cutting of Fe-metals and steel materials. Hobbing, drilling, thread cutting with low and medium cutting data.
Forming	Drawing, stamping, pressing and forming tools for the working of steel plates; cold forging
Plastic moulding	For tools subject to high abrasive wear, e.g. mineral-filled organic moulding compounds; improved demoulding of injection-moulded parts
Other	Foodstuffs industry, medical technology, decorative applications

COATING PROPERTIES

Hardness	2,300 ± 200 HV
Max. application temperature	500 °C / 930 °F
Coefficient of friction against steel	0.6
Coating thicknesses	1 - 4 µm
Colour	gold

