

CVD TiN/TiC

Titanium nitride / titanium carbide

The titanium nitride / titanium carbide combination is a well-proven standard coating that has stood the test of time. The combination of extreme hardness, sufficient toughness and higher coating thicknesses provides significant durability improvements in the area of metal forming of thick sheet metals.

CVD coating technology guarantees the highest adhesive strength and wear reserve for tools which are not too critical concerning dimensional tolerances.

PRODUCT FEATURES

- » Very high hardness
- » Very good adhesive strength
- » Higher coating thicknesses compared to PVD coatings
- » Higher hardness compared to TiC/TiN

APPLICATIONS

Punching and forming	Drawing, stamping, pressing and forming tools for the working of Fe-metals and steel plates. Especially suited to the processing of thicker plates and at higher contact pressures.
Deposition technology	Coatings are applied using CVD methods at approximately 1,000 °C. This guarantees outstanding adhesive strength. The higher coating thicknesses of up to 10 micrometres made possible using CVD methods provide a welcome wear reserve in many applications.

COATING PROPERTIES

Hardness	3,000 ± 300 HV
Max. application temperature	450 °C / 800 °F
Coefficient of friction against steel	0.2
Coating thicknesses	up to 10 µm
Colour	grey/metallic

