

# CVD TiC/TiN

Titanium carbide / titanium nitride – a combination of high toughness and high adhesive strength

TiC/TiN combines high hardness with greater toughness: an advantage for many applications subject to impact loads. CVD coating technology guarantees the highest adhesive strength and wear reserve for tools which are not too critical concerning dimensional tolerances. After the coating, a high-gloss polish of the functional areas guarantees friction-reducing surfaces.

## PRODUCT FEATURES

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

## APPLICATIONS

<b>Cutting</b>	For indexable inserts used for cutting or roughing of moderately hard steels. Here, voestalpine eifeler uses a specially adapted process which, in addition to the high coating thicknesses of approximately 8 µm, also produces a very smooth surface.
<b>Punching and forming</b>	Drawing, stamping, pressing and forming tools for the working of e.g. aluminium-plated or galvanised sheets in the automobile industry.
<b>Deposition technology</b>	Coatings are applied using CVD methods at approximately 1,000 °C. This guarantees the highest 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

<b>Hardness</b>	2,700 ± 300 HV
<b>Max. application temperature</b>	500 °C / 900 °F
<b>Coefficient of friction against steel</b>	0.6
<b>Coating thicknesses</b>	6 - 10 µm
<b>Colour</b>	gold

