

# TOPMATIC

## Titanium aluminium nitride

This TiAlN-based coating is relatively tough and can therefore also be deposited in comparatively high coating thicknesses.

The coating has excellent adhesive strength.

### PVD OR CVD?

In terms of adhesive strength and wear reserve, the CVD coatings are practically unbeatable.

However, the high coating temperatures result in altered tool dimensions, which severely limit CVD coating applications. Here, TOPMATIC can significantly reduce the gap between PVD and CVD in certain cases.

### PRODUCT FEATURES

- » Adhesion and layer thickness are almost on the level of CVD layers. And this is achieved with coating temperatures of < 500 °C, ensuring that tool dimensions are not changed when using suitably heat-treated steels.
- » Wherever there is uniform abrasive wear, TOPMATIC can add the decisive plus to durability.
- » The tough coating structure, together with a hardness of at least 2.800 HV in the unusually thick coatings (by PVD standards), offer an enormous additional wear reserve.

### APPLICATIONS

<b>Forming and cutting</b>	The benefits of TOPMATIC can be seen in forming and cutting sheet steel, just as they can in cold forging. When working with high strength steels, we recommend coatings with greater hardness, e.g. TiCN, VARIANTIC or DUMATIC.
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### COATING PROPERTIES

<b>Hardness</b>	2,800 ± 300 HV
<b>Max. application temperature</b>	700 °C / 1,292 °F
<b>Coefficient of friction against steel</b>	0,6
<b>Coating thicknesses</b>	5 - 10 µm
<b>Colour</b>	aubergine

