

DUPLEX-VARIANTIC®-1000

The multifunctional multilayer coating for extreme wear

The Duplex-VARIANTIC®-1000 represents an expansion of our PVD coatings for the forming process. Its high layer adhesion and excellent protection against abrasive wear is the reason it has been developed especially for the cold forming of high-strength steels.

APPLICATIONS

Forming	Drawing, pressing and forming tools for the working of high-strength steels.
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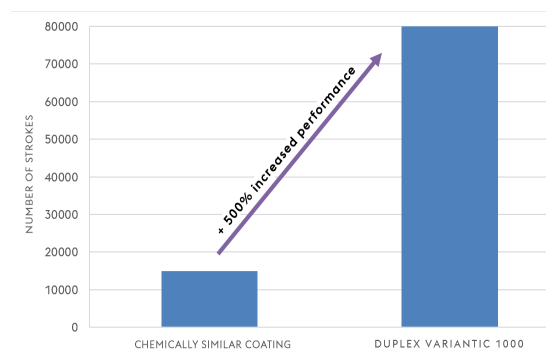
COATING PROPERTIES

Material	Titanium aluminium carbonitride, TiAlCN (multilayer)
Microhardness	4,000 ± 200 HV
Max. application temp.	800 °C / 1,470 °F
Coating thickness	approx. 9 µm
Roughness with comparable substrate quality	Ra 0.04 µm; Rz 0.6 µm
Colour	dark reddish gold

PRODUCT FEATURES

- » Can be deposited on tool steels, HSS, hard metals or materials at temperatures under 450 °C
- » Application by means of PVD technology
- » Use of the voestalpine eifeler Duplex technology

COMPARISON OF NUMBER OF STROKES



Tool: Through-punch
 Tool material: 1.2379 (58 HRc)
 Workpiece: DP800 with 3.2 mm plate thickness
 Lubricant: Oil-free, water-based lubricant

