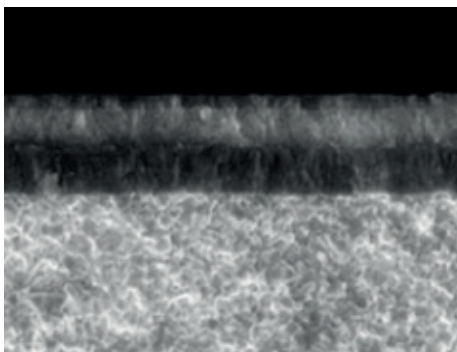




Ionbond™ CVD 02 TiC



Wear resistant and low friction CVD coating

The combination of high hardness, toughness, wear resistance and the low coefficient of friction of Ionbond™ CVD 02 make it an ideal coating for open tolerance tools used in metal forming applications. Ionbond™ CVD 02 provides excellent performance in forming ferritic and austenitic stainless steels, high strength low alloy (HSLA), advanced high strength steels (AHSS), and steel alloy work pieces with a thickness of more than 2 mm.

In addition, the inherent characteristics of Ionbond™ CVD 02 make it a better solution than traditional PVD coatings for open tolerance tools used in piercing applications.

Ionbond™ CVD 02 is deposited at 1000°C. Therefore, it is only recommended for tool materials compatible with the elevated temperatures. Due to the fact that tool steel will undergo dimensional changes, sufficient dimensional tolerances are required or dimensioning has to be adapted to compensate for the expected changes. Tempered tools need to be heat treated after coating in order to restore the desired hardness of the tool material.

Technical Data

Material	TiC
Technology	CVD
Thickness range	6 – 10 µm
Microhardness HV 0.05	3200
Friction vs. steel (dry)	0.20
Max service temperature	300°C
Process temperature	1000°C
Color	Grey