



Ionbond™ CVD 10 TiN - TiCN - TiN



Traditional CVD Coating for use in metal forming applications

Ionbond™ 10 is a CVD TiCN coating with a high hardness, good toughness and wear resistance, and a lower coefficient of friction than other CVD coatings like Ionbond™ 13. This combination of properties makes Ionbond™ 10 a preferred product over Ionbond™ 13 for open tolerance tooling used in light to medium metal forming applications involving stainless steels, steel alloys with thicknesses greater than 3 mm, and high strength low alloy (HSLA) materials.

Ionbond™ 10 can be deposited between 800 and 1000°C. Therefore it is only recommended for tool materials compatible with the CVD process. In addition, dimensional change will occur on tool steel materials coated with Ionbond™ 10. Therefore, sufficient dimensional tolerances are required to accommodate the expected dimensional change. The broader deposition range for Ionbond™ 10, as compared to that for Ionbond™ 13 and Ionbond™ 02, allow for it to be used on tool steels like S7 (1.2355) or A2 (1.2363), which are not compatible with the deposition process for Ionbond™ 13 or Ionbond™ 02.

Technical Data

Material	TiN - TiCN - TiN
Technology	CVD
Thickness range	4 - 6 μm
Microhardness HV 0.05	2800
Friction vs. steel (dry)	0.30
Max service temperature	800°C
Process temperature	800 - 1000°C
Color	Gold