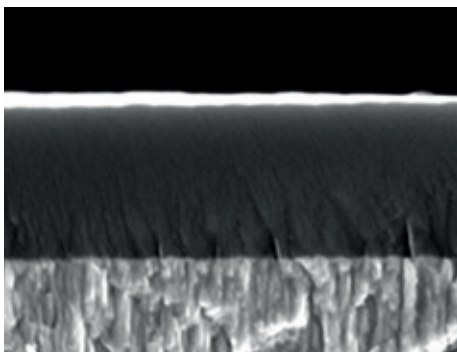




Ionbond™ 41 a-C:H:W + a-C:H



Versatile PVD DLC coating for use in metal forming and plastic injection molding applications

Ionbond™ 41 is a DLC coating with excellent abrasive wear and good galling resistance and a low friction properties, This combination makes it an ideal coating for forming of nonferrous metals and applications with galvanized, prepainted or aluminized sheet steels with low to medium impact levels. Ionbond™ 41 is particularly well suited for applications where static friction contributes to tool failure.

The low friction and wear characteristic combined with the superb surface quality promotes Ionbond™ 41 to be used in plastic injection molding. The increased hardness protects tools from damage during routine handling. Ejector pins, slide cores, bottle closures and video disc molds are typical examples of where Ionbond™ 41 is used.

Ionbond™ 41 is deposited between 160 and 200°C. The process allows coating of a wide variety of tool materials below their respective tempering temperature. This ensures that no softening or dimensional changes will occur.

Technical Data

Material	a-C:H:W + a-C:H
Technology	PVD Arc / UBM
Thickness range	3 – 5 µm
Microhardness HV 0.05	2000 – 2800
Friction vs. steel (dry)	0.10
Max service temperature	300°C
Process temperature	160 – 250°C
Color	Black