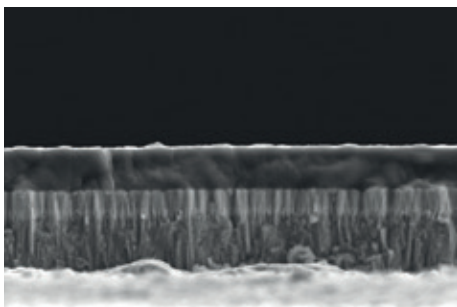




## Ionbond™ 42 Cr + CrN + a-C:H



### PVD DLC coating for premium performance in metal forming and plastic injection molding applications

Ionbond™ 42 is a DLC coating with superior fatigue resistance, excellent abrasive wear and galling resistance and a low coefficient of friction. This combination makes it the preferred coating over other DLC coatings for forming of nonferrous metals in demanding applications, such as trimming aluminum sheets. Ionbond™ 42 is particularly well suited for applications where limited lubrication is employed.

The low friction and wear characteristic combined with the superb fatigue properties promotes Ionbond™ 42 to be used over other DLC coatings 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™ 42 is used.

Ionbond™ 42 is deposited between 200°C and 250°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	Cr + CrN + a-C:H
Technology	UBM / PACVD
Thickness range	2 – 5 µm
Microhardness HV 0.05	2000 – 2800
Friction vs. steel (dry)	<0.10
Max service temperature	300°C
Process temperature	250°C
Color	Black