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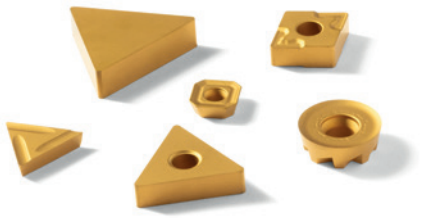
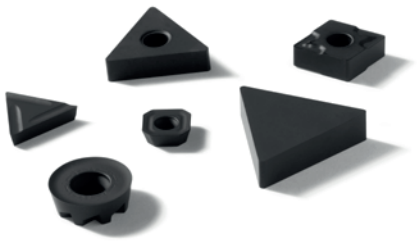
Ionbond™ CVD 29 Ultra





Enhanced durability for extended tool life during demanding continuous and interrupted machining

Ionbond™ CVD 29 Ultra is the latest addition to the Ionbond's CVD coatings for cutting tool applications. Engineered for enhanced toughness and exceptional hardness, it offers outstanding wear resistance that reduces crater as well as flank wear, providing longer tool life. The tailored crystallographic structure of α-Al_2O_3 layer exhibits higher tendency for plastic deformation before fracture and effectively suppresses chipping and cracking. The enhanced toughness improves performance during interrupted cutting. By virtue of its hot hardness and excellent thermal stability, the tool retains strength even at high temperatures, enabling faster machining and greater productivity.

Its high chemical inertness suppresses built-up edge formation during machining of sticky materials. Ideal for high-speed machining of steel and cast-iron viz. turning, milling, peeling and scarfing applications, Ionbond™ CVD 29 Ultra maximizes productivity and minimizes downtime, making it the smart choice for most demanding machining conditions. It is offered in both Gold and Black colors for a perfect combination of durability and visual appeal.

Technical Data

Material	TiN/MT-TiCN/αAl_2O_3/(TiN)
Technology	CVD
Thickness range	10 – 20 µm
Hardness H_{IT}	3000
Friction vs. steel (dry)	0.3
Max. service temperature	1200°C
Process temperature	1000°C
Color	Gold or black

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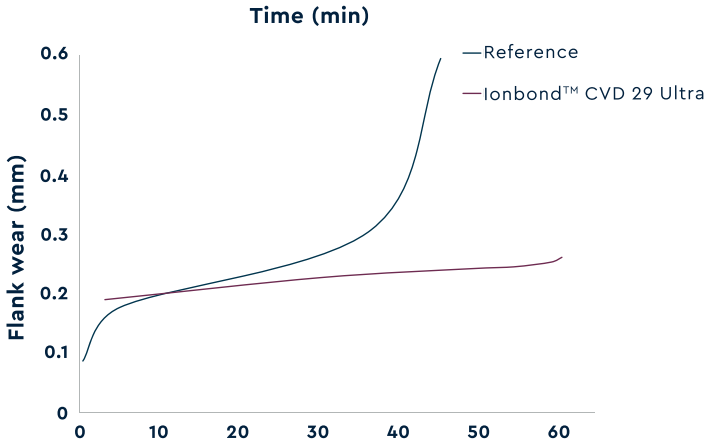
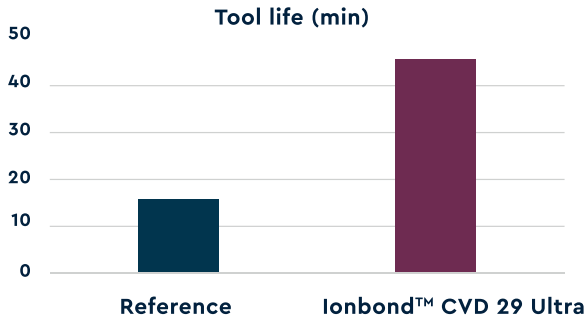
Ionbond™ CVD 29 Ultra performance



Turning CK45 (AISI 1045) Steel

Tool:	Turning insert
Workpiece material:	CK45
Cutting speed m/min:	250
Feed:	0.3 mm
Conditions:	wet
Source of data:	OEM customer

Ionbond™ CVD 29 Ultra ensures progressive wear and effectively prolongs the tool life.



Milling CK45 (AISI 1045) Steel

Tool:	Milling insert
Workpiece material:	CK45
Cutting speed m/min:	80
Feed:	0.1 mm
Conditions:	Wet
Source of data:	OEM customer

Ionbond™ CVD 29 Ultra considerably extends the tool life (tool life criteria: Flank wear ≤ 0.1 mm).