

Machining and Cutting

Coating Portfolio



Tools Inserts | Drills | End Drills | Hobs | Broaches | Reamers | Saw Blades

Historical Index	Coating	Composition	Coating Architecture			Applications						Properties				
			Single Layer	Multilayer	Gradient	General	High Alloyed Steel, Ti, Stainless Steel, Super Alloys	Hardened Steel, Cast Iron	Cu & Al, Al with Low Si	Light Metal Al, Mg, Ti	Non Metal Materials: Wood, Plastic, Graphite, etc.	Thickness, µm	Hardness HV ±200	Thermostability °C	Coefficient of Friction (dry over steel)	Colour
PERFORMANCE COATINGS																
-	TiN	TiN	+			+						2-5	2200	600	0.3	Gold
-	TiCN	TiCN		+		+						2-5	3000	400	0.2	Grey/Bronze
-	CRN	CRN Based	+						+			2-5	2000	800	0.3	Silver
-	ZRN	ZRN	+						+	+	+	2-5	3000	600	0.5	Yellow
-	TiAlN	TiAlN Based	+			+						2-5	3000	800	0.5	Grey
ADVANCED HIGH-PERFORMANCE COATINGS																
New	CRALON	AlCr(M)N Based	+			+		+				2-5	3300	1100	0.5	Grey
New	CRALON-S	TiAlVSiN Based		+		+	+	+				2-5	3500	1100	0.2	Bronze
New	Cuttex	TiAlVN Based	+		+	+	+					2-5	3300	900	0.2	Bronze
New	Cuttex M	TiAlSiN Based	+		+		+	+				2-5	3400	900	0.25	Dark Bronze
New	Cuttex S	TiAlCrSiN Based		+		+	+	+			+	2-5	3800	1100	0.2	Bronze
New	Cuttex SM	AlCrTiSiN Based		+		+	+	+			+	2-5	3800	1100	0.4	Grey
New	D-ARC	DLC-Diamond Like Carbon		+	+				+	+	+	2-4	4000	350	<0.1	Grey/Black

Machining with Cralon and Cuttex

Optimized solutions for cutting tools



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				Thickness +/- 2 µm Thickness, um	Hardness HV ±200	Thermostability °C	Coefficient of Friction	Colour
-	CRALON	AlCRN Based	<ul style="list-style-type: none"> Standard edge protection Used for medium applications 	5	3300	1100	0.5	Grey
New	CRALON-S	TiAlVSiN Based	<ul style="list-style-type: none"> Used in high-speed machining applications Suitable for tough materials, i.e Alloyed Steel, Stainless Steel & Super Alloys 	5	3800	1100	0.2	Bronze
New	Cuttex	TiAlVN Based	<ul style="list-style-type: none"> Suitable for Stainless Steel applications as well as general purpose applications Flexibility of low to higher speeds 	5	3300	900	0.2	Bronze
New	Cuttex M	TiAlSiN Based	<ul style="list-style-type: none"> General purpose coating for average to demanding machining applications Optimized performance 	5	3400	900	0.25	Bronze
New	Cuttex S	TiAlCrSiN Based	<ul style="list-style-type: none"> Demanding applications High performance coating with improved wear resistance and superior service temperature Optimal performance in ISO-M & ISO-S applications High productivity and lower production costs, suitable for high-speed Semi Finishing and Finishing applications 	5	3800	1100	0.2	Bronze
New	Cuttex SM	AlCrTiSiN Based	<ul style="list-style-type: none"> Optimal coating for drilling, including deep hole drilling and challenging applications Suitable for Steel, Stainless Steel, Cast Iron and Super Alloys Superior hardness, wear and temperature resistance 	5	3800	1100	0.4	Grey

ADVANTAGES edge protection, high speed machining, longevity, optimized performance, higher productivity, less cost in production.