

	Ferrous				Non-Ferrous			Hi-Temp & Exotics
	SC-2	SC-3	SC-5	SC-8	SC-13	SC-10	SC-19	SC-11
Coating Type	TiAlN	AlCrN	AlCrN Based	TiAlN Based	ZrN	ta-C (DLC)	TiB2	Diamond
Application/Benefits	Excellent coating adhesion with uniform wear behavior.	Very high wear resistance and excellent hot hardness with top results in both wet and dry machining and at the highest of cutting speeds.	Dual layer structure with high abrasion-resistance and outstanding hot hardness as well as increased oxidation resistance.	Enormous abrasion-resistance, high hot hardness and extremely smooth surface makes it ideal for a diverse variety of carbide drills.	Non-ferrous material solution due to high hardness, lubricity and abrasion resistance. Works well with gummy workpiece materials due to its lubricity and edge retention properties.	The thin, extremely hard coating is designed to maintain maximum cutting edge sharpness.Its very low coefficient of friction exhibits excellent performance in machining a wide range of sticky materials.	Has a high hardness, toughness and working temp. Provides extremely high metal removal rates in aluminum due to its incredibly low coefficient of friction. Prevents BUE and chip packing.	Diamond coating grown on the surface of cutting tools in a vacuum coating process, significantly increasing tool life and performance in highly abrasive machining applications.
Materials	Good all-round coating	Groundbreaking all-round coating excellent for roughing and finishing of steels (up to 52 HRC), stainless steels, titanium, cast irons, etc.	Excellent performance in tool steel > 1,000 N/mm2, hardened steel (45-52 HRC), stainless steel, heat-resistant steels, cast iron, titanium and titanium alloys.	Ideal for challenging materials such as high tensile strength materials, ductile irons, and stainless steels	Designed for aluminum, works well in abrasive non ferrous alloys such as brass, copper, bronze, fiberglass and composites.	Highly suited for machining abrasive materials such as graphite and high silicon content (>12%) aluminium alloys, composite materials and PEEK.	Well suited for high silicon aluminum alloys, titanium alloys, magnesium alloys, no lead brass, bronze and copper alloys.	Excels in carbon fiber reinforced polymers (CFRP), metal matrix composites (MMC), high-silicon aluminum alloys, and many other difficult to machine non-ferrous applications
Hardness (HV 0.05)	3100	3200	3200	3200	2600	>5000	4000	≈ 10000
Coeffecient of Friction	.3-.35	0.35	0.3	0.25	0.55	0.15	.10 - .20	-
Thickness	1-4µm	1-4µm	1-4µm	1-4µm	2-4µm	.5-2µm	1-2µm	8-12µm
Max Working Temp	900 C°	1100 C°	>1100 C°	1000 C°	500 C°	750 C°	850 C°	500 C°
Coating Color	Violet-Grey	Bright Grey	Light Grey	Aubergine-Grey	Pale Gold	Dark Grey	Light Grey/Silver	Dull Grey