



Material Selector				
Material	Wear Resistance	Toughness	Red Hardness	Additional Notes
Forte				Best option for rotary broaching due to its superior toughness and increased wear resistance
Saberloy				Best option for cutoff blades due to its high cobalt content and combination of red hardness, wear resistance and toughness
M2				Economical solution for cutoff blades and form tools, also popular for rotary broaching
M42 (Cobalt)				Great but still economical option for cutoff blades and form tools
T15PM				Great option for cutoff blades and form tools, can also be used for rotary broaching in tougher materials
Rex76/76PM M48				Great option for form tools in short runs, low SFM, and/or interrupted cuts
Rex86/86PM (Maxamet)				Great option for form tools - can be run near carbide SFM but is less prone to chipping in tough materials or interrupted cuts
C2 Micrograin Carbide				Great option for Swiss inserts, cutoff blades and form tools for long-running jobs, at SFM ≤ 250
C6 Micrograin Carbide				Great option for Swiss inserts, cutoff blades and form tools for long-running jobs, at SFM > 250

Wear Resistance: The relative ability of the material to withstand the abrasive action of difficult to machine materials

Toughness: The relative ability of the steel to withstand deflection and interrupted cuts without chipping

Red Hardness: The relative ability of the steel to withstand the heat generated when cutting hard materials without losing its own hardness



Coating Descriptions		
Coating	Color	Notes
TiN	Gold	An excellent, wide-ranging and cost-effective coating, TiN coated tools can last up to five times longer than uncoated ones. It also improves the wear resistance of the tool and allows for higher operating speeds.
TiCN	Blue-Gray	A superior hard coating for high-rockwell steels, TiCN achieves superior results when machining materials over 40HRC. It is recommended for high-shock resistance in operations like forming, broaching or interrupted cuts.
TiAlN	Violet	TiAlN is recommended for adding extra hardness and heat resistance to tools. When machining abrasive materials such as cast iron, titanium and high silicon-content aluminum alloys, this coating makes machining at higher speeds possible with smaller amounts of coolant needed.
TiAlCN	Copper	A premium, universal hard coating, TiAlCN is a high-performance coating that combines the properties of TiN, TiCN, and TiAlN to give tools lubricity, superior wear and abrasion resistance, toughness and shock resistance, and temperature stability.
AlTiN	Gray-Black	A powerful coating for high-speed machining, AlTiN has the ultimate resistance to heat and premature wear when machining at high speeds and feeds. It also allows freer cutting and better chip evacuation in dry machining applications.
AlCrN	Dark Gray	A high performance coating for a wide range of applications, AlCrN provides a high level of oxidation resistance and hot hardness. This leads to high wear resistance under severe machining conditions - especially for steel in the 40-50 HRC range.
NF	White-Gold	A functional coating with extra lubricity, NF is an excellent choice for machining non-ferrous materials such as aluminum, brass and copper. It improves the wear resistance of the tools in forming and punching operations.