

Selection of Sumitomo Grades (Turning)

According to Work Materials and Applications

Insert Selection

Cutting Process	P General Steel (Carbon Steel, Alloy Steel), Soft Steel						M Stainless Steel					K Cast Iron							
	High-Speed	Finishing to Light		Medium	Rough to Heavy		High-Speed	Finishing to Light	Medium	Rough to Heavy		High-Speed	Finishing	Medium					
	Wear Resistance ←			→ Fracture Resistance			Wear Resistance ←			→ Fracture Resistance			Wear Resistance ←		→ Fracture Resistance				
ISO Classification	-	P01	P10	P20	P30	P40	-	M01	M10	M20	M30	M40	-	K01	K10	K20	K30		
Coated Carbide		AC805P	AC810P	AC820P	AC830P			AC610M	New AC6030M	New AC6040M	AC630M	AC830P	AC520U	AC530U		AC405K	AC415K	AC420K	AC820P
Coated Cermet		New T1500Z	T3000Z																
Cermet		New T1000A	T1500A					T1000A	T1500A						New T1000A				
Carbide			ST10P	ST20E	A30										G10E				
Uncoated CBN Coated CBN																BNS800	BN7000	BN500	BNC500

Cutting Process	S Exotic Alloy				H Hardened Steel				N Non-Ferrous Metal				Sintered Components							
	High-Speed	Light		Medium	High-Speed	Light	Medium		High-Speed	Light	Medium		High-Speed	Light	Medium					
	Wear Resistance ←			→ Fracture Resistance	Wear Resistance ←			→ Fracture Resistance	Wear Resistance ←		→ Fracture Resist.	Wear Resistance ←		→ Fracture Resist.						
ISO Classification	-	S01	S10	S20	S30	-	H01	H10	H20	H30	-	N01	N10	N20	N30	-	01	10	20	30
Coated Carbide		AC510U	AC520U																	AC510U
Cermet																				New T1000A
Carbide		EH510	EH520												H1					
Coated CBN								New BNC2010	New BNC2020	BNC300	BNC100	BNC160	BNC200							
Uncoated CBN		BN7000	BNS800					BN1000	BN2000	BNX20	BN350	BNX10	BNX25					BN7500	BN7000	
PCD															DA1000	DA150				