

Selection system of CVD coated grades

Workpiece	Machining types	Recommended grade	Recommended cutting speed (m/min)	ISO	Application range
P Steel	Continuous cutting	PC3600	235 (180 ~ 290)	P20	PC3600
		PC3700	235 (180 ~ 290)	P30	PC3700 ^{new}
	Interrupted cutting	PC5300	195 (150 ~ 240)	P40	PC5300
		PC5400	145 (80 ~ 210)		PC5400
M Stainless steel	Continuous cutting	PC5300	130 (100 ~ 160)	M20	PC5300
		PC9530	130 (100 ~ 160)	M30	PC9530
	Interrupted cutting	PC5400	120 (95 ~ 155)	M40	PC5400
		PC9540	110 (80 ~ 140)	M50	PC9540 ^{new}
K Cast iron	Continuous cutting	PC6510	180 (140 ~ 230)	K05 K10	PC6510
		PC5300	145 (110 ~ 180)	K20	PC5300
	Interrupted cutting	PC5400	125 (85 ~ 160)	K30	PC5400
S HRSA	Continuous cutting	PC5300	55 (40 ~ 70)	S10 S20	PC5300
		PC5400	40 (30 ~ 50)	S30	PC5400
	Interrupted cutting	PC9540	40 (30 ~ 50)	S40	PC9540 ^{new}
H High hardness steel	Continuous cutting	PC2005	60 (40 ~ 80)	H01	PC2005
		PC2010	55 (40 ~ 70)	H10	PC2010
		PC2015	50 (35 ~ 65)	H20	PC2015
		PC210F	50 (35 ~ 65)	H30	PC210F

The features of PVD coated grades

PVD Coated grades	ISO	Features
PC3600	P25 ~ P35	<ul style="list-style-type: none"> Milling grade for medium and roughing of steel New coating layer with superior wear resistance and oxidation resistance with high toughness substrate
PC3700 ^{new}	P25 ~ P35	<ul style="list-style-type: none"> Exclusive grade for milling grade Lubricated and high hardness multi-layered coating
PC5300	P30 ~ P40 K20 ~ K30 M20 ~ M30 S15 ~ S25	<ul style="list-style-type: none"> Superior universal grade for steel, cast iron, hard to cut material, stainless steel New coating and ultra fine grain provide wear resistance and oxidation resistance TiAlN Series new coating
PC5400	P35 ~ P45 K25 ~ K35 M30 ~ M40 S25 ~ S35	<ul style="list-style-type: none"> Universal grade for interrupted machining of steel, cast iron, hard-to-cut materials and stainless steel with stable machinability New coating layer with high toughness and lubrication on ultra fine grain substrate with high toughness AlCrN series new coating
PC6510	K05 ~ K15	<ul style="list-style-type: none"> High speed milling grade for cast iron and aluminum K-Gold coating
PC9530	M25 ~ M35 S20 ~ S30	<ul style="list-style-type: none"> Medium to rough cutting of hard to cut materials such as stainless steel, Cr-Ni steel, etc. The toughest sub-micron substrate provides excellent cutting performance at high feed TiAlN coating
PC9540 ^{new}	M35 ~ M45 S30 ~ S40	<ul style="list-style-type: none"> Exclusive high toughness grade for stainless steel milling PVD dioxide film with good heat resistance
PC2005	P01 ~ P10 K01 ~ K10 H01 ~ H10	<ul style="list-style-type: none"> Exclusive for Laser Mill in milling of high hardness workpieces and press mold steel Utmost wear resistance due to high hardness substrate and coating Ultra high hardness K-Brown coating
PC2010	H05 ~ H15	<ul style="list-style-type: none"> Exclusive for Laser Mill in milling of pre hardened steel and plastic mold steel High hardness enhanced cutting edges due to ultra fine WC and high contents binder for expanding application range to high hardness steel and pre hardened steel Ultra high hardness K-Brown coating
PC2015	H10 ~ H20	<ul style="list-style-type: none"> Exclusive for Laser Mill in milling of carbon steel and cast Highly lubricative K-SILVER coating Lubricative coating layer and high contents substrate for machining mild steel and hard-to-cut cast materials
PC210F	H10 ~ H20 P25 ~ P35 K15 ~ K25 M15 ~ M25 S10 ~ S20	<ul style="list-style-type: none"> High speed milling grade for hardened steel, cast iron, and stainless steel(Laser Mill) New coating and ultra fine grain provide wear resistance and oxidation resistance TiAlN Series new coating
PC2505 ^{new}	H01 ~ H10	<ul style="list-style-type: none"> Roughing grade for high hardened steel and pressed die steel Excellent wear resistance ideal for machining die steel and high hardened steel over HRC50
PC2510 ^{new}	H05 ~ H15	<ul style="list-style-type: none"> Roughing grade for pre-hardened steel and plastic die steel Stabilized toughness ideal for interrupted cutting of high hardened steel and wet cutting accompanied by massive thermal shock

