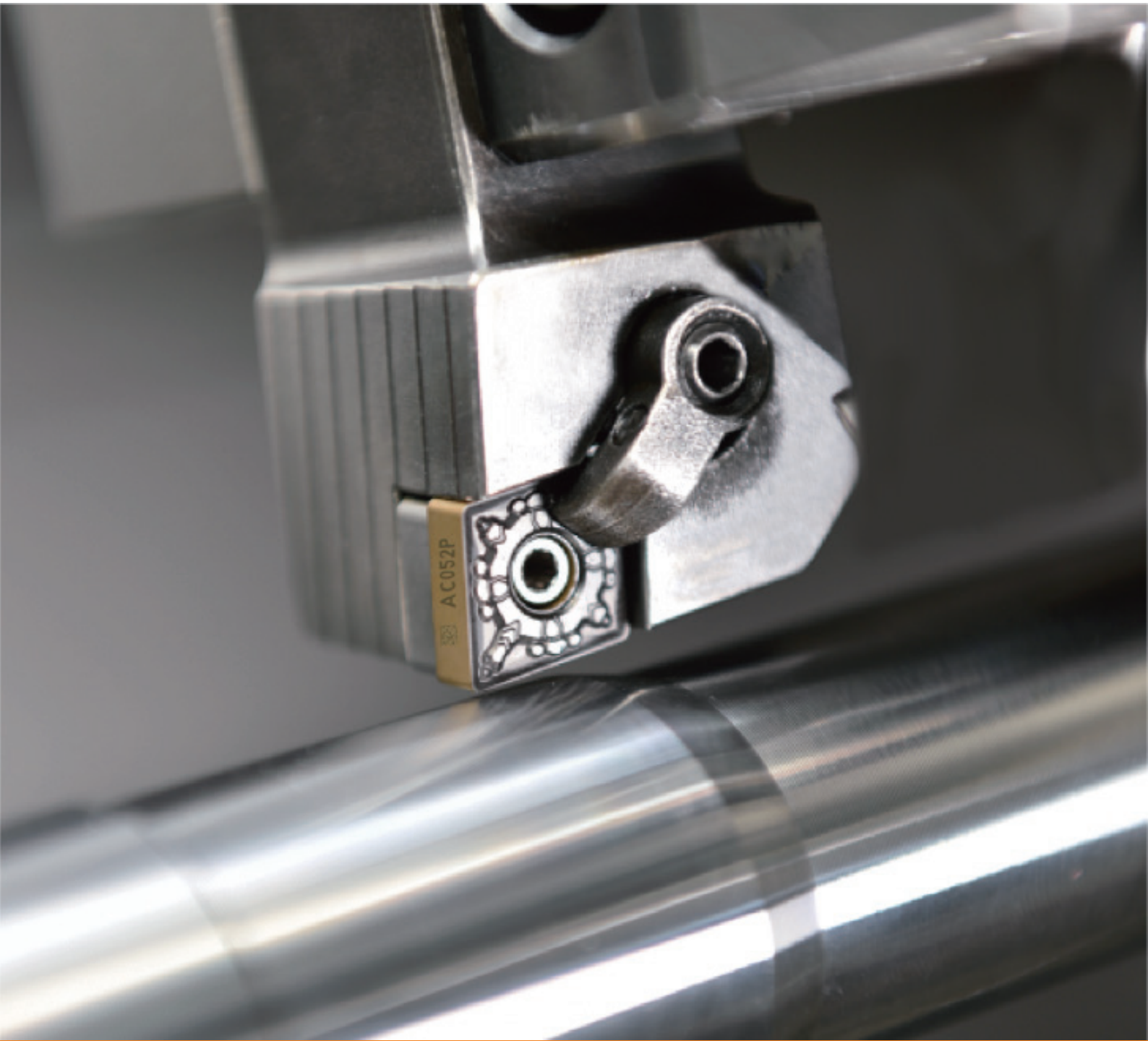
NEW
PRODUCT!

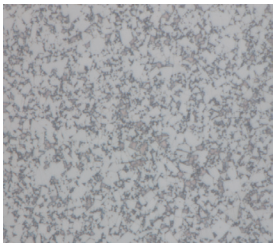
AC052P

New Turning Grade For Steel



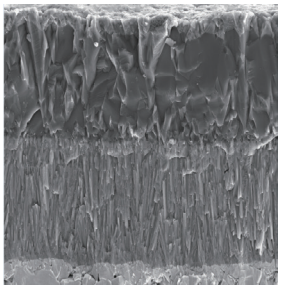
AC052P technical features

Using Achteck new coating technology to control the growth direction of Al_2O_3 coating crystal structure, the hardest crystal surface of Al_2O_3 coating crystal can directly contact the machining material, and the plastic deformation resistance and toughness along the cutting direction are improved. It can have machining stability with high efficiency and longer tool life.



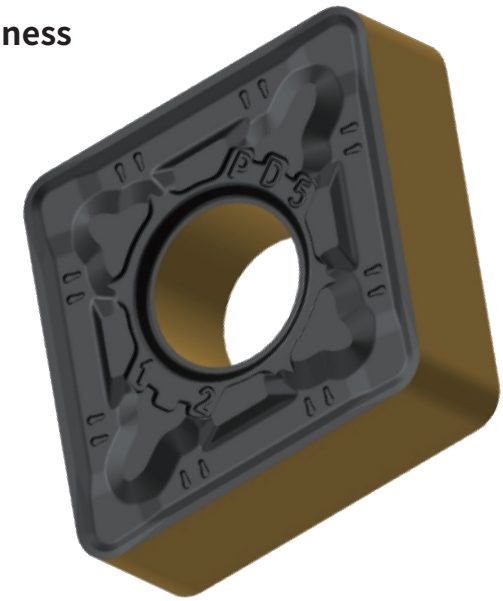
Substrate with excellent toughness and wear resistance

- Good resistance to plastic deformation and high temperature.
- Good toughness improves impact resistance.
- Rich cobalt layer with gradient sintering technology improves reliability.



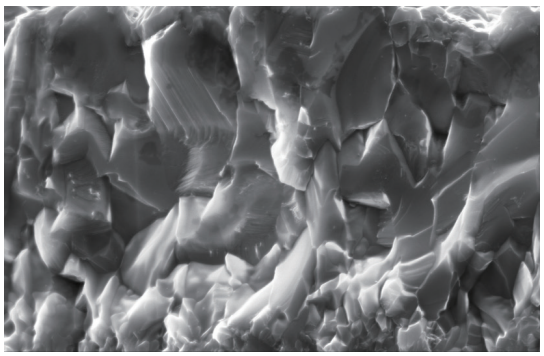
New Nano-coating

- More uniform insert wear gives coating higher wear resistance.
- Better coating adhesion can prevent coating peeling.

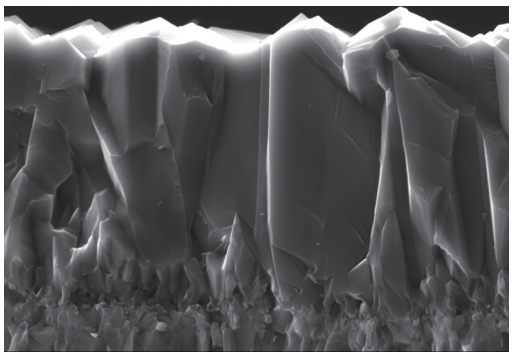


Brand-new coating technology

Using new coating technology to control the growth direction of Al_2O_3 coating crystal makes it more consistent which greatly improve wear resistance, and extend for tool life.



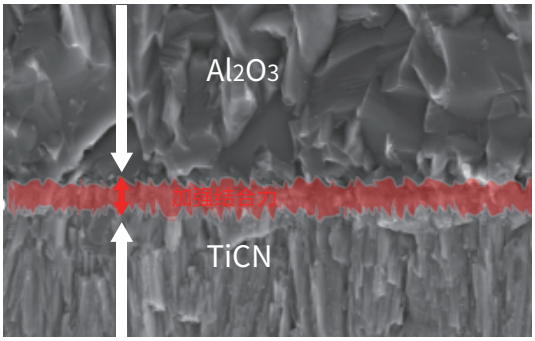
Old coating technology:
Growth direction of Al_2O_3 CVD coating is random and uneven.

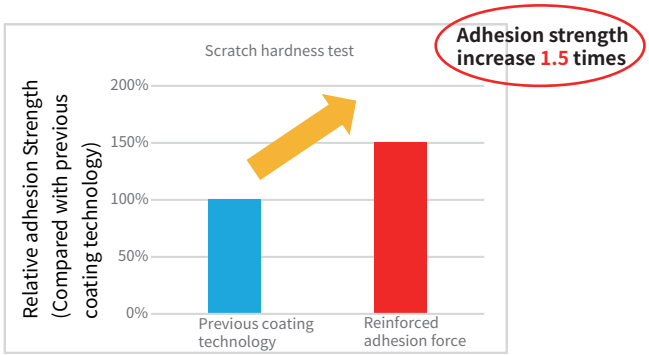


New coating technology:
Crystal of Al_2O_3 coating grow in one direction and form a strong barrier facing the cutting area.

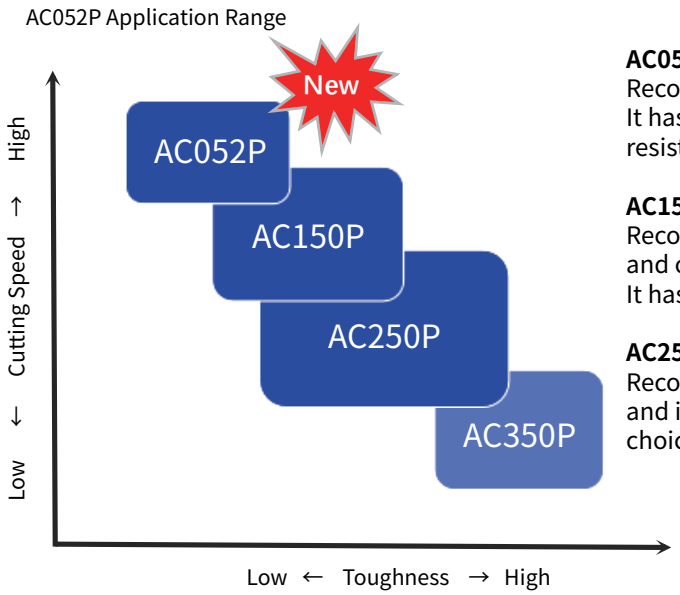
Reinforced coating adhesion technology

Using transition layer with acicular structure refined adhesion structure and gave coating good adhesion to prevent coating peeling, and improve wear resistance greatly.





AC052P/AC150P/AC250P application range



AC052P:
Recommended for steel semi-finishing to rough turning. It has high metal removal rate, heat resistance, good crater resistance and plastic deformation resistance.

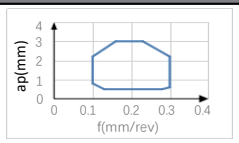
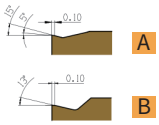
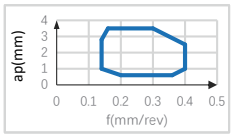
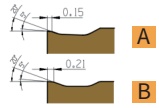
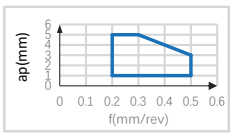
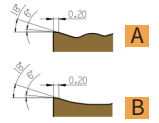
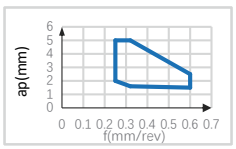
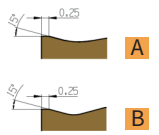
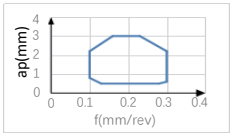
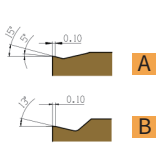
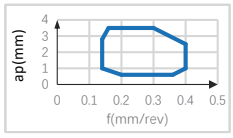
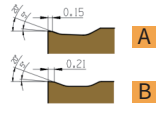
AC150P:
Recommended for steel and cast steel finish to rough turning, and can be used in continuous and light interrupted turning. It has high metal removal rate.

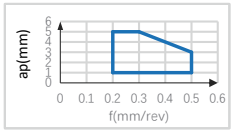
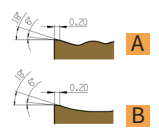
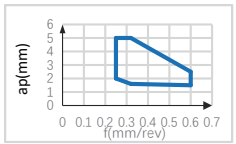
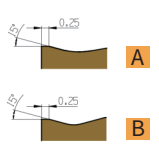
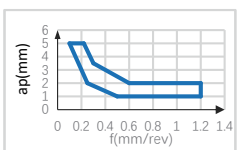
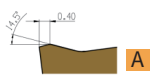
AC250P:
Recommended for steel and cast steel finish to rough turning, and is suitable for continuous and interrupted cutting. First choice for steel turning.

AC052P/AC150P/AC250P application range

Materials	Application Range										
Machining condition	Stable conditions ⟷ Bad conditions										
ISO	P01	P05	P10	P15	P20	P25	P30	P35	P40	P45	P50
Grade	AC052P (New)										
	AC150P										
	AC250P										
	AC350P										

Overview of turning insert geometries

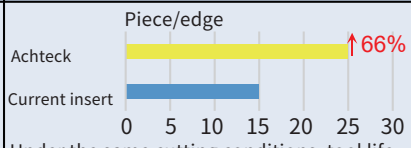
Applications		Chip breaker		Features	Chip breaking range	Cross section
Negative	Finishing	PB1		**1st choice for steel finish turning** Light cutting chip breaker, low cutting force, suitable for machining slender shaft, thin wall and unstably clamped parts, good cutting performance		
	Semi-finishing	PB3		**1st choice for steel semi finish turning** The positive rake angle combined with small land guaranteed edge strength and sharpness, reduced the cutting force. The wavy side edge design has a good chip breaking result in out-copying turning on the shoulder, and in profile turning at different cutting depths.		
	Medium machining	PD3		**1st choice for steel medium turning** It has a strong chip control ability at low feed and cutting depth, and reduces crater wear. The chip breaking is also very good at high feed and cutting depth due to the geometry design. Double rake angle design makes sharp cutting edge and reduces cutting force.		
		PC4		**Alternative chip breaker for carbon steel and alloy steel medium turning** Flat T-land guarantee the strength of cutting edge. This multi-purpose geometry can be used in universal applications.		
		PL5		**1st choice for steel slender bar turning** Open chip breaker leads to smooth cutting with low cutting force, which is suitable for slender shaft turning.		
	Roughing	PD5		**Alternative chip breaker for steel rough turning** A strong cutting edge. Double rake angle design effectively reduces the cutting force, can still have good chip breaking at small cutting depth.		

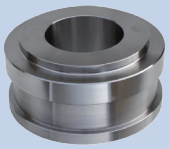
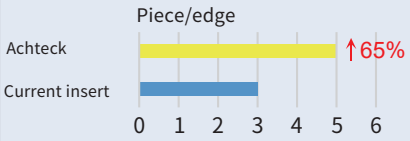
Applications		Chip breaker		Features	Chip breaking range	Cross section
Positive	Semi-finishing	PC2		**1st choice for steel and stainless steel semi-finish turning** Sharp geometry design ensures low cutting force, less built-up edge and excellent chip control.		
	Medium machining	KC2		**General purpose geometry for steel, stainless steel and cast iron turning** Suitable for medium and rough turning. Simple and durable chip breaker design, very good versatility and wide application range.		
		No code		**Alternative chipbreaker for cast iron and alloy steel medium turning** Negative land and big rake angle design ensure cutting edge strength and sharpness.		

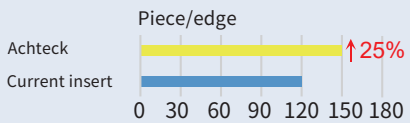
Recommanded cutting speed for different materials

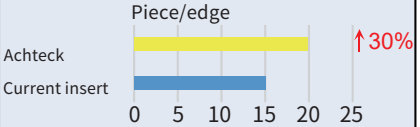
Materials						AC052P		
ISO	Brinell hardness			Brinell hardness (HB)	Tensile strength (N/mm^2)	Initial value of cutting speed Vc(m/min)		
						f(mm/rev)		
						0.1	0.4	0.6
P	Unalloyed steel	C≤0.25%	Annealed	125	428	620	450	330
		0.25＜C≤0.55%	Annealed	190	639	560	405	295
		0.25＜C≤0.55%	Heat-treated	210	708	400	280	200
		C＞0.55%	Annealed	190	639	530	385	275
		C＞0.55%	Heat-treated	300	1013	380	245	180
		Free cutting steel(short-chip)	Annealed	220	745	600	420	300
	Free cutting steel (short-chip)	Annealed		175	591	610	410	285
		Heat-treated		300	1013	530	350	250
		Heat-treated		380	1282	330	230	175
		Heat-treated		430	1477	265	185	140
	High alloyed steel and high alloyed tool steel	Annealed		200	675	445	295	215
		Hardened and tempered		300	1013	300	200	160
		Hardened and tempered		400	1361	220	140	105
	Stainless steel	Ferritic/marten sitic, annealed		200	675			
		Martensitic, heat-treated		330	1114			

Case stories

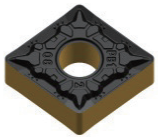
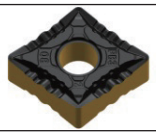
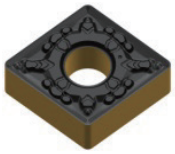
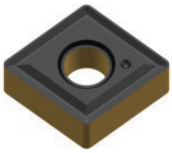
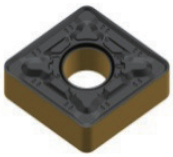
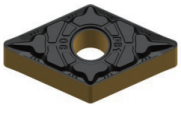
Product	WNMG 080408E-PD3 AC052P
Workpiece	Pin 
Materials	40MnB
Operation	Rough external turning
Vc	320m/min
f	0.3mm/rev
ap	1.5mm
Coolant	Dry
Result	 Under the same cutting conditions, tool life is 66% longer than the other competitor's. Time of changing tools is decreased and turning efficiency is increased, tool cost is decreased.

Product	WNMG 080412E-PD5 AC052P
Workpiece	Flange 
Materials	Alloyed steel
Operation	Rough external and face turnning
Vc	390m/min
f	0.5mm/rev
ap	3mm
Coolant	Wet
Result	 Tool life is 65% longer than before and turning efficiency is increased, tool cost is decreased.

Product	DNMG 150608E-PD3 AC052P
Workpiece	Shaft sleeve 
Materials	55#Steel
Operation	External machining
Vc	210m/min
f	0.4mm/rev
ap	2.5mm
Coolant	Wet
Result	 Under the same cutting conditions, the tool life is 25% longer. Time of changing tools is decreased and turning efficiency is increased, tool cost is decreased.

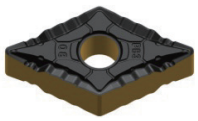
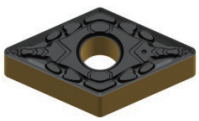
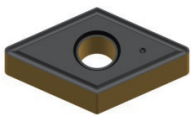
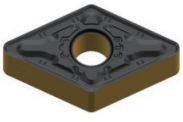
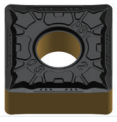
Product	CNMG 120408E-PD3 AC052P
Workpiece	Sleeve 
Materials	20MnCr5
Operation	External machining
Vc	280m/min
f	0.35mm/rev
ap	2.0mm
Coolant	Dry
Result	 Time of changing tools is reduced. Turning efficiency is increased, tool cost is decreased. Tool life is 30% longer.

Negative insert list

Insert	Product code	f (mm/rev)	ap (mm)	Dimension(mm)				Grade
				IC	S	D1	RE	AC052P
	CNMG 120404E-PB1	0.05-0.15	0.26-3.2	12.7	4.76	5.16	0.4	○
	CNMG 120408E-PB1	0.10-0.30	0.52-3.2	12.7	4.76	5.16	0.8	●
	CNMG 120412E-PB1	0.15-0.45	0.78-3.2	12.7	4.76	5.16	1.2	●
	CNMG 120404E-PB3	0.06-0.18	0.30-3.5	12.7	4.76	5.16	0.4	○
	CNMG 120408E-PB3	0.12-0.36	0.60-3.5	12.7	4.76	5.16	0.8	●
	CNMG 120412E-PB3	0.18-0.54	0.90-3.5	12.7	4.76	5.16	1.2	●
	CNMG 120404E-PD3	0.08-0.22	0.40-4.3	12.7	4.76	5.16	0.4	○
	CNMG 120408E-PD3	0.15-0.44	0.80-4.3	12.7	4.76	5.16	0.8	●
	CNMG 120412E-PD3	0.23-0.66	1.20-4.3	12.7	4.76	5.16	1.2	●
	CNMG 160608E-PD3	0.15-0.44	0.80-5.3	15.875	6.35	6.35	0.8	●
	CNMG 160612E-PD3	0.23-0.66	1.20-5.3	15.875	6.35	6.35	1.2	●
	CNMG 190608E-PD3	0.15-0.44	0.80-6.4	19.05	6.35	7.94	0.8	●
	CNMG 190612E-PD3	0.23-0.66	1.20-6.4	19.05	6.35	7.94	1.2	●
	CNMG 190616E-PD3	0.30-0.66	1.60-6.4	19.05	6.35	7.94	1.6	●
	CNMG 120404E-PC4	0.08-0.22	0.40-4.3	12.7	4.76	5.16	0.4	○
	CNMG 120408E-PC4	0.15-0.44	0.80-4.3	12.7	4.76	5.16	0.8	●
	CNMG 120412E-PC4	0.23-0.66	1.20-4.3	12.7	4.76	5.16	1.2	●
	CNMG 160612E-PC4	0.23-0.66	1.20-5.3	15.875	6.35	6.35	1.2	●
	CNMG 160616E-PC4	0.30-0.88	1.60-5.3	15.875	6.35	6.35	1.6	●
	CNMG 190612E-PC4	0.23-0.66	1.20-6.4	19.05	6.35	7.94	1.2	●
	CNMG 120408E-PD5	0.20-0.60	1.20-6.4	12.7	4.76	5.16	0.8	●
	CNMG 120412E-PD5	0.30-0.90	1.80-6.4	12.7	4.76	5.16	1.2	●
	CNMG 160608E-PD5	0.20-0.60	1.20-8.1	15.875	6.35	6.35	0.8	●
	CNMG 160612E-PD5	0.30-0.90	1.80-8.1	15.875	6.35	6.35	1.2	●
	CNMG 160616E-PD5	0.40-1.20	2.40-8.1	15.875	6.35	6.35	1.6	●
	CNMG 160624E-PD5	0.60-1.80	3.60-8.1	15.875	6.35	6.35	2.4	●
	CNMG 190612E-PD5	0.30-0.90	1.80-9.7	19.05	6.35	7.94	1.2	●
	CNMG 190616E-PD5	0.40-1.20	2.40-9.7	19.05	6.35	7.94	1.6	●
	DNMG 150404E-PB1	0.05-0.15	0.26-3.1	12.7	4.76	5.16	0.4	○
	DNMG 150408E-PB1	0.10-0.30	0.52-3.1	12.7	4.76	5.16	0.8	●
	DNMG 150604E-PB1	0.05-0.15	0.26-3.1	12.7	6.35	5.16	0.4	○
	DNMG 150608E-PB1	0.10-0.30	0.52-3.1	12.7	6.35	5.16	0.8	●

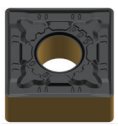
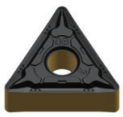
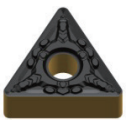
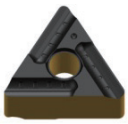
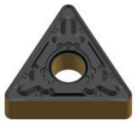
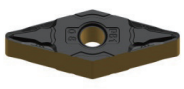
Marks: ● Stocked ○ Non-stocked

Negative insert list

Insert	Product code	f (mm/rev)	ap (mm)	Dimension(mm)				Grade
				IC	S	D1	RE	AC052P
	DNMG 150404E-PB3	0.06-0.18	0.30-3.1	12.7	4.76	5.16	0.4	○
	DNMG 150408E-PB3	0.12-0.36	0.60-3.1	12.7	4.76	5.16	0.8	●
	DNMG 150412E-PB3	0.18-0.54	0.90-3.1	12.7	4.76	5.16	1.2	●
	DNMG 150604E-PB3	0.06-0.18	0.30-3.1	12.7	6.35	5.16	0.4	○
	DNMG 150608E-PB3	0.12-0.36	0.60-3.1	12.7	6.35	5.16	0.8	●
	DNMG 150612E-PB3	0.18-0.54	0.90-3.1	12.7	6.35	5.16	1.2	●
	DNMG 110404E-PD3	0.08-0.22	0.40-2.9	9.525	4.76	3.81	0.4	○
	DNMG 110408E-PD3	0.15-0.44	0.80-2.9	9.525	4.76	3.81	0.8	●
	DNMG 150404E-PD3	0.08-0.22	0.40-3.9	12.7	4.76	5.16	0.4	○
	DNMG 150408E-PD3	0.15-0.44	0.80-3.9	12.7	4.76	5.16	0.8	●
	DNMG 150412E-PD3	0.23-0.66	1.20-3.9	12.7	4.76	5.16	1.2	●
	DNMG 150604E-PD3	0.08-0.22	0.40-3.9	12.7	6.35	5.16	0.4	○
	DNMG 150608E-PD3	0.15-0.44	0.80-3.9	12.7	6.35	5.16	0.8	●
	DNMG 150612E-PD3	0.23-0.66	1.20-3.9	12.7	6.35	5.16	1.2	●
	DNMG 150404E-PC4	0.08-0.22	0.40-3.9	12.7	4.76	5.16	0.4	○
	DNMG 150408E-PC4	0.15-0.44	0.80-3.9	12.7	4.76	5.16	0.8	●
	DNMG 150412E-PC4	0.23-0.66	1.20-3.9	12.7	4.76	5.16	1.2	●
	DNMG 150604E-PC4	0.08-0.22	0.40-3.9	12.7	6.35	5.16	0.4	○
	DNMG 150608E-PC4	0.15-0.44	0.80-3.9	12.7	6.35	5.16	0.8	●
	DNMG 150612E-PC4	0.23-0.66	1.20-3.9	12.7	6.35	5.16	1.2	●
	DNMG 150408E-PD5	0.20-0.60	1.20-5.4	12.7	4.76	5.16	0.8	●
	DNMG 150412E-PD5	0.30-0.90	1.80-5.4	12.7	4.76	5.16	1.2	●
	DNMG 150416E-PD5	0.40-1.20	2.40-5.4	12.7	4.76	5.16	1.6	●
	DNMG 150608E-PD5	0.20-0.60	1.20-5.4	12.7	6.35	5.16	0.8	●
	DNMG 150612E-PD5	0.30-0.90	1.80-5.4	12.7	6.35	5.16	1.2	●
	DNMG 150616E-PD5	0.40-1.20	2.40-5.4	12.7	6.35	5.16	1.6	●
	SNMG 120404E-PB1	0.05-0.15	0.26-3.2	12.7	4.76	5.16	0.4	○
	SNMG 120408E-PB1	0.10-0.30	0.52-3.2	12.7	4.76	5.16	0.8	●
	SNMG 120412E-PB1	0.15-0.45	0.78-3.2	12.7	4.76	5.16	1.2	●
	SNMG 120404E-PD3	0.08-0.22	0.40-4.2	12.7	4.76	5.16	0.4	○
	SNMG 120408E-PD3	0.15-0.44	0.80-4.2	12.7	4.76	5.16	0.8	●
	SNMG 120412E-PD3	0.23-0.66	1.20-4.2	12.7	4.76	5.16	1.2	●
	SNMG 190608E-PD3	0.15-0.44	0.80-6.3	19.05	6.35	7.94	0.8	●

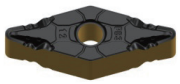
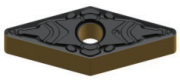
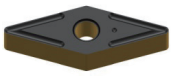
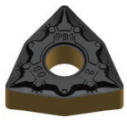
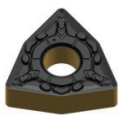
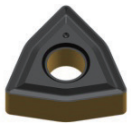
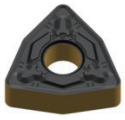
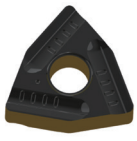
Marks: ● Stocked ○ Non-stocked

Negative insert list

Insert	Product code	f (mm/rev)	ap (mm)	Dimension(mm)				Grade
				IC	S	D1	RE	AC052P
	SNMG 120404E-PC4	0.08-0.22	0.40-4.2	12.7	4.76	5.16	0.4	○
	SNMG 120408E-PC4	0.15-0.44	0.80-4.2	12.7	4.76	5.16	0.8	●
	SNMG 120412E-PC4	0.23-0.66	1.20-4.2	12.7	4.76	5.16	1.2	●
	SNMG 150608E-PD5	0.20-0.60	1.20-7.9	15.875	6.35	6.35	0.8	●
	SNMG 150612E-PD5	0.30-0.90	1.80-7.9	15.875	6.35	6.35	1.2	●
	SNMG 150616E-PD5	0.40-1.20	2.40-7.9	15.875	6.35	6.35	1.6	●
	SNMG 190612E-PD5	0.30-0.90	1.80-9.5	19.05	6.35	7.94	1.2	●
	SNMG 190616E-PD5	0.40-1.20	2.40-9.5	19.05	6.35	7.94	1.6	●
	TNMG 160404E-PB1	0.05-0.15	0.26-3.1	9.525	4.76	3.81	0.4	○
	TNMG 160408E-PB1	0.10-0.30	0.52-3.1	9.525	4.76	3.81	0.8	●
	TNMG 160412E-PB1	0.15-0.45	0.78-3.1	9.525	4.76	3.81	1.2	●
	TNMG 160404E-PB3	0.06-0.18	0.30-3.3	9.525	4.76	3.81	0.4	○
	TNMG 160408E-PB3	0.12-0.36	0.60-3.3	9.525	4.76	3.81	0.8	●
	TNMG 160412E-PB3	0.18-0.54	0.90-3.3	9.525	4.76	3.81	1.2	●
	TNMG 160404E-PD3	0.08-0.22	0.40-4.1	9.525	4.76	3.81	0.4	○
	TNMG 160408E-PD3	0.15-0.44	0.80-4.1	9.525	4.76	3.81	0.8	●
	TNMG 160412E-PD3	0.23-0.66	1.20-4.1	9.525	4.76	3.81	1.2	●
	TNMG 160404R-PL5	0.08-0.22	0.40-4.1	9.525	4.76	3.81	0.4	○
	TNMG 160408R-PL5	0.15-0.44	0.80-4.1	9.525	4.76	3.81	0.8	●
	TNMG 160404L-PL5	0.08-0.22	0.40-4.1	9.525	4.76	3.81	0.4	○
	TNMG 160408L-PL5	0.15-0.44	0.80-4.1	9.525	4.76	3.81	0.8	●
	TNMG 160404E-PC4	0.08-0.22	0.40-4.1	9.525	4.76	3.81	0.4	○
	TNMG 160408E-PC4	0.15-0.44	0.80-4.1	9.525	4.76	3.81	0.8	●
	TNMG 160412E-PC4	0.23-0.66	1.20-4.1	9.525	4.76	3.81	1.2	●
	TNMG 220412E-PC4	0.23-0.66	1.20-4.9	12.7	4.76	5.16	1.2	○
	TNMG 160408E-PD5	0.20-0.60	1.20-5.8	9.525	4.76	3.81	0.8	●
	TNMG 160412E-PD5	0.30-0.90	1.80-5.8	9.525	4.76	3.81	1.2	●
	TNMG 220408E-PD5	0.20-0.60	1.20-7.7	12.7	4.76	5.16	0.8	●
	TNMG 220412E-PD5	0.30-0.90	1.80-7.7	12.7	4.76	5.16	1.2	●
	TNMG 220416E-PD5	0.40-1.20	2.40-7.7	12.7	4.76	5.16	1.6	●
	VNMG 160404E-PB1	0.05-0.15	0.26-2.1	9.525	4.76	3.81	0.4	○
	VNMG 160408E-PB1	0.10-0.30	0.52-2.1	9.525	4.76	3.81	0.8	●

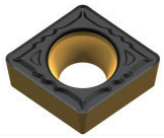
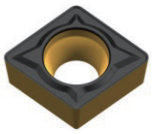
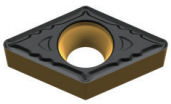
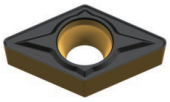
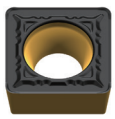
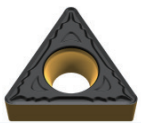
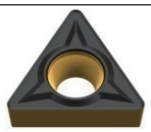
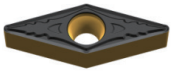
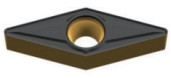
Marks: ● Stocked ○ Non-stocked

Negative insert list

Insert	Product code	f (mm/rev)	ap (mm)	Dimension(mm)				Grade
				IC	S	D1	RE	AC052P
	VNMG 160404E-PB3	0.06-0.18	0.30-3.1	9.525	4.76	3.81	0.4	○
	VNMG 160408E-PB3	0.12-0.36	0.60-3.1	9.525	4.76	3.81	0.8	●
	VNMG 160412E-PB3	0.18-0.54	0.90-3.1	9.525	4.76	3.81	1.2	●
	VNMG 160404E-PD3	0.08-0.22	0.40-3.3	9.525	4.76	3.81	0.4	○
	VNMG 160408E-PD3	0.15-0.44	0.80-3.3	9.525	4.76	3.81	0.8	●
	VNMG 160412E-PD3	0.23-0.66	1.20-3.3	9.525	4.76	3.81	1.2	●
	VNMG 160404E-PC4	0.08-0.22	0.40-3.3	9.525	4.76	3.81	0.4	○
	VNMG 160408E-PC4	0.15-0.44	0.80-3.3	9.525	4.76	3.81	0.8	●
	VNMG 160412E-PC4	0.23-0.66	1.20-3.3	9.525	4.76	3.81	1.2	●
	WNMG 080404E-PB1	0.05-0.15	0.26-2.2	12.7	4.76	5.16	0.4	○
	WNMG 080408E-PB1	0.10-0.30	0.52-2.2	12.7	4.76	5.16	0.8	●
	WNMG 080412E-PB1	0.15-0.45	0.78-2.2	12.7	4.76	5.16	1.2	●
	WNMG 080404E-PB3	0.06-0.18	0.30-2.3	12.7	4.76	5.16	0.4	○
	WNMG 080408E-PB3	0.12-0.36	0.60-2.3	12.7	4.76	5.16	0.8	●
	WNMG 080412E-PB3	0.18-0.54	0.90-2.3	12.7	4.76	5.16	1.2	●
	WNMG 060408E-PD3	0.15-0.44	0.80-2.1	12.7	4.76	5.16	0.8	●
	WNMG 080404E-PD3	0.08-0.22	0.40-2.9	12.7	4.76	5.16	0.4	○
	WNMG 080408E-PD3	0.15-0.44	0.80-2.9	12.7	4.76	5.16	0.8	●
	WNMG 080412E-PD3	0.23-0.66	1.20-2.9	12.7	4.76	5.16	1.2	●
	WNMG 080404E-PC4	0.08-0.22	0.40-2.9	12.7	4.76	5.16	0.4	○
	WNMG 080408E-PC4	0.15-0.44	0.80-2.9	12.7	4.76	5.16	0.8	●
	WNMG 080412E-PC4	0.23-0.66	1.20-2.9	12.7	4.76	5.16	1.2	●
	WNMG 080408E-PD5	0.20-0.60	1.20-4.3	12.7	4.76	5.16	0.8	●
	WNMG 080412E-PD5	0.30-0.90	1.80-4.3	12.7	4.76	5.16	1.2	●
	WNMG 080404R-PL5	0.20-0.50	0.40-4.0	12.7	4.76	5.16	0.4	○
	WNMG 080404L-PL5	0.20-0.50	0.40-4.0	12.7	4.76	5.16	0.4	○
	WNMG 080408R-PL5	0.20-0.50	0.40-5.0	12.7	4.76	5.16	0.8	○
	WNMG 080408L-PL5	0.20-0.50	0.40-5.0	12.7	4.76	5.16	0.8	○

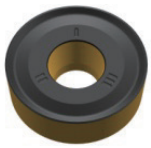
Marks: ● Stocked ○ Non-stocked

Positive insert list

Insert	Product code	f (mm/rev)	ap (mm)	Dimension(mm)				Grade
				IC	S	D1	RE	AC052P
	CCMT 09T304E-PC2	0.05-0.16	0.35-2.9	9.525	3.97	4.4	0.4	●
	CCMT 09T308E-PC2	0.10-0.32	0.70-2.9	9.525	3.97	4.4	0.8	●
	CCMT 09T312E-PC2	0.16-0.48	1.05-2.9	9.525	3.97	4.4	1.2	○
	CCMT 09T304E-KC2	0.06-0.18	0.40-3.2	9.525	3.97	4.4	0.4	●
	CCMT 09T308E-KC2	0.12-0.36	0.80-3.2	9.525	3.97	4.4	0.8	●
	CCMT 120404E-KC2	0.06-0.18	0.40-4.3	12.7	4.76	5.5	0.4	○
	CCMT 120408E-KC2	0.12-0.36	0.80-4.3	12.7	4.76	5.5	0.8	●
	CCMT 120412E-KC2	0.18-0.54	1.20-4.3	12.7	4.76	5.5	1.2	○
	DCMT 11T304E-PC2	0.05-0.16	0.35-3.1	9.525	3.97	4.4	0.4	●
	DCMT 11T308E-PC2	0.10-0.32	0.70-3.1	9.525	3.97	4.4	0.8	●
	DCMT 11T312E-PC2	0.16-0.48	1.05-3.1	9.525	3.97	4.4	1.2	○
	DCMT 11T304E-KC2	0.06-0.18	0.40-3.5	9.525	3.97	4.4	0.4	○
	DCMT 11T308E-KC2	0.12-0.36	0.80-3.5	9.525	3.97	4.4	0.8	●
	DCMT 11T312E-KC2	0.18-0.54	1.20-3.5	9.525	3.97	4.4	1.2	●
	SCMT 120408E-PC2	0.05-0.16	0.35-2.9	12.7	4.76	5.5	0.8	●
	SCMT 120412E-PC2	0.10-0.32	0.70-2.9	12.7	4.76	5.5	1.2	●
	SCMT 09T304E-KC2	0.06-0.18	0.40-3.1	9.525	3.97	4.4	0.4	○
	SCMT 09T308E-KC2	0.12-0.36	0.80-3.1	9.525	3.97	4.4	0.8	○
	TCMT 16T304E-PC2	0.05-0.16	0.35-4.5	9.525	3.97	4.4	0.4	●
	TCMT 16T308E-PC2	0.10-0.32	0.70-4.5	9.525	3.97	4.4	0.8	●
	TCMT 16T312E-PC2	0.16-0.48	1.05-4.5	9.525	3.97	4.4	1.2	○
	TCMT 16T304E-KC2	0.06-0.18	0.40-4.9	9.525	3.97	4.4	0.4	●
	TCMT 16T308E-KC2	0.12-0.36	0.80-4.9	9.525	3.97	4.4	0.8	●
	TCMT 16T312E-KC2	0.18-0.54	1.20-4.9	9.525	3.97	4.4	1.2	○
	VBMT 160404E-PC2	0.05-0.16	0.35-3.1	9.525	4.76	4.4	0.4	●
	VBMT 160408E-PC2	0.10-0.32	0.70-3.1	9.525	4.76	4.4	0.8	●
	VBMT 160412E-PC2	0.16-0.48	1.05-3.1	9.525	4.76	4.4	1.2	●
	VBMT 160404E-KC2	0.06-0.18	0.40-3.3	9.525	4.76	4.4	0.4	○
	VBMT 160408E-KC2	0.12-0.36	0.80-3.3	9.525	4.76	4.4	0.8	●
	VBMT 160412E-KC2	0.18-0.54	1.20-3.3	9.525	4.76	4.4	1.2	●

Marks: ● Stocked ○ Non-stocked

Positive insert list

Insert	Product code	f (mm/rev)	ap (mm)	Dimension(mm)				Grade
				IC	S	D1	RE	AC052P
	RCMX 100300S	0.25-0.50	1.5-4.0	10.0	3.18	4.4	-	○
	RCMX 120400S	0.30-0.60	2.5-5.0	12.0	4.76	4.2	-	●
	RCMX 160600S	0.40-0.75	3.0-7.0	16.0	6.35	5.2	-	●
	RCMX 200600S	0.48-0.90	3.5-9.0	20.0	6.35	6.5	-	●
	RCMX 250700S	0.55-1.20	4.0-12.0	25.0	7.94	7.2	-	●
	RCMX 320900S	0.65-1.50	5.0-15.0	32.0	9.52	9.6	-	●

Marks: ● Stocked ○ Non-stocked