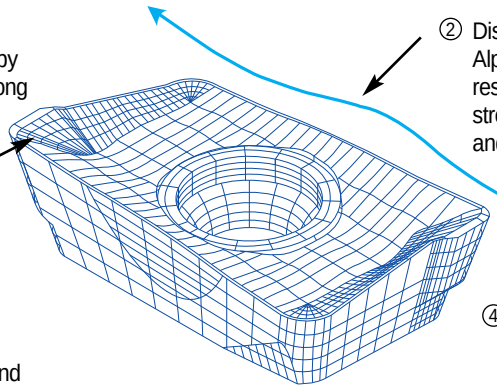
AP/AD Multifunctional Insert

① Long tool life at high speed, high feed and deeper cutting by low cutting resistance and strong cutting edge.

② Distinguished features of Alpha-Curve make cutting resistance reduce and the strength of cutting edge and wear resistance improve.

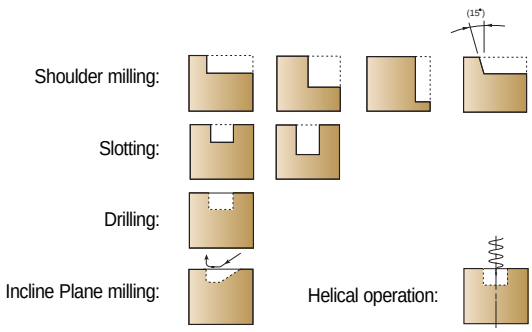


③ Low cutting resistance is realized by unique design i.e alpha curve cutting edge and optimal convex and concave design.

④ High efficient machining is available by the ideal application of the grade to material.

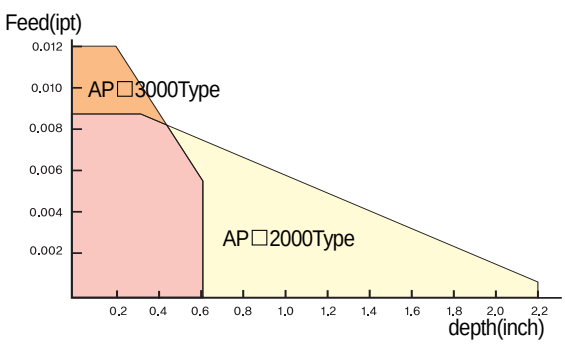
Inserts Feature & Application

- Innovative curve cutting edge and chip-breaker design ensures ideal 90 degree cutting and lower cutting resistance
- Various applications are available with multi-functional cutters(Facing, Slotting, Square shoulder milling and etc.)
- Improved inserts life time with optimized per each application
- Excellent performance ensured at large depth of cutting operations due to strong cutting edge and low cutting resistance



Chip -breaker	Cutting Edge Shape		Recommendation C/B and Grades (● : 1st Choice)									
			Low carbon steels Soft Steels		High carbon steels Alloy Steels		Stainless steels		Cast Irons		Aluminum alloys	
			C/B	Grade	C/B	Grade	C/B	Grade	C/B	Grade	C/B	Grade
F2		Low cutting Resistance Type	●	○PM25C ○PM30P ●PM30C		●PM25C ○PM30P ○PM30C	●	○PM25C ○PM30P ●PM30C	●	●KM20C	–	–
M		Reinforced Cutting Edge Type		○PM25C ○PM30P ●PM30C	●	●PM25C ○PM30P ○PM30C	●	○PM25C ○PM30P ●PM30C	●	●KM20C	–	–
A		Sharp Cutting Edge Type	–	–	–	–	–	–	–	–	●	●KTM10U

AP / AD Mill Application Range

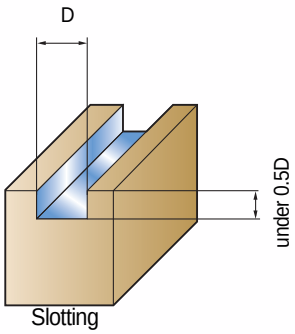


Tips

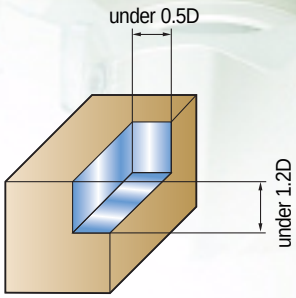
1. The cutting speed and feed can be adjusted in accordance with the machine's power and conditions of work-piece.
2. We recommended you operate them with small Radial depth(RD) and large Axial depth(AD) at the square shoulder milling applications.
3. We recommend you use the compressed air during the slotting and pocket milling applications for the better chip removal.
4. When find some chattering during the operation, decrease the cutting speed.

Recommended Depth of Cuts

(D : Cutting Diameter)



Slotting



Square Shoulder Milling

Recommended cutting conditions (for Single-Edge Type)

(Standard for side cutting, reduce condition 20~30% for slotting)

Work-piece Material	Grade	Cutting Diameter							
		~ ø0.625		ø0.625, ø1.000		ø1.25, ø1.50		ø3.000, ø4.000	
		V(sfm)	fz(ipt)	V(sfm)	fz(ipt)	V(sfm)	fz(ipt)	V(sfm)	fz(ipt)
Low Carbon Steels, Soft Steels	PM25C PM30P	195~395	0.002~0.006	260~590	0.004~0.006	395~820	0.001~0.006	490~820	0.004~0.006
High Carbon Steels, Alloy Steels	PM25C PM30P	165~330	0.002~0.006	260~490	0.002~0.006	330~655	0.004~0.06	330~655	0.004~0.006
Stainless Steels	PM30C MM30P	165~330	0.002~0.006	260~490	0.002~0.006	330~590	0.004~0.006	330~590	0.004~0.006
Cast irons	KM20C	260~395	0.003~0.008	330~425	0.006~0.008	395~655	0.002~0.008	395~655	0.006~0.008
Aluminum Alloy	KTM10U	855~2955	0.006~0.012	985~3120	0.006~0.012	1310~3280	0.004~0.016	1310~3280	0.004~0.016