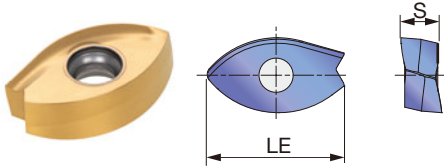


## INSERT

ZRBM...



<b>P</b> Steel	★									
<b>M</b> Stainless	☆									
<b>K</b> Cast iron	☆									
<b>N</b> Non-ferrous										
<b>S</b> Superalloys	☆									
<b>H</b> Hard materials	☆									

★ : First choice  
☆ : Second choice

Designation	RE	Coated										LE	S
		APH730											
ZRBM160-MM	8	●										12.4	3.7
ZRBM200-MM	10	●										14.9	4.8
ZRBM250-MM	12.5	●										18.9	5.9

● : Line up  
Pack quantity = 5 pcs.

## Standard cutting conditions

ISO	Workpiece materials	Hardness	Selection criteria	Recommended grade	Chip-breaker	Cutting speed Vc (m/min)	Feed per tooth fz (mm/t)
<b>P</b>	Low carbon steel (C15 etc.)	- 200HB	First choice	APH730	MM	150 - 350	0.08 - 0.6
	High carbon and alloy steel (C55, 42CrMo4, etc.)	- 300HB	First choice	APH730	MM	120 - 320	0.05 - 0.5
	Prehardened steels (NAK80, PX5 etc.)	30 - 40HRC	First choice	APH730	MM	100 - 200	0.05 - 0.5
<b>M</b>	Austenitic stainless steel (X5CrNi18-9, X5CrNiMo17-12-3, etc.)	- 200HB	First choice	APH730	MM	100 - 280	0.05 - 0.6
	Martensitic stainless steel (X20Cr13 etc.)	- 200HB	First choice	APH730	MM	100 - 300	0.05 - 0.6
<b>K</b>	Gray cast irons (GG25, 250, etc.)	150 - 250HB	First choice	APH730	MM	120 - 380	0.08 - 0.6
	Ductile cast iron (GGG60 / 600-3, etc.)	150 - 250HB	First choice	APH730	MM	100 - 280	0.08 - 0.5
<b>S</b>	Titanium alloy (Ti-6Al-4V, etc.)	-	First choice	APH730	MM	20 - 80	0.05 - 0.6
	Heat-resistance alloys (Inconel718, etc.)	-	First choice	APH730	MM	20 - 60	0.05 - 0.4
<b>H</b>	Hardened steel (SKD61 / X40CrMoV51)	40- 50HB	First choice	APH730	MM	40 - 80	0.05 - 0.2
	Hardened steel (SKD11 / X153CrMoV12, etc.)	50 - 60HB	First choice	APH730	MM	30 - 60	0.04 - 0.14

The above cutting parameters are for reference. Adjustments may be required depending on applications, machine powers and rigidity, and/or workpiece fixture/clamping methods.