

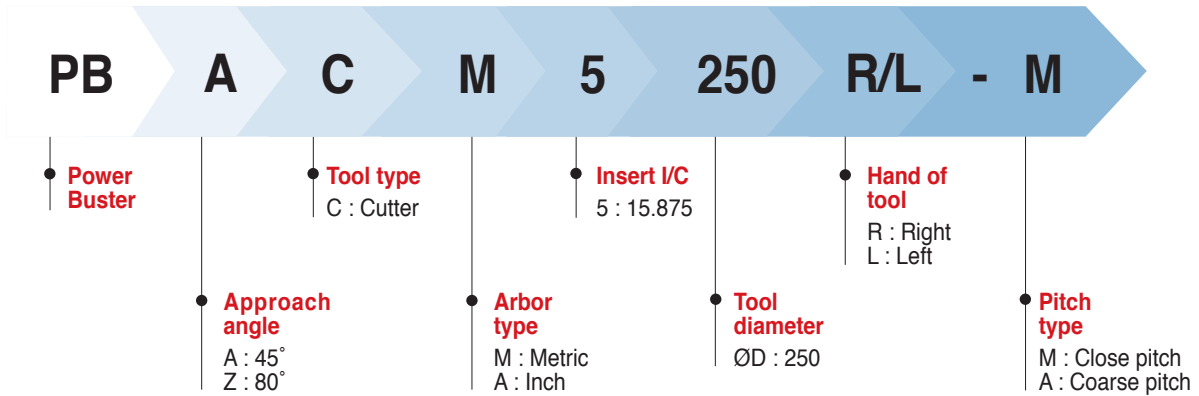
Power Buster

- New tooling utilizing a specially designed serrated edges to increase productivity.
- AA (approach angle) : 45° and 10° available



Power Buster

Code system



Features

- New tooling utilizing a specially designed serrated edges to increase productivity by reducing the cutting load.
- Double-sided 6 corner insert geometry ensures high rigidity, long tool life and cost efficiency.
- The serrated edges divide the chips into smaller pieces. This feature provides excellent chip control, reduces interference of the cutter and ensures good durability of the cutter body.
- AA (approach angle) : 45° and 80° available (same insert used)
- Application : High depth of cut and high feed rate (Steel, Cast iron)

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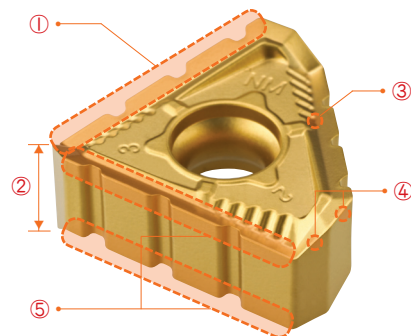
POWER BUSTER

Features of Insert

1 Major cutting edge (Nick edge)

- Low cutting load
- Ideal for chip control, divides chips into small pieces for proper chip evacuation. Double sided 6 corner insert
- Ideal edge design for Steel and Cast iron rough milling
- Comparison of chip control and cutting force
- Work piece : SCM440
- Cutting condition : $vc=200\text{m/min}$, $ap=8\text{mm}$
 $ae=90\text{mm}$, $fz=0.3\text{mm/t}$

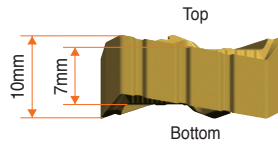
- Tools : Power Buster PBACA 5600R
Insert TMMX2710AZNR-NM
- Milling Tool ADNA5600R
Insert SDCN 53AESN-RH



Power Buster	ISO milling
<p>75%</p> <p>Cutting force 5100N</p>	<p>100%</p> <p>Cutting force 6500N</p>

2 Thick insert

- Thick insert guarantees high rigidity
- Balanced insert design for stable mounting



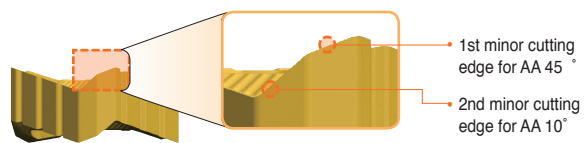
3 NM Chip breaker

- High rake angle for low cutting force
- Good chip flow at various feed and depth of cut
- Inserts are protected with seats for a precise mounting.
- Low friction and good heat evacuation at high depth cut



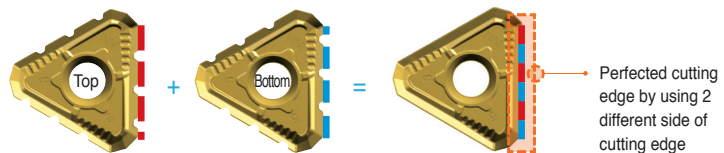
4 Minor cutting edge

- High rake angle to avoid interference with chip
- Calculated minor cutting edge angle for both AA 45° & 10° cutter

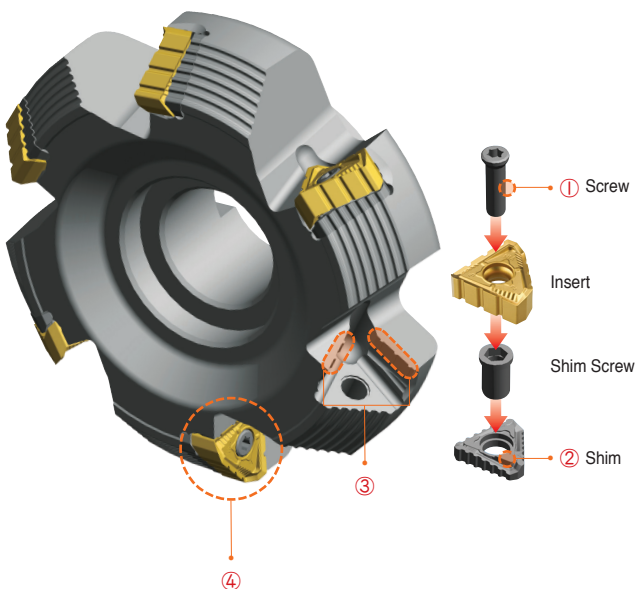


5 Mirror system

- Cutting edge on the both side of insert covers all overlapped cutting area



Features of Cutter

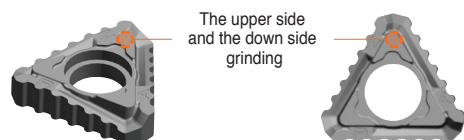


1 Screw on clamping system

- Simple and strong screw on clamping system

2 Better rigidity & Stable Assembly system

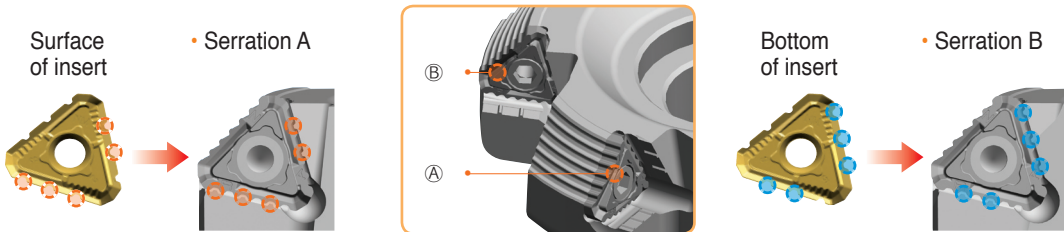
- The shim protects the cutter from insert damage
- High accuracy shim ensures tighter clamping



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3 Foolproof System

- Insert serrations match pocket design to prevent improper seating and alignment.

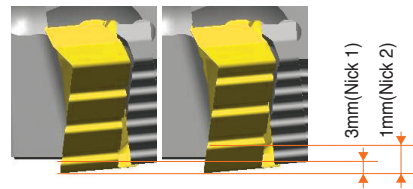
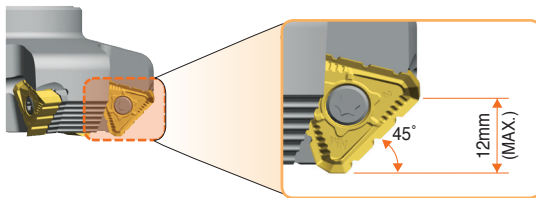


4 Multi-application system

- Same insert for multi use (45° and 80°)

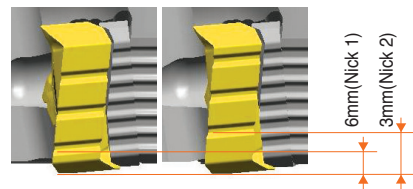
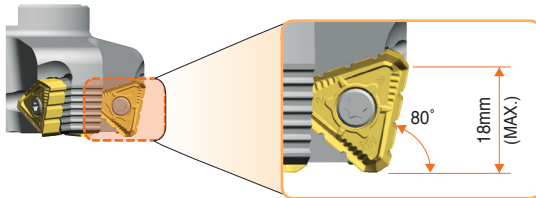
• AA 45°

The nicks are effective with a depth of cut larger than 1mm



• AA 80°

The nicks are effective with a depth of cut larger than 3mm



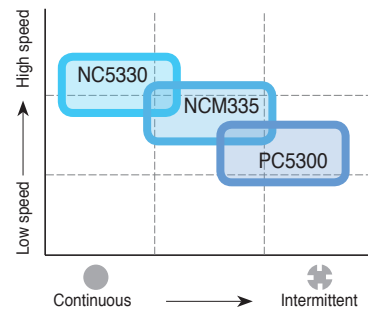
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Recommended cutting condition

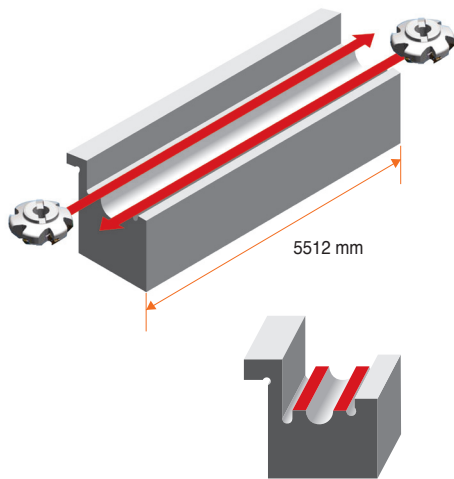
Workpiece	P (Steel)		K (Cast Iron)	
	vc (sfm)	vc (sfm)	vc (sfm)	fz (ipt)
NC5330	200(150~250)	0.1~0.30	200(150~300)	0.1~0.30
NCM335	180(150~250)	0.1~0.30	180(150~280)	0.1~0.35
PC5300	180(120~230)	0.1~0.30	180(120~250)	0.1~0.35



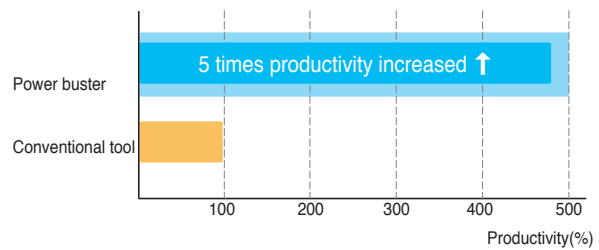
🎯 Power Buster Test

• Cylinder block for ship engine(Cast iron)

- Cutting width(ae) = 160mm×2
- Cutting depth(ap) = 20mm

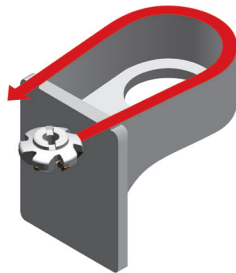


Item	Power Buster	Conventional tool
ØD	200mm	200mm
	12teeth	12teeth
Grade	NC5330	PVD coating for Cast iron
vc	170m/min	130m/min
fz	0.24mm/t	0.16mm/t
ap	10mm x 2 passes	4mm x 5 passes
min	28.2min/ea	137.5min/ea

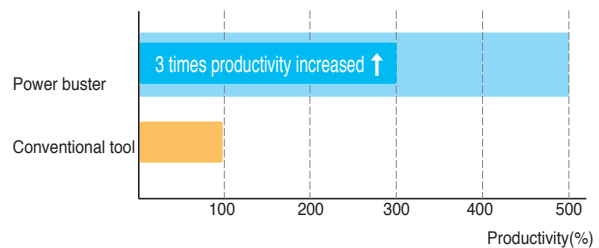


• Heavy machinery part(Alloy steel)

- Cutting width(ae) = 35mm
- Cutting depth(ap) = 10mm



Item	Power Buster	Conventional tool
ØD	125mm	100mm
	8teeth	8teeth
Grade	NCM335	PVD coating for Steel
vc	180m/min	150m/min
fz	0.15mm/t	0.10mm/t
ap	5mm x 2 passes	2.5mm x 4 passes
min	5min/ea	14.7min/ea



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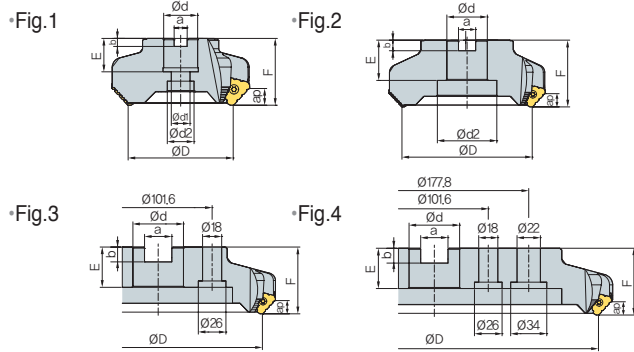
Power Buster

▶ PBAC(M) 5000



• AR : -7°
• RR : -12°~-18°

AA 45°



(mm)

Designation			ØD	Ød	Ød ₁	Ød ₂	a	b	E	F	ap	Fig.
Coarse pitch	PBAC(M) 5080R/L	4	80	25.4(27)	14	20	9.5(12.4)	6(7)	25(22)	50	12	1
	5100R/L	4	100	31.75(32)	-	45	12.7(14.4)	8(8)	32(28)	50	12	2
	5125R/L	6	125	38.1(40)	-	56	15.9(16.4)	10(9)	38(32)	63	12	2
	5160R/L	8	160	50.8(40)	-	100	19(16.4)	11(9)	38(32)	63	12	2
	5200R/L	10	200	47.625(60)	-	-	25.4(25.7)	14(14)	38(38)	63	12	3
	5250R/L	12	250	47.625(60)	-	-	25.4(25.7)	14(14)	38(38)	63	12	3
	5315R/L	14	315	47.625(60)	-	-	25.4(25.7)	14(14)	38(38)	63	12	4
Close pitch	PBAC(M) 5080R/L-M	6	80	25.4(27)	14	20	9.5(12.4)	6(7)	25(22)	50	12	1
	5100R/L-M	6	100	31.75(32)	-	45	12.7(14.4)	8(8)	32(28)	50	12	2
	5125R/L-M	8	125	38.1(40)	-	56	15.9(16.4)	10(9)	38(32)	63	12	2
	5160R/L-M	10	160	50.8(40)	-	100	19(16.4)	11(9)	38(32)	63	12	2
	5200R/L-M	12	200	47.625(60)	-	-	25.4(25.7)	14(14)	38(38)	63	12	3
	5250R/L-M	14	250	47.625(60)	-	-	25.4(25.7)	14(14)	38(38)	63	12	3
	5315R/L-M	16	315	47.625(60)	-	-	25.4(25.7)	14(14)	38(38)	63	12	4

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POWER BUSTER

• Parts

Screw	Shim
FTGA0518	ST53AZR
Shim Screw	Wrench
SHXN0712F	TW20-100

• Available Inserts

		WNMX-MM																
		Coated							Cermet		Uncoated							
Designation		NCM625	NCM635	NC5330	PC3500	PC5300	PC3545	PC9530	PC6510	PC215K	PD2000	CN2000	CN20	CN30	H01	G10E	A30	ST20E
TNMX 2710AZNR-NM		●	●															
2710AZNL-NM																		

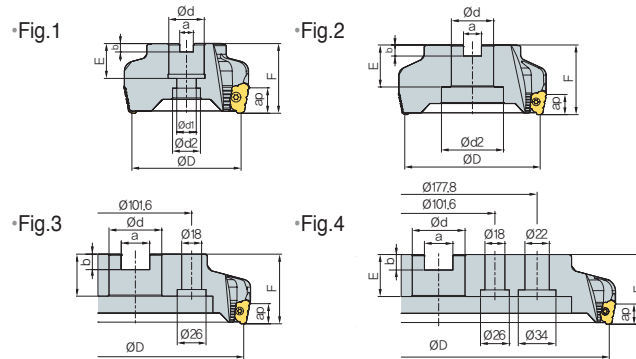
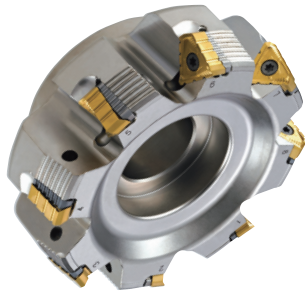
● : Stock item

⊙ PBZC(M) 5000



• AR : -7°
• RR : -12° ~ -18°

AA 80°



(mm)

Designation			ØD	Ød	Ød ₁	Ød ₂	a	b	E	F	ap	Fig.
Coarse pitch	PBZC(M) 5080R/L	4	80	25.4(27)	14	20	9.5(12.4)	6(7)	25(22)	50	18	1
	5100R/L	4	100	31.75(32)	-	45	12.7(14.4)	8(8)	32(28)	50	18	2
	5125R/L	6	125	38.1(40)	-	56	15.9(16.4)	10(9)	38(32)	63	18	2
	5160R/L	8	160	50.8(40)	-	100	19(16.4)	11(9)	38(32)	63	18	2
	5200R/L	10	200	47.625(60)	-	-	25.4(25.7)	14(14)	38(38)	63	18	3
	5250R/L	12	250	47.625(60)	-	-	25.4(25.7)	14(14)	38(38)	63	18	3
	5315R/L	14	315	47.625(60)	-	-	25.4(25.7)	14(14)	38(38)	63	18	4
Close pitch	PBZC(M) 5080R/L-M	6	80	25.4(27)	14	20	9.5(12.4)	6(7)	25(22)	50	18	1
	5100R/L-M	6	100	31.75(32)	-	45	12.7(14.4)	8(8)	32(28)	50	18	2
	5125R/L-M	8	125	38.1(40)	-	56	15.9(16.4)	10(9)	38(32)	63	18	2
	5160R/L-M	10	160	50.8(40)	-	100	19(16.4)	11(9)	38(32)	63	18	2
	5200R/L-M	12	200	47.625(60)	-	-	25.4(25.7)	14(14)	38(38)	63	18	3
	5250R/L-M	14	250	47.625(60)	-	-	25.4(25.7)	14(14)	38(38)	63	18	3
	5315R/L-M	16	315	47.625(60)	-	-	25.4(25.7)	14(14)	38(38)	63	18	4

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POWER BUSTER

• Parts

Screw	Shim
FTGA0518	ST53AZR
Shim Screw	Wrench
SHXN0712F	TW20-100

• Available Inserts

		WNMX-MM																
		Coated								Cermet		Uncoated						
Designation		NCM325	NCM335	NC5330	PC3500	PC3300	PC3545	PC3550	PC3510	PC215K	PD2000	CN2000	CN20	CN30	H01	G10E	A30	ST20E
TNMX	2710AZNR-NM	●	●															
	2710AZNL-NM																	

● : Stock item



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