

For surface milling

- ON series···B017-B020
- XNF45 series···B021-B022
- HN45 series···B023-B024
- 4033 series···B025-B026
- 4047 series···B027-B028
- 4048 series···B029-B030
- CMF series···B031-B032
- ASX445 series···B033-B034
- SE445 series···B035-B036
- FP45 series···B037-B039
- FP75 series···B040



ON

Surface Milling Tools



Products Features

ON series lead angle is 45° One option	3.4mm//5mm/6mm Maximum cutting depth Three options	Economical 16-cutting-edge double sided inserts

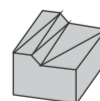
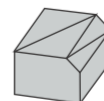
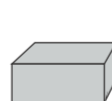
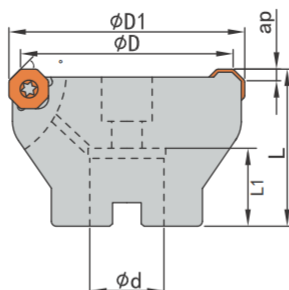
inserts shape	inserts model	ap max (mm)
	ONGU050408-PM	3.4mm
	ONGU08T508-PM	5mm
	ONGU090520-PM	6mm

ON Series

Inserts Groove Introduction

Inserts	Chip breaker	Features
ONGU050408-PM ONGU08T508-PM ONGU090520-PM		High-strength positive rake edge design, suitable for general cutting of steel, stainless steel, cast iron and high-temperature alloys

ON05 Cutter Specification



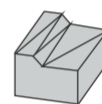
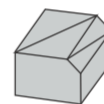
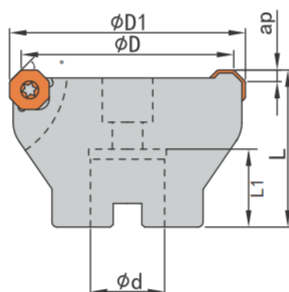
Surface processing

Chamfering processing

Form processing

Model	Size							Insert	Screws	Wrench	Stock
	D	d	D1	L	L1	T	ap (max)				
ON45T-050R040N05-A22C *	50	22	62	40	20	4	3.4	ONGU05 0408-PM	S4012-1	T15	○
ON45T-063R050N05-A22C	63	22	75	40	20	5					○
ON45T-080R060N05-A27C	80	27	92	50	22	6					●
ON45T-100R080N05-B32C	100	32	112	63	25	8					●
ON45T-125R080N05-B40C	125	40	136	63	28	8					●
ON45T-160R100N05-C40C	160	40	172	63	28	10					●

ON08 Cutter Specifications



Surface processing

Chamfering processing

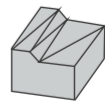
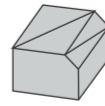
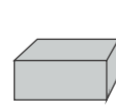
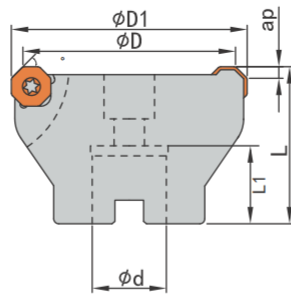
Form processing

Model	Size							Insert	Screws	Wrench	Stock
	D	d	D1	L	L1	T	ap (max)				
ON45-063R050N08-A22	63	22	78	40	20	5	5	ONGU08 T508-PM	S5012- A55-1	T20	○
ON45-080R060N08-B27	80	27	95	50	22	6					○
ON45-100R070N08-B32	100	32	115	63	25	7					○
ON45-125R080N08-B40	125	40	140	63	28	8					●
ON45-160R100N08-C40	160	40	175	63	28	10					●
ON45-200R120N08-C60 *	200	60	215	63	32	12					○
ON45-250R140N08-C60 *	250	60	265	63	32	14					○
ON45-315R160N08-D60 *	315	60	330	80	32	16					○

Remark: ● In stock ○ Reservations

Remark: Take ON45T-050R040N05-A22C* as an example, "T" stands for unequal pitch, "C" stands for internal cooling, and "*" stands for non-standard customized products

ON09 Cutter Specification



Surface processing

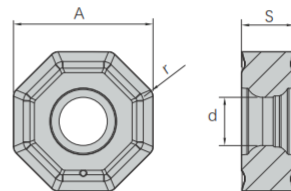
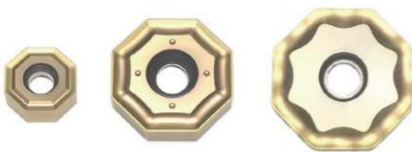
Chamfering processing

Form processing

Model	Size							Insert	Screws	Wrench	Stock
	D	d	D1	L	L1	T	ap (max)				
ON45-063R050N09-A22 *	63	22	78	40	20	5	6	ONGU09 0520-PM	S5012- A55-1	T20	○
ON45-080R060N09-B27	80	27	95	50	22	6					●
ON45-100R070N09-B32	100	32	115	63	25	7					●
ON45-125R080N09-B40	125	40	140	63	28	8					●
ON45-160R100N09-C40	160	40	175	63	28	10					●
ON45-200R120N09-C60 *	200	60	215	63	32	12					○
ON45-250R140N09-C60 *	250	60	265	63	32	14					○
ON45-315R160N09-D60 *	315	60	330	80	32	16					○

Model	Size							Insert	Screws	Wrench	Stock
	D	d	D1	L	L1	T	ap (max)				
ON45-063R050N09S-A22 *	63	22	78	40	20	5	6	ONGU09 0520-PM Special for heat resistant alloy	S5012- A55-1	T20	○
ON45-080R060N09S-A27	80	27	95	50	22	6					●
ON45-100R070N09S-B32	100	32	115	63	25	7					●
ON45-125R080N09S-B40	125	40	140	63	28	8					●

Inserts Specifications



Model	Material				Size			
	PVD			CVD	A	s	r	d
	HPS115B	HPA025B	HPA225B	HCK115B				
ONGU050408-PM	●	●	●		12.7	6.2	0.8	4.4
ONGU08T508-PM		●	●	●	20.2	5.79	0.8	5.3
ONGU090520-PM	●		●	●	22	5.8	0.8	5.3

Remark: The items marked with "*" are non-standard customized products

Remark: ● In stock ○ Reservations

Recommended Cutting Parameters

Workpieces material		Hardness	Insert material	Vc(m/min)	fz(mm/t)
P	Mild Steel(SS400、S10C etc.)	≤HB180	HPA025B	180 (100-250)	0.2 (0.15-0.25)
	Carbon steel, alloy steel (S50C, SCM440, etc.)	HB180-350	HPA025B	180 (100-250)	0.2 (0.15-0.25)
	Pre-hardened steel (NAK55, etc.)	HRC35-45	HPA025B	120 (80-160)	0.15 (0.1-0.2)
	High alloy steel (SKD, SK, etc.)	≤HB300	HPA025B	120 (80-160)	0.15 (0.1-0.2)
M	Stainless steel (SUS304, SUS316, etc.)	≤HB200	HPA225B	125 (100-150)	0.1 (0.05-0.15)
			HPA025B	125 (100-150)	0.1 (0.05-0.15)
			HPS115B	125 (100-150)	0.1 (0.05-0.15)
	Stainless steel (SUS304LN, SUS316LN, etc.)	≥HB200	HPA225B	100 (75-125)	0.1 (0.05-0.15)
			HPA025B	100 (75-125)	0.1 (0.05-0.15)
			HPS115B	100 (75-125)	0.1 (0.05-0.15)
K	Grey cast iron (FC250, etc.)	Tensile strength ≤350MPa	HCK115B	220 (150-300)	0.3 (0.2-0.4)
	Ductile iron (FCD450, etc.)	Tensile strength 360-500MPa	HCK115B	200 (150-250)	0.2 (0.1-0.3)
	Ductile iron (FCD500, etc.)	Tensile strength 500-800MPa	HCK115B	170 (150-200)	0.2 (0.1-0.3)
S	Titanium alloy (Ti-6Al-4V, etc.)	-	HPS115B	40 (20-50)	0.15 (0.1-0.25)
			HPA225B	40 (20-50)	0.15 (0.1-0.25)
	Heat-resistant alloys	-	HPS115B	30 (10-40)	0.15 (0.05-0.15)
			HPA225B	30 (10-40)	

A

B

C

D

E

XNF45

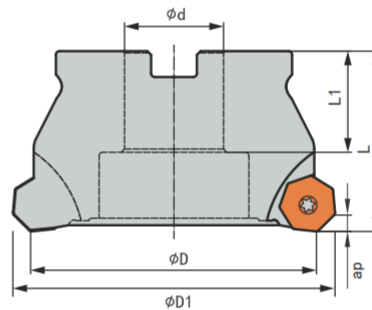
Face Milling Cutter



Prodcuts Features

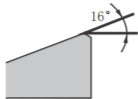
- 14-cutting-edge double sided inserts, more economical processing
- Thickened inserts design, strong resistance to breakage
- The insert edge setting M type meets the customer's general processing requirements
- Lead angle : 45°
- Max cutting depth: 4.5mm

Cutter Specifications



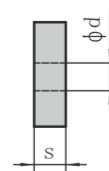
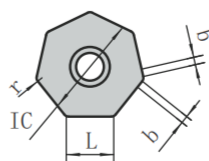
Model	Size							Insert	Screws	Wrench	Stock
	D	d	D1	L	L1	T	a_p (max)				
XNF45-050R04XN07-A22	50	22	60.38	40	20	4	4.5	XNHF0705	TS3510	T15	●
XNF45-063R05XN07-A22	63	22	73.38	50	20	5					●
XNF45-080R06XN07-A27	80	27	90.38	50	22	6					●
XNF45-100R07XN07-B32	100	32	110.38	50	25	7					●
XNF45-125R08XN07-B40	125	40	135.38	63	28	8					●
XNF45-160R10XN07-B40	160	40	170.38	63	28	10					●

Insert Grooving Introduction

Groove type	Graphics	Feature
M-groove		General type, suitable for semi-finishing to medium processing conditions, suitable for most materials

Remark: ● In stock ○ Reservations

Inserts Specifications



Model	Material						Size				
	PVD				CVD		IC	s	r	b/d	L
	HPA025B	HPA225B	HPS325B	HPS120D	HCK115B	HCK215B					
XNHFO705ANN-M	●	●	●		●	●	14.5	4.6	0.8	1.1	6.98
XNMU070508-S				●			14.5	4.6	0.8	1.1	6.98

Remark: ● In stock ○ Reservations

Recommended Cutting Parameters

	Workpieces material	Hardness	Insert material	Vc(m/min)	fz(mm/t)
P	Mild Steel(SS400, S10C etc.)	≤HB180	HPA025B	180 (100-250)	0.2 (0.15-0.25)
	Carbon steel, alloy steel (S50C, SCM440, etc.)	HB180-350	HPA025B	180 (100-250)	0.2 (0.15-0.25)
	Pre-hardened steel (NAK55, etc.)	HRC35-45	HPA025B	120 (80-160)	0.15 (0.1-0.2)
	High alloy steel (SKD, SK, etc.)	≤HB300	HPA025B	120 (80-160)	0.15 (0.1-0.2)
M	Stainless steel (SUS304, SUS316, etc.)	≤HB200	HPA225B	125 (100-150)	0.1 (0.05-0.15)
			HPA025B	125 (100-150)	0.1 (0.05-0.15)
	Stainless steel (SUS304LN, SUS316LN, etc.)	≥HB200	HPA225B	100 (75-125)	0.1 (0.05-0.15)
			HPA025B	100 (75-125)	0.1 (0.05-0.15)
K	Grey cast iron (FC250, etc.)	Tensile strength ≤350MPa	HCK115B	160 (100-200)	0.25 (0.2-0.3)
			HCK215B	160 (100-200)	0.25 (0.2-0.3)
	Ductile iron (FCD450, etc.)	Tensile strength 360-500MPa	HCK115B	160 (100-220)	0.2 (0.15-0.25)
			HCK215B	160 (100-200)	0.2 (0.15-0.25)
	Ductile iron (FCD500, etc.)	Tensile strength 500-800MPa	HCK115B	140 (90-190)	0.2 (0.15-0.25)
			HCK215B	140 (90-190)	0.2 (0.15-0.25)
S	Titanium alloy (Ti-6Al-4V, etc.)	-	HPS325B	60 (40-80)	0.15 (0.1-0.25)
	Heat-resistant alloys	-	HPS325B	30 (10-40)	0.15 (0.05-0.15)

HN45

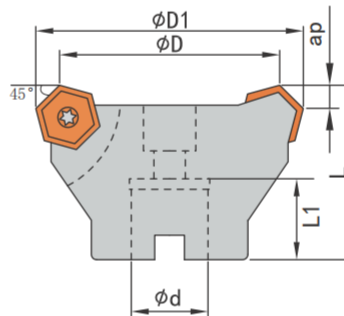
Face Milling Cutter



Prodcuts Features

- Achieve high feed processing
- Low cutting resistance
- High collapse resistance
- Super versatility
- 12-cutting-edge double sided inserts
- Cutter interface: Metric interface
- Lead angle: 45°
- Max cutting depth: 5mm
- Diameter range: $\Phi 50$ - $\Phi 315$ mm

Cutter Specifications

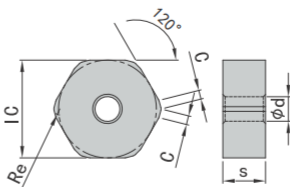
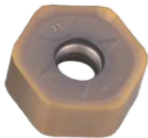


Model	Size							Insert	Screws	Wrench	Stock
	D	d	D1	L	L1	T	ap (max)				
HN45-50R04H09-A22	50	22	61.7	40	20	4	5	HNGX09 07ANSN	SC45 1260-F	T20	●
HN45-63R06H09-A22	63	22	74.7	40	20	6					●
HN45-80R06H09-A27	80	27	91.7	50	22	6					●
HN45-80R08H09-A27	80	27	91.7	50	22	8					●
HN45-100R06H09-B32	100	32	111.7	50	25	6					●
HN45-125R06H09-B40	125	40	136.7	63	28	6					●
HN45-125R08H09-B40	125	40	136.7	63	28	8					●
HN45-125R10H09-B40	125	40	136.7	63	28	10					●
HN45-160R08H09-C40	160	40	171.7	63	28	8					●
HN45-160R10H09-C40	160	40	171.7	63	28	10					●
HN45-160R12H09-C40	160	40	171.7	63	28	12					●
HN45-200R12H09-D60 *	200	60	211.7	63	32	12					○
HN45-315R16H09-D60 *	315	60	326.7	80	32	16					○

Remark: The items marked with "*" are non-standard customized products

Remark: ● In stock ○ Reservations

Inserts Specifications



Model	Material			Size				
	PVD		CVD	IC	S	Re	C	d
	HPA225B	HPA025B	HCK115B					
HNGX0907ANSN-M	●	●	○	16.5	7.13	1	1.5	4.86
HNGX0907ANSN-R	●	●	●	16.5	7.13	1	1.5	4.86

Remark: ● In stock ○ Reservations

Recommended Cutting Parameters

	Workpieces material	Hardness	Insert material	Vc(m/min)	fz(mm/t)
P	Mild Steel (SS400、S10C etc.)	≤HB180	HPA025B	250 (200-300)	0.3 (0.2-0.4)
	alloy steel (SCM*** etc.)	HB180-280	HPA025B	180 (100-250)	0.2 (0.15-0.25)
	alloy steel (SNCM439 etc.)	HB280-350	HPA025B	140 (100-180)	0.3 (0.2-0.4)
M	Stainless steel (SUS304, SUS316, etc.)	≤HB200	HPA225B	150 (100-200)	0.2 (0.1-0.3)
K	Grey cast iron (FC300, etc.)	Tensile strength ≤ 350MPa	HCK115B	220 (150-300)	0.3 (0.2-0.4)
			HPA225B	180 (130-230)	0.3 (0.2-0.4)
	Ductile iron (FCD450, etc.)	Tensile strength ≤ 450MPa	HCK115B	200 (150-250)	0.2 (0.1-0.3)
			HPA225B	170 (120-220)	0.2 (0.1-0.3)
	Ductile iron (FCD700, etc.)	Tensile strength ≤ 800MPa	HCK115B	170 (150-200)	0.2 (0.1-0.3)
			HPA225B	150 (125-170)	0.2 (0.1-0.3)
H	High hardness steel (SKD61 etc.)	HRC40-50	HPA025B	80 (60-100)	0.15 (0.1-0.2)

4033

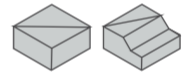
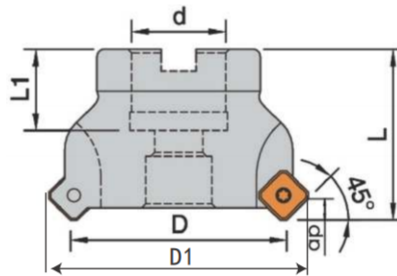
Face Milling Cutter



Prodcuts Features

- Unique "Z" design and special cutting edge ensure
- Low cutting resistance
- Max cutting depth: 5mm
- Reduce loads and extend tool life
- Excellent cutting process
- Diameter range: $\Phi 50$ - $\Phi 315$ mm
- 8-edge angles, good economy
- Lead angle: 45°

Cutter Specifications

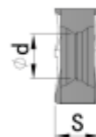
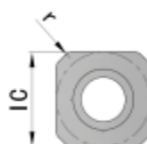


Model	Size							Insert	Screws	Wrench	Stock
	D	d	D1	L	L1	T	$a_{p(max)}$				
4033. A. 050. Z04. SN12-22 *	50	22	64.5	40	20	4	5	SNMX1 205ATN	TS4015	T15	○
4033. A. 063. Z05. SN12-22	63	22	77.5	40	20	5					●
4033. A. 080. Z07. SN12-27	80	27	94.5	50	22	7					●
4033. B. 100. Z08. SN12-32	100	32	114.5	50	28	8					●
4033. B. 125. Z10. SN12-40	125	40	139.5	63	35	10					●
4033. B. 160. Z12. SN12-40 *	160	40	174.5	63	35	12					○
4033. C. 200. Z14. SN12-60 *	200	60	214.5	63	42	14					○
4033. C. 250. Z16. SN12-60 *	250	60	264.5	63	42	16					○
4033. D. 315. Z20. SN12-60 *	315	60	329.5	63	57	20					○

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Remark: ● In stock ○ Reservations

Inserts Specifications



Model	Material				Size			
	CVD		PVD		IC	s	r	d
	HCP330B	HCK115B	HPA025B	HPA225B				
SNMX1205ATN	●	●	●	●	12.7	6.2	0.8	6

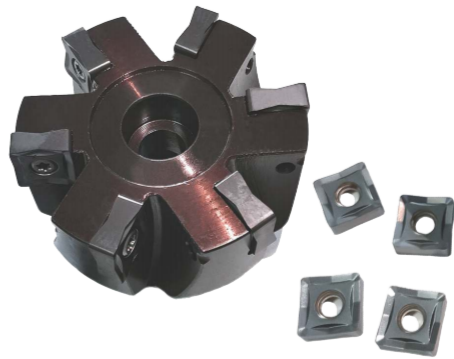
Remark: ● In stock ○ Reservations

Recommended Cutting Parameters

	Workpieces material	Hardness	Insert material	Vc(m/min)	fz(mm/t)
P	Carbon steel, alloy steel (S45C, SCM440 etc.)	HB180-350	HPP330B	200 (150-250)	0.2 (0.15-0.25)
			HPA025B	120 (80-160)	0.2 (0.15-0.25)
M	Austenitic stainless steel (SUS304, SUS316 etc.)	≤HB200	HPA225B	120 (70-160)	0.18 (0.13-0.22)
	Austenitic stainless steel (SUS304LN, SUS316LN etc.)	>HB200	HPA225B	100 (60-140)	0.18 (0.13-0.22)
K	Grey cast iron (FC300, etc.)	≤350MPa	HCK115B	220 (200-270)	0.2 (0.15-0.25)
			HPA225B	180 (130-250)	0.2 (0.15-0.25)
	Ductile iron (FCD700, etc.)	≤800MPa	HCK115B	200 (150-250)	0.2 (0.15-0.25)
			HPA225B	180 (130-250)	0.2 (0.15-0.25)
H	High hardness steel (SKD61, SKT4 etc.)	HRC40-50	HPA025B	50 (30-70)	0.08 (0.05-0.12)

4047

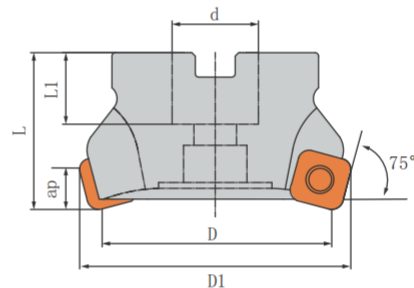
Face Milling Cutter



Product Features

- 8-cutting-edge indexable inserts, suitable for different lead angles
- Design effectively ensures product strength
- The insert is larger and thicker, and the cutting edge is strengthened
- Positive rake angle geometry combined with stable indexable inserts ensures maximum productivity
- Lead angle: 75°
- Max cutting depth: 13.5mm

Cutter Specifications

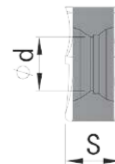
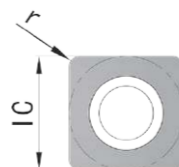


Model	Size							Insert	Screws	Wrench	Stock
	D	d	D1	L	L1	T	$a_{p(max)}$				
4047. A. 063. Z05. 08-22 *	63	22	72.5	40	20	5	13.5	SNGX16	S5012-A55-1	T20	●
4047. A. 080. Z05. 08-27 *	80	27	89.5	50	22	5					○
4047. B. 100. Z08. 08-32 *	100	32	109.5	50	25	8					●
4047. B. 125. Z10. 08-40 *	125	40	134.5	63	28	10					●
4047. B. 160. Z10. 08-40 *	160	40	169.5	63	28	10					○
4047. C. 160. Z12. 08-40 *	160	40	169.5	63	28	12					○
4047. C. 200. Z14. 08-60 *	200	60	209.5	63	32	14					●
4047. C. 250. Z16. 08-60 *	250	60	259.5	63	32	16					○

Remark: The items marked with "*" are non-standard customized products

Remark: ● In stock ○ Reservations

Inserts Specifications



Model	Material						Size			
	CVD		PVD				IC	s	r	d
	HCK115B	HCP340B	HPA025B	HPA220B	HPA225B	HPH125B				
SNGX160612EN-M	●	●	●	●	●	○	16	7.7	1.2	6

Remark: ● In stock ○ Reservations

Recommended Cutting Parameters

	Workpieces material	Hardness	Insert material	Vc(m/min)	fz(mm/t)
P	Carbon steel, alloy steel (S45C, SCM440 etc.)	HB180-350	HPA025B	120 (80-160)	0.20 (0.15-0.25)
M	Austenitic stainless steel (SUS304, SUS316 etc.)	≤HB200	HPA025B	120 (70-160)	0.18 (0.13-0.22)
	Austenitic stainless steel (SUS304LN, SUS316LN etc.)	>HB200	HPA025B	100 (60-140)	0.18 (0.13-0.22)
K	Grey cast iron (FC300, etc.)	≤350MPa	HCK115B	220 (200-270)	0.20 (0.15-0.25)
	Ductile iron (FCD700, etc.)	≤800MPa	HCK115B	200 (150-250)	0.20 (0.15-0.25)
H	High hardness steel (SKD61, SKT4 etc.)	HRC40-50	HPA025B	50 (30-70)	0.08 (0.05-0.12)

4048

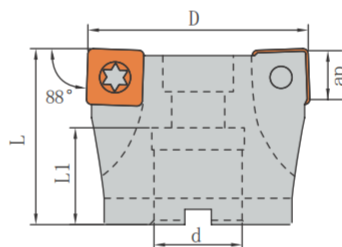
Face Milling Cutter



Product Features

- 8-cutting-edge indexable inserts, suitable for different lead angles
- Max cutting depth: 11mm, 14.5mm
- The insert is larger and thicker, and the cutting edge is strengthened
- Rake angle slot combined with stable indexable inserts ensures maximum productivity
- Lead angles: 88°
- Design effectively ensures product strength

Cutter Specifications



Model	Size						Insert	Screws	Wrench	Stock
	D	d	L	L1	T	ap (max)				
4048. B. 050. Z04. 06-22	50	22	40	21	4	11	SNMX1205	TS4015	T15	●
4048. B. 063. Z05. 06-22	63	22	40	21	5					●
4048. B. 063. Z05. 06-25. 4	63	25.4	40	21	5					○
4048. B. 080. Z06. 06-25. 4	80	25.4	50	25	6					○
4048. B. 080. Z06. 06-27	80	27	50	25	6					●
4048. B. 100. Z07. 06-31. 75	100	31.75	50	25	7					●
4048. B. 100. Z07. 06-31. 75	100	31.75	50	25	11					●
4048. B. 125. Z08. 06-38. 1	125	38.1	63	38	8					○
4048. B. 125. Z08. 06-40	125	40	63	38	8					●
4048. A. 063. Z04. 08-22 *	63	22	40	20	4	14.5	SNGX1606	S5012-A55-1	T20	○
4048. A. 063. Z05. 08-22 *	63	22	40	20	5					○
4048. A. 080. Z05. 08-27 *	80	27	50	22	5					○
4048. A. 080. Z06. 08-27 *	80	27	50	22	6					○
4048. B. 100. Z06. 08-32 *	100	32	50	25	6					○
4048. B. 100. Z08. 08-32 *	100	32	50	25	8					○
4048. B. 125. Z08. 06-40 *	125	40	63	28	8					○
4048. C. 200. Z12. 08-60 *	200	60	63	32	12					○
4048. C. 250. Z14. 08-60 *	250	60	63	32	14					○

Remark: The items marked with "*" are non-standard customized products

Remark: ● In stock ○ Reservations

Inserts Specifications



Model	Material					Size			
	CVD			PVD		IC	s	r	d
	HCP125B	HCP330B	HCK115B	HPA025B	HPA225B				
SNMX120512-M	○	○	○	●	○	12.7	6.2	1.2	6
SNEU1206ZNN-M	●	○	●	●	●	12.7	6.2	0.8	6
SNGX160612EN-M			●	●		16	7.7	1.2	6

Remark: ● In stock ○ Reservations

Remark:SNEU1206ZNN-M with wiper

Recommended Cutting Parameters

	Workpieces material	Hardness	Insert material	Vc(m/min)	fz(mm/t)
P	Carbon steel, alloy steel (S45C, SCM440 etc.)	HB180-350	HCP330B	200 (150-250)	0.20 (0.15-0.25)
			HPA025B	120 (80-160)	0.20 (0.15-0.25)
M	Austenitic stainless steel (SUS304, SUS316 etc.)	≤HB200	HPA225B	120 (70-160)	0.18 (0.13-0.22)
	Austenitic stainless steel (SUS304LN, SUS316LN etc.)	>HB200	HPA225B	100 (60-140)	0.18 (0.13-0.22)
K	Grey cast iron (FC300, etc.)	≤350MPa	HCK115B	220 (200-270)	0.20 (0.15-0.25)
			HPA225B	180 (130-250)	0.20 (0.15-0.25)
	Ductile iron (FCD700, etc.)	≤800MPa	HCK115B	200 (150-250)	0.20 (0.15-0.25)
			HPA225B	180 (130-250)	0.20 (0.15-0.25)
H	High hardness steel (SKD61, SKT4 etc.)	HRC40-50	HPA025B	50 (30-70)	0.08 (0.05-0.12)

CMF

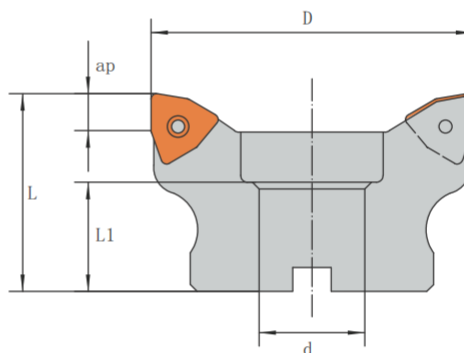
Face Milling Cutter



Product Features

- The insert edge is specially designed with a large rake angle for easy cutting
- G-grade insert precision, universal insert for left and right
- 6-cutting-edge inserts, highly economical
- The insert positioning surface has a large contact area, increased thickness improves the anti-break strength
- Lead angle: 90°
- Max cutting depth: 8mm
- Diameter range: $\Phi 63$ - $\Phi 250$ mm
- Cutter interface: Metric interface

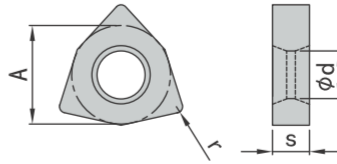
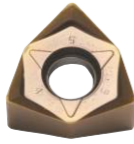
Cutter specifications



Model	Size						Insert	Screws	Wrench	Stock
	D	d	L	L1	T	$\frac{ap}{max}$				
CMFWN90063R-4T	63	22	40	21	4	8	WNGU080608N-GM	S5012-A55-1	T20	●
CMFWN90063R-5T	63	22	40	21	5					●
CMFWN90080R-5T	80	27	50	26.5	5					●
CMFWN90080R-7T	80	27	50	26.5	7					●
CMFWN90100R-7T	100	32	50	30	7					●
CMFWN90125R-8T	125	40	63	33	8					●
CMFWN90160R-10T	160	40	63	32	10					●
CMFWN90200R-12T	200	60	63	40	12					●
CMFWN90250R-14T	250	60	63	40	14					○

Remark: ● In stock ○ Reservations

Inserts specifications



Model	Material			Size			
	PVD		CVD	A	s	r	d
	HPA025B	HPA225B	HCK125B				
WNGU080608N-GM	●	●	●	14.03	8.28	0.8	6.17

Remark: ● In stock ○ Reservations

Recommended cutting parameters

	Workpieces material	Hardness	Insert material	Vc(m/min)	fz(mm/t)
P	Mild Steel(SS400、S10C etc.)	HB200-300	HPA025B	180 (120-250)	0.2 (0.1-0.3)
	alloy steel(SCM etc.)	HB150-300	HPA025B	180 (100-220)	0.2 (0.1-0.3)
	Mold Steel(SKD、NAK etc.)	≤HB300	HPA025B	140 (80-180)	0.15 (0.1-0.25)
M	Stainless steel(SUS304, SUS316, etc.)	-	HPA225B	150 (100-200)	0.15 (0.1-0.25)
K	Grey cast iron(FC300, etc.)	Tensile strength ≤350MPa	HCK125B	220 (200-270)	0.2 (0.15-0.25)
			HPA225B	180 (120-250)	0.2 (0.1-0.3)
	Ductile iron(FCD450, etc.)	Tensile strength ≤450MPa	HCK125B	220 (150-250)	0.2 (0.15-0.25)
			HPA225B	150 (100-200)	0.15 (0.1-0.25)

ASX445

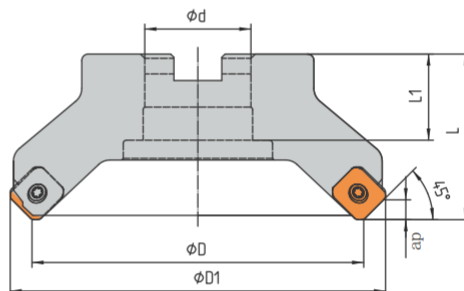
Face Milling Cutter



Product Features

- High-precision grinding inserts with high positioning accuracy
- Large radial and axial rake angles, easy cutting
- Quickly replace the insert, simple and convenient
- Carbide insert pads are used to protect the cutter
- Distance diameter range: $\Phi 50\text{--}\Phi 315\text{mm}$
- Cutter interface: Metric interface
- Lead angle: 45°
- Max cutting depth: 8mm
- Suitable for processing thin-walled parts, box parts and steel parts, stainless steel and castings with poor rigidity in process systems

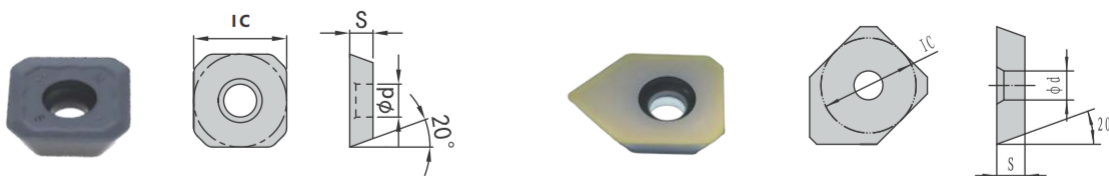
Cutter specifications



Model	Size							Insert	Shim	Shim screw	Inserts crew	Screw wrench	Wrench	Stock
	D	d	D1	L	L1	T	a_p (max)							
ASX445L050-22-4T	50	22	62.4	40	20	4	6	SEET12T3 XEGT12T3	STASX445 N547	SM0508	TS3510	L3.5	T15	○
ASX445L063-22-5T	63	22	75.4	40	20	5								○
ASX445R050-22-4T	50	22	62.4	40	20	4								○
ASX445R063-22-5T	63	22	75.4	40	20	5								●
ASX445R080-27-6T	80	27	92.4	50	22	6								●
ASX445R100-32-7T	100	32	112.4	50	25	7								●
ASX445R125-40-8T	125	40	137.4	63	28	8								●
ASX445R160-40-10T	160	40	172.4	63	28	10								●
ASX445R200-60-12T	200	60	212.4	63	32	12								●
ASX445R250-60-14T	250	60	262.4	63	32	14								○
ASX445R315-60-18T	315	60	327.4	80	32	18								○

Remark: ● In stock ○ Reservations

Inserts specifications



Model	Material						Size		
	CVD		PVD		Cermet	Carbide	IC	s	d
	HCP330B	HCK115B	HPA025B	HPA225B	HN200D	HWK001B			
SEET12T3-HL						●	13.4	3.97	4.1
SEET12T3-FM	●		●	●			13.4	3.97	4.1
SEET12T3-SM	●	●	●	●		○	13.4	3.97	4.1
SEET12T3AGEN					●		13.4	3.97	4.1
XEGT12T3-W			○	●			13.4	3.97	4.1

Remark: ● In stock ○ Reservations

Recommended cutting parameters

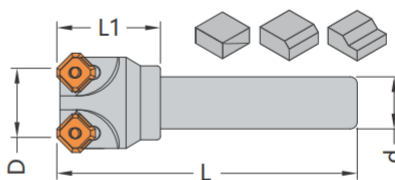
Workpieces material		Hardness	Insert material	Vc(m/min)	Finishing-light cutting		Medium cutting	
					fz(mm/t)	Corresponding chip breaker	fz(mm/t)	Corresponding chip breaker
P	Mild Steel (SS400, S10C etc.)	≤HB180	HCP330B	260 (210-350)	0.15 (0.1-0.2)	FM	0.2 (0.1-0.3)	SM
			HPA025B	180 (130-230)	0.15 (0.1-0.2)		0.2 (0.1-0.3)	
	Carbon steel, alloy steel (S45C, SCM440, etc.)	HB180-280	HCP330B	240 (210-300)	0.15 (0.1-0.2)	FM	0.2 (0.1-0.3)	SM
		HB280-350	HCP330B	180 (130-230)	0.15 (0.1-0.2)		0.2 (0.1-0.3)	
M	Stainless steel (SUS304 etc.)	≤HB270	HPA225B	200 (150-250)	0.15 (0.1-0.2)	FM	0.2 (0.1-0.3)	SM
K	cast iron, Ductile iron (FC250/FCD400, etc.)	Tensile strength ≤ 450MPa	HCK115B	180 (150-230)	0.15 (0.1-0.2)	FM	0.2 (0.1-0.3)	SM
			HPA225B	160 (130-200)	0.15 (0.1-0.2)		0.2 (0.1-0.3)	
		Tensile strength ≥ 450MPa	HCK115B	180 (150-230)	0.15 (0.1-0.2)		0.2 (0.1-0.3)	
			HPA225B	120 (100-180)	0.15 (0.1-0.2)		0.2 (0.1-0.3)	
N	Non-ferrous metals	-	HWK001B	300 (200-500)	0.05-0.2	HL	0.05-0.2	HL

SE445

Face Milling Cutter

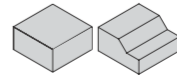
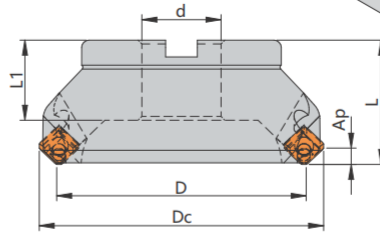


Cutter specifications



Model	Size					Insert	Screws	Wrench
	D	d	L	L1	T			
SE445R232S20	32	20	110	45	2	SE*1204AFER	TS5006	TK20
SE445R340S20	40	20	110	45	3			
SE445R450S20	50	20	120	45	4			
SE445R450S25	50	25	120	45	4			
SE445R563S25	63	25	120	45	5			
SE445R563S32	63	25	120	45	5			

Cutter specifications



Model	Size							Insert	Screws	Wrench
	D	Dc	d	L	L1	T	Ap			
SE445R050-22-4T	50	64	22	40	20	4	4	SE**1204*	TS5006	TK20
SE445R063-22-5T	63	77	22	45	21	5				
SE445R063-25.4-5T	63	77	25.4	45	21	5				
SE445R080-27-6T	80	94	27	50	26	6				
SE445R080-31.75-6T	80	94	31.75	50	26	6				
SE445R100-32-6T	100	114	32	50	32	6				
SE445R100-31.75-6T	100	114	31.75	50	32	6				
SE445R125-40-8T	125	139	40	63	38	8				
SE445R125-38.1-8T	125	139	38.1	63	38	8				
SE445R160-40-10T	160	174	40	63	38	10				
SE445R160-50.8-10T	160	174	50.8	63	38	10				
SE445R200-47.625-12T	200	214	47.625	63	38	12				
SE445R250-47.625-14T	200	264	47.625	63	38	14				

Model	Size							Insert	Screws	Wrench
	D	Dc	d	L	L1	T	Ap			
SE445L050-22-4T	50	64	22	40	20	4	4	SE**1204*	TS5006	TK20
SE445L063-22-5T	63	77	22	45	21	5				
SE445L063-25.4-5T	63	77	25.4	45	21	5				
SE445L080-27-6T	80	94	27	50	26	6				
SE445L080-31.75-6T	80	94	31.75	50	26	6				
SE445L100-32-6T	100	114	32	50	32	6				
SE445L100-31.75-6T	100	114	31.75	50	32	6				
SE445L125-40-8T	125	139	40	63	38	8				
SE445L125-38.1-8T	125	139	38.1	63	38	8				
SE445L160-40-10T	160	174	40	63	38	10				
SE445L160-50.8-10T	160	174	50.8	63	38	10				
SE445L200-47.625-12T	200	214	47.625	63	38	12				
SE445L250-47.625-14T	200	264	47.625	63	38	14				

A

B

C

D

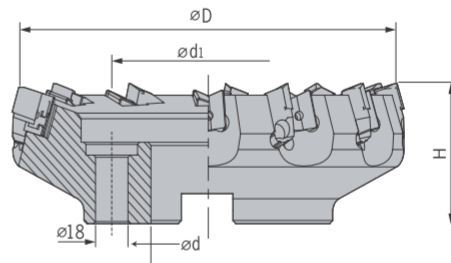
E

FP45

Face Milling Cutter



Cutter specifications

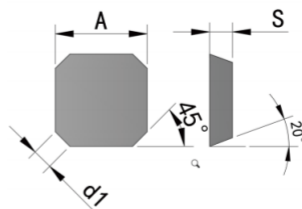


Model	Size						Insert	Screws	Wrench	Milling Fixture	Wedge
	D	d	d1	H	ap	T					
FP45PTR0805A25.4	80	25.4	—	50	5.5/5.7	5					
FP45PTR1005A31.75	100	31.75	—	50	5.5/5.7	5					
FP45PTR1256A38.1	125	38.1	—	63	5.5/5.7	6					
FP45PTR1608A50.8	160	50.8	—	63	5.5/5.7	8					
FP45PTR20010A47.625	200	47.625	101.6	63	5.5/5.7	10					
FP45PTR25012A47.625	250	47.625	101.6	63	5.5/5.7	12				FC2250-SE1203-45	SV-128170-15-45
FP45PTR30014A47.625	300	47.625	101.6	63	5.5/5.7	14	SE**1204*	TS5006	TK20	FC2250-SE1504-45	
FP45PTR0805B27	80	27	—	50	5.5/5.7	5					
FP45PTR1005B32	100	32	—	50	5.5/5.7	5					
FP45PTR1256B40	125	40	—	63	5.5/5.7	6					
FP45PTR1608B40	160	40	—	63	5.5/5.7	8					
FP45PTR20010B60	200	60	101.6	63	5.5/5.7	10					
FP45PTR25012B60	250	60	101.6	63	5.5/5.7	12					
FP45PTR30014B60	300	60	101.6	63	5.5/5.7	14					

Remark:

1. The main thing is to replace the insert seat. The same FP specification cutter head can use two types of blades, SEKN1203 and SEKN1504.
2. Order model example: The blade used is SEKN1203, FP45PTR0805A25.4-SE1203.

Inserts specifications



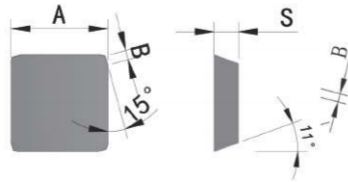
Model	Material						Size				
	CVD				PVD		A	B	S	d1	d1
	HCP330B	HCP340B	HCP350B	HCK115B	HPA025B	HPA225B					
SEKN1203AFN-D	○	○	○	○	●	○	12.7	1	3.18	1.4	-
SEKN1203AFTN	●	○	●	●	●	●	12.7	1	3.18	1.4	-
SEKN1504AFN			●	●	●		15.875	1	4.76	1.4	-
SEKN1504AFTN							15.875	1	4.76	1.4	-

Remark: ● In stock ○ Reservations

Recommended cutting parameters

Workpieces material		Hardness	Insert material	Vc(m/min)	fz(mm/t)
P	Mild Steel (SS400、S10C etc.)	≤HB180	HCP330B	200 (160-250)	0.2 (0.1-0.3)
			HCP340B	200 (160-250)	0.2 (0.1-0.3)
			HCP350B	200 (160-250)	0.2 (0.1-0.3)
			HPA025B	140 (80-250)	0.2 (0.1-0.3)
	Carbon steel, alloy steel (S45C, SCM440, etc.)	HB180-280	HCP330B	180 (140-230)	0.2 (0.1-0.3)
			HCP340B	180 (140-230)	0.2 (0.1-0.3)
			HCP350B	180 (140-230)	0.2 (0.1-0.3)
			HPA025B	180 (140-230)	0.2 (0.1-0.3)
		HB280-350	HCP330B	140 (100-220)	0.15 (0.1-0.2)
			HCP340B	140 (100-220)	0.15 (0.1-0.2)
			HCP350B	180 (140-200)	0.15 (0.1-0.2)
			HPA025B	120 (80-160)	0.15 (0.1-0.2)
M	Stainless steel (SUS304, etc.)	≤HB200	HPA225B	150 (100-200)	0.2 (0.1-0.3)
K	cast iron (FC300, FC400 etc.)	Tensile strength≤450MPa	HCK115B	160 (100-220)	0.2 (0.1-0.3)
			HPA025B	160 (100-220)	0.2 (0.1-0.3)

Inserts specifications



Model	Material							Size		
	CVD				PVD		Carbide	A	B	S
	HCP330B	HCP340B	HCP350B	HCK115B	HPA025B	HPA225B	HWK202B			
SPGN120308		○	○	●	○	○		9.525	—	3.18
SPKN1203EDFR	●				○	○	●	12.7	1.4	3.18
SPKN1203EDSKR					○	○		12.7	1.4	3.18
SPKN1203EDTR	●			●	○	○		12.7	1.4	3.18
SPKN1504EDFL	○				○	○	●	15.875	1.4	4.76
SPKN1504EDFR					○	○	○	15.875	1.4	4.76
SPKN1504EDR					○	○	●	15.875	1.4	4.76
SPKN1504EDSKR	●				○	○	○	15.875	1.4	4.76
SPKN1504EDTR					○	○		15.875	1.4	4.76

Remark: ● In stock ○ Reservations

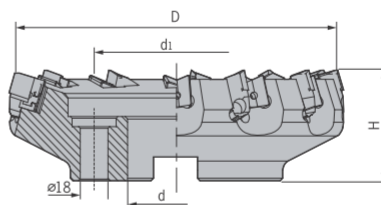
Recommended cutting parameters

Workpieces material		Hardness	Insert material	Vc(m/min)	fz(mm/t)
P	Mild Steel (SS400, S10C etc.)	≤HB180	HCP330B	200(160-250)	0.2(0.1-0.3)
			HCP340B	200(160-250)	0.2(0.1-0.3)
			HCP350B	200(160-250)	0.2(0.1-0.3)
			HPA025B	180(100-250)	0.2(0.1-0.3)
	Carbon steel, alloy steel (S45C, SCM440, etc.)	HB180-280	HCP330B	200(160-250)	0.2(0.1-0.3)
			HCP340B	200(160-250)	0.2(0.1-0.3)
			HCP350B	200(160-250)	0.2(0.1-0.3)
			HPA025B	180(100-250)	0.2(0.1-0.3)
		HB280-350	HCP330B	180(140-200)	0.15(0.1-0.2)
			HCP340B	180(140-200)	0.15(0.1-0.2)
			HCP350B	180(140-200)	0.15(0.1-0.2)
			HPA025B	120(80-160)	0.15(0.1-0.2)
M	Stainless steel (SUS304 etc.)	≤HB200	HPA225B	150(100-200)	0.2(0.1-0.3)
K	cast iron (FC300, FC400 etc.)	Tensile strength ≤450MPa	HCK115B	175(100-250)	0.2(0.1-0.3)
			HPA025B	160(100-220)	0.2(0.1-0.3)
N	Aluminum alloy	—	HWK202B	1000(200-1500)	0.15(0.05-0.25)
H	High hardness steel	HRC40-55	HPA025B	80(60-100)	0.15(0.05-0.25)

FP75

Face Milling Cutter

Cutter specifications



Model	Size						Insert	Screws	Wrench	Milling Fixture	Wedge
	D	d	d1	H	ap	T					
FP75PTR0805A25.4	80	25.4	—	50	6/8	5	SPKN120308 SPKN1504	H516	T04	FC2250- SP1203-75 FC2250- SP1504-75	SV- 128170- 15-75
FP75PTR1006A31.75	100	31.75	—	50	6/8	6					
FP75PTR1258A38.1	125	38.1	—	50	6/8	8					
FP75PTR16010A50.8	160	50.8	—	50	6/8	10					
FP75PTR20014A47.625	200	47.625	101.6	50	6/8	14					
FP75PTR25016A47.625	250	47.625	101.6	50	6/8	16					
FP75PTR30014A47.625	300	47.625	101.6	50	6/8	14					
FP75PTR0804B27	80	27	—	50	6/8	4					
FP75PTR1006B32	100	32	—	50	6/8	6					
FP75PTR1258B40	125	40	—	50	6/8	8					
FP75PTR16010B40	160	40	—	50	6/8	10					
FP75PTR20012B60	200	60	101.6	50	6/8	12					
FP75PTR25014B60	250	60	101.6	50	6/8	14					
FP75PTR30016B60	300	60	101.6	50	6/8	16					

Remark: The main thing is to replace the insert seat. The same FP specification cutter head can use two types of blades, SPKN120308 and SPKN1504ED.

A

B

C

D

E