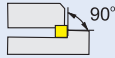
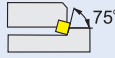
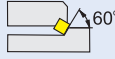
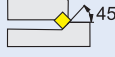
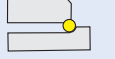
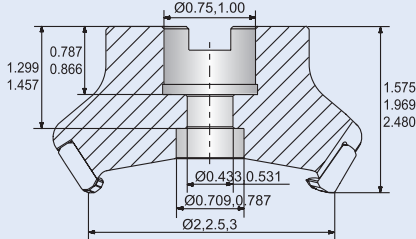
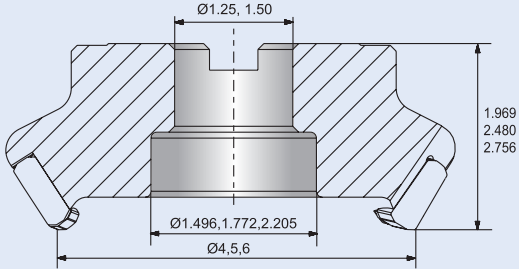
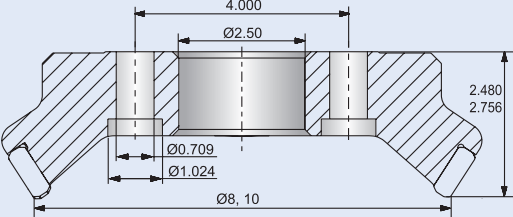
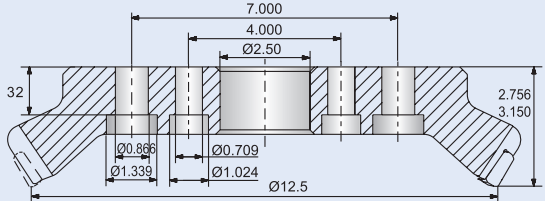


Cutter type		Approach angle		Sequence number of series
FM	Face milling	P	90° 	Cutting diameter ØD Side and face milling tool:diameter X cutting edge width
EM	Square shoulder milling	E	75° 	
HM	Helical end milling	D	60° 	Arbor/spindle Mounting (as follow figure)
SM	Side and face milling	A	45° 	
BM	Profile milling	R		
CM	Chamfer milling			
XM	Special milling			

FM A 02 - 2.00" - A

Arbor/spindle Mounting			
A		B	
C		D	

Arbor hole size(inch)
(as follow figure)

Insert shape			
 C	 D	 R	 S
 T	 L	 H	 O

Insert clearance angle

N	B	C	P	D	E	F
0°	5°	7°	11°	15°	20°	25°

0.75"

S

E

12

04

C

D

Cutting edge length of insert

Inscribed circle	Insert shape					
	C	D	R	S	T	L
0.219	—	—	—	—	09	—
0.250	06	07	—	—	11	—
0.375	09	11	09	09	16	—
0.500	12	15	12	12	22	—
0.625	16	19	15	15	27	—
0.750	19	—	19	19	33	—
1.000	25	—	25	25	44	2

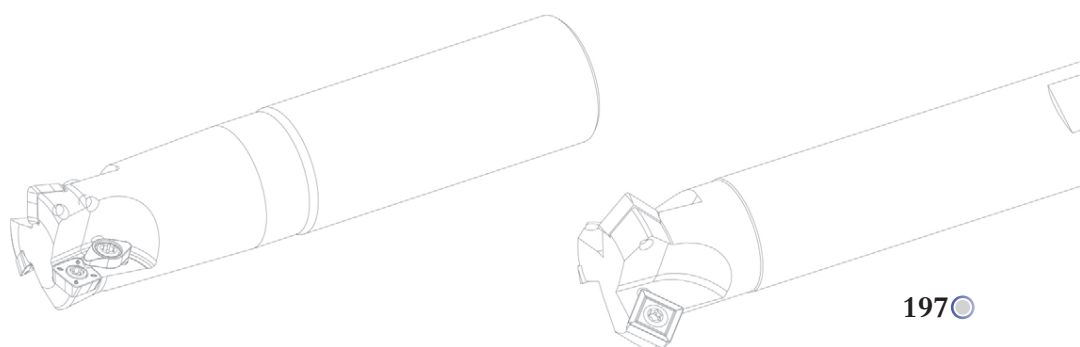
Number of teeth

(number of flute for corn-shaped milling tools)

Cutting direction

(Default:Right L:left)

Internal cooling structure



Face milling tools

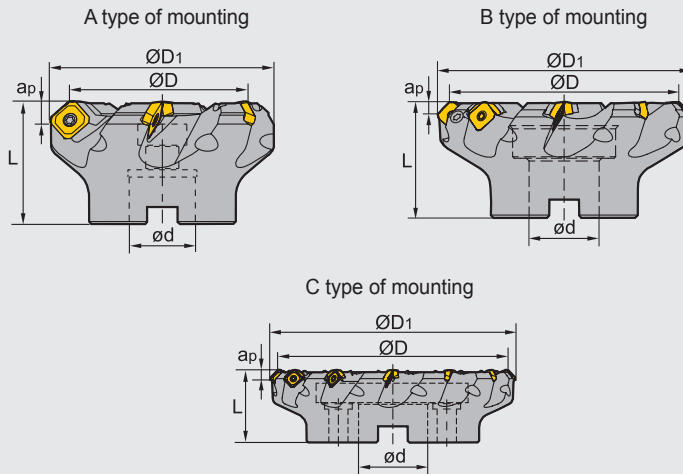
Kr:45°



FMA01 P M K N S



Close pitch



Specification of tools

Type		Dimensions(inch)						
		ØD	ØD1	Ød	L	apmax	Z	Interface form
FMA01	-2.00"-A0.75"-SE12-04	2.000	2.510	0.750	1.500	0.236	4	A
	-2.50"-A0.75"-SE12-05	2.500	3.010	0.750	1.500	0.236	5	A
	-3.00"-A1.00"-SE12-06	3.000	3.510	1.000	2.000	0.236	6	A
	-4.00"-B1.25"-SE12-07	4.000	4.510	1.250	2.000	0.236	7	B
	-4.00"-B1.25"-SE18-04	4.000	4.510	1.250	2.500	0.384	4	B
	-5.00"-B1.50"-SE12-08	5.000	5.510	1.500	2.500	0.236	8	B
	-5.00"-B1.50"-SE18-05	5.000	5.510	1.500	2.500	0.384	5	B
	-6.00"-B1.50"-SE12-10	6.000	6.510	1.500	2.500	0.236	10	B
	-6.00"-B1.50"-SE18-06	6.000	6.510	1.500	2.500	0.384	6	B
	-8.00"-C2.50"-SE12-12	8.000	8.510	2.500	2.500	0.236	12	C
	-8.00"-C2.50"-SE18-08	8.000	8.510	2.500	2.500	0.384	8	C
	-10.0"-C2.50"-SE12-14	10.00	10.510	2.500	2.500	0.236	14	C

Spare parts

Diameter ØD	Insert specification	Insert screw	Shim	Shim screw	Wrench	Wrench	Sketch of installation
Ø2", Ø2.5" Ø3", Ø4"	SEET12T3-□□	I60M3.5×10	--	--	WT15IS	--	
Ø5", Ø6" Ø8", Ø10"	SEET12T3-□□	I60M3.5×12	S13BS	SM5×7XA		WH35L	
Ø4"-Ø8"	SEET18T6-DM	I60M5×17	S18BS	SM8×9XA	WT20IT	WH50L	

Face milling tools **Kr:45°**

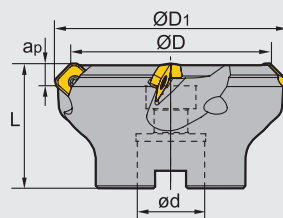


FMA02 **P M K N S**

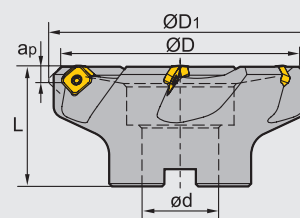


Coarse pitch differential

A type of mounting



B type of mounting

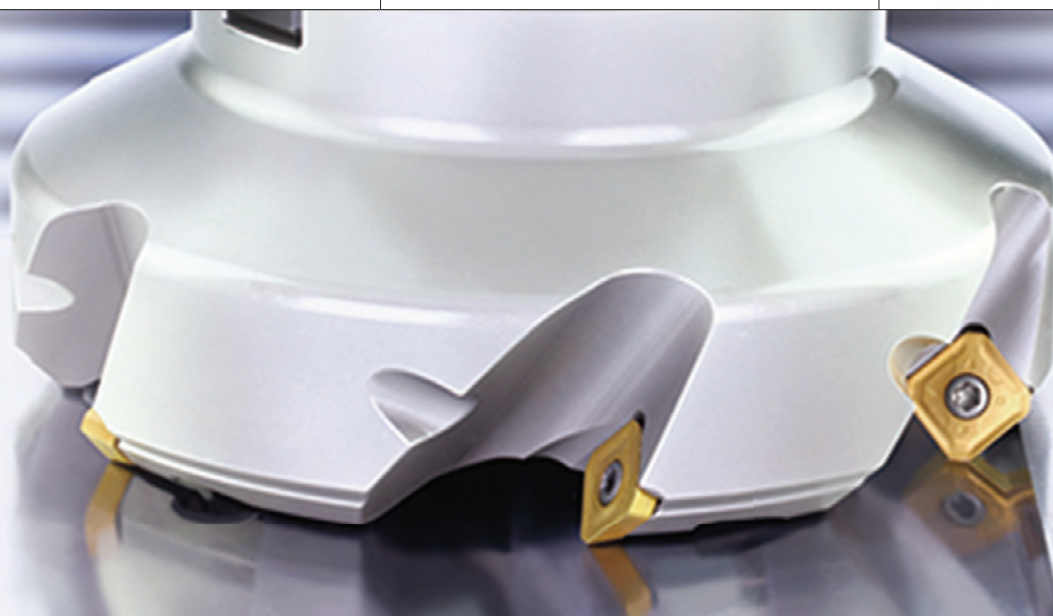


Specification of tools

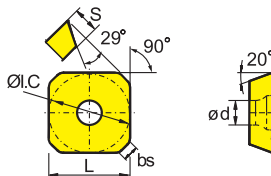
Type		Dimensions(inch)						
		ØD	ØD ₁	Ød	L	ap _{max}	Z	Interface form
FMA02	-2.00"-A0.75"-SE12-04	2.000	2.510	0.750	1.500	0.236	4	A
	-2.50"-A0.75"-SE12-05	2.500	3.010	0.750	1.500	0.236	5	A
	-3.00"-A1.00"-SE12-05	3.000	3.510	1.000	2.000	0.236	5	A
	-4.00"-B1.25"-SE12-07	4.000	4.510	1.250	2.000	0.236	7	B
	-5.00"-B1.50"-SE12-08	5.000	5.510	1.500	2.500	0.236	8	B

Spare parts

Insert screw	Wrench	Sketch of installation
		
I60M3.5×10	WT15IS	

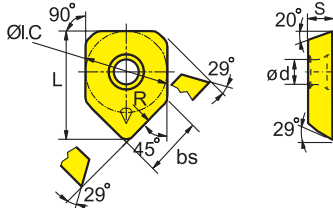


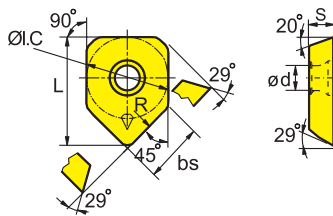
Selection of inserts



😊 Good working conditions 😐 General working conditions ☹️ Adverse working conditions

Workpiece material	P Steel	M Stainless steel	K Cast iron	N Ferrite materials	S Heat-resistant steel	YBC302	YBM251	YBM253	YBM351	YBD152	YBD252	YBG102	YBG202	YBG205	YB9320	YBG302	YBG152	YBG252	YNG151	YNG151C	YC30S	YD051	YD101	YD201
P Steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
M Stainless steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
K Cast iron	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
N Ferrite materials	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
S Heat-resistant steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊

Insert shape	Type	Dimensions(inch)						Coated grade										Cermert		Cemented carbide							
		L	ØI.C	S	ød	bs	R	YBC302	YBM251	YBM253	YBM351	YBD152	YBD252	YBG102	YBG202	YBG205	YB9320	YBG302	YBG152	YBG252	YNG151	YNG151C	YC30S	YD051	YD101	YD201	
	SEET12T3-DF	0.528	0.528	0.156	0.161	0.100		●	○							●		○									
	SEET12T3-CF	0.528	0.528	0.156	0.161	0.100						○		●		○		○									
	SEET12T3-EF	0.528	0.528	0.156	0.161	0.100										●		○									
	SEET12T3-DM	0.528	0.528	0.156	0.161	0.100		●	●							○		●									
	SEET18T6-DM	0.709	0.709	0.24	0.217	0.059	0.039	●		●						●											
	SEET12T3-CM	0.528	0.528	0.156	0.161	0.100						●				●		○									
	SEET12T3-EM	0.528	0.528	0.156	0.161	0.100			●		●					●		●									
	SEET12T3-DR	0.528	0.528	0.156	0.161	0.100		●			●					●		●									
	SEET12T3-CR	0.528	0.528	0.156	0.161	0.100						●				●		●									
	SEET12T3-LH	0.528	0.528	0.156	0.161	0.100			●																○	●	
	SEET12T3-W	0.702	0.528	0.156	0.161	0.372	19.685	●	●			●				●					●						
																											



● Always stock available ○ Produce according to order

Chipbreaker selection for FMA01

Function Classification	For finishing	For semi-finishing	For roughing
P	-DF	-DM	-DR
M,S	-EF	-EM	
K	-CF	-CM	-CR
AL	-LH		

Recommended cutting parameters

Recommended cutting parameters							
Workpiece material		Hardness HB	Insert grade	Cutting parameters			
				V(SFPM)	f(in/z)		
					-DF	-DM	-DR
P	Low-carbon steel、 Soft steel	≤ 180	YBM251	900(700-1200)	0.006(0.004-0.008)	0.008(0.004-0.012)	0.012(0.008-0.016)
			YBC302	900(700-1200)	0.006(0.004-0.008)	0.008(0.004-0.012)	0.012(0.008-0.016)
			YBG205	900(650-1200)	0.006(0.004-0.008)	0.008(0.004-0.012)	0.012(0.008-0.016)
			YBG302	750(550-1200)	0.006(0.004-0.008)	0.008(0.004-0.012)	0.012(0.008-0.016)
	High-carbon steel、 Alloy steel	180-280	YBM251	800(700-1000)	0.006(0.004-0.008)	0.008(0.004-0.012)	0.012(0.008-0.016)
			YBG205	800(600-1200)	0.006(0.004-0.008)	0.008(0.004-0.012)	0.012(0.008-0.016)
			YBG302	700(500-1100)	0.006(0.004-0.008)	0.008(0.004-0.012)	0.012(0.008-0.016)
	Alloy tool steel	280-350	YBM251	700(600-1000)	0.006(0.004-0.008)	0.008(0.004-0.012)	0.012(0.008-0.016)
			YBG205	700(550-1100)	0.006(0.004-0.008)	0.008(0.004-0.012)	0.012(0.008-0.016)
			YBG302	600(400-1000)	0.006(0.004-0.008)	0.008(0.004-0.012)	0.012(0.008-0.016)
M					-EF	-EM	
	Stainless steel	≤ 270	YBM251	500(400-800)	0.006(0.004-0.008)	0.008(0.004-0.012)	
			YBG205	500(360-900)	0.006(0.004-0.008)	0.008(0.004-0.012)	
			YBG302	450(300-800)	0.006(0.004-0.008)	0.008(0.004-0.012)	
K					-CF	-CM	-CR
	Cast iron	180-250	YBG102	700(400-1000)	0.006(0.004-0.008)	0.008(0.004-0.012)	0.012(0.008-0.016)
N					-LH		
	Al alloy steel	-	YD101	1000-	0.010(0.004-0.016)		
			YD201	1000-			
S					-EF	-EM	
	High-temperature alloy	≤ 400	YBG102	150(60-200)	0.004(0.004-0.008)	0.006(0.004-0.012)	

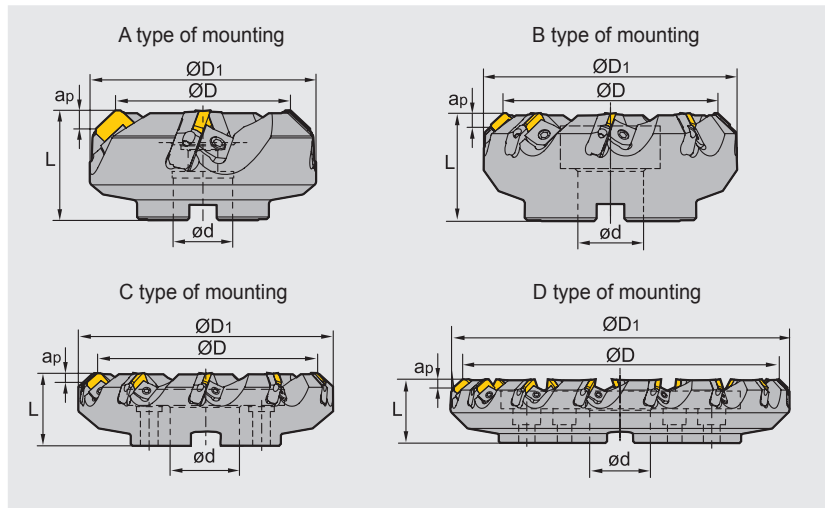


Face milling tools

Kr:45°



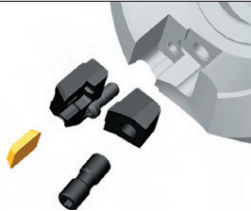
FMA03 **P** **M** **K**



Specification of tools

Type		Dimensions(inch)						
		ØD	ØD ₁	Ød	L	ap _{max}	Z	Interface form
FMA03	-3.00"-A1.00"-SE12-04	3.000	3.858	1.000	2.000	0.217	4	A
	-4.00"-B1.25"-SE12-05	4.000	4.858	1.250	2.000	0.217	5	B
	-5.00"-B1.50"-SE12-06	5.000	5.858	1.500	2.500	0.217	6	B
	-6.00"-B1.50"-SE12-08	6.000	6.858	1.500	2.500	0.217	8	B
	-8.00"-C2.50"-SE12-10	8.000	8.858	2.500	2.500	0.217	10	C
	-10.0"-C2.50"-SE12-12	10.00	10.858	2.500	2.500	0.217	12	C
	-12.0"-D2.50"-SE12-15	12.00	12.858	2.500	2.500	0.217	15	D
	-3.00"-A1.00"-SE15-04	3.000	3.858	1.000	2.000	0.295	4	A
	-4.00"-B1.25"-SE15-05	4.000	4.858	1.250	2.000	0.295	5	B
	-5.00"-B1.50"-SE15-06	5.000	5.858	1.500	2.500	0.295	6	B
	-6.00"-B1.50"-SE15-08	6.000	6.858	1.500	2.500	0.295	8	B
	-8.00"-C2.50"-SE15-10	8.000	8.858	2.500	2.500	0.295	10	C
	-10.0"-C2.50"-SE15-12	10.00	10.858	2.500	2.500	0.295	12	C
	-12.0"-D2.50"-SE15-15	12.00	12.858	2.500	2.500	0.295	15	D

Spare parts

Locator	Wedge	Wedge screw	Locator screw	Wrench	Sketch of installation
 LSE 12R/L (Suitable for 12mm inserts) LSE 15R/L (Suitable for 15mm inserts)	 W01R/L	 DM8×21X	 LOM5×15.1	 WT20T WH40T	

Recommended cutting parameters

Workpiece material		Hardness HB	Insert grade	Cutting parameters	
				V(SFPM)	f(in/z)
P	Low-carbon steel、Soft steel	≤180	YNG151	1400 (1100 -1600)	0.008(0.004-0.016)
			YBM251	900 (700 -1100)	0.008(0.004-0.016)
			YBM351	700 (600 -1000)	0.01(0.006-0.012)
			YBG202	900 (650 -1200)	0.008(0.004-0.012)
			YC30S	450 (300 -700)	0.011(0.004-0.016)
	High-carbon steel、Alloy steel	180—280	YNG151	1300 (1000 -1600)	0.008(0.004-0.016)
			YBM251	800 (650 -1000)	0.008(0.006-0.016)
			YBM351	650 (500 -900)	0.010(0.006-0.012)
			YBG202	800 (600 -1100)	0.008(0.004-0.012)
			YC30S	400 (260 -650)	0.011(0.004-0.016)
	Alloy tool steel	280—350	YNG151	1100 (1000 -1500)	0.008(0.004-0.016)
			YBM251	700 (600 -1000)	0.008(0.004-0.016)
			YBM351	600 (500 -800)	0.01(0.006-0.012)
			YBG202	700 (550 -1100)	0.008(0.004-0.012)
			YC30S	300 (200 -600)	0.011(0.004-0.016)
M	Stainless steel	≤270	YNG151	700 (500 -900)	0.008(0.004-0.016)
			YBM251	400 (300 -700)	0.008(0.004-0.016)
			YBM351	450 (300 -800)	0.01(0.006-0.012)
			YBG202	450 (300 -800)	0.008(0.004-0.012)
K	Cast iron	180-250	YBG102	700 (400 -1000)	0.008(0.004-0.012)
			YD201	300 (260 -500)	0.01(0.004-0.016)

D

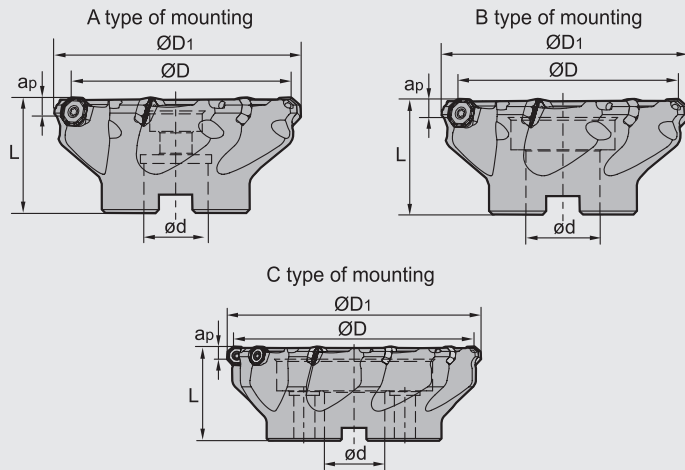
Face milling tools **Kr:45°**



FMA04 **P** **M** **K** **N**



Screw clamping



Specification of tools

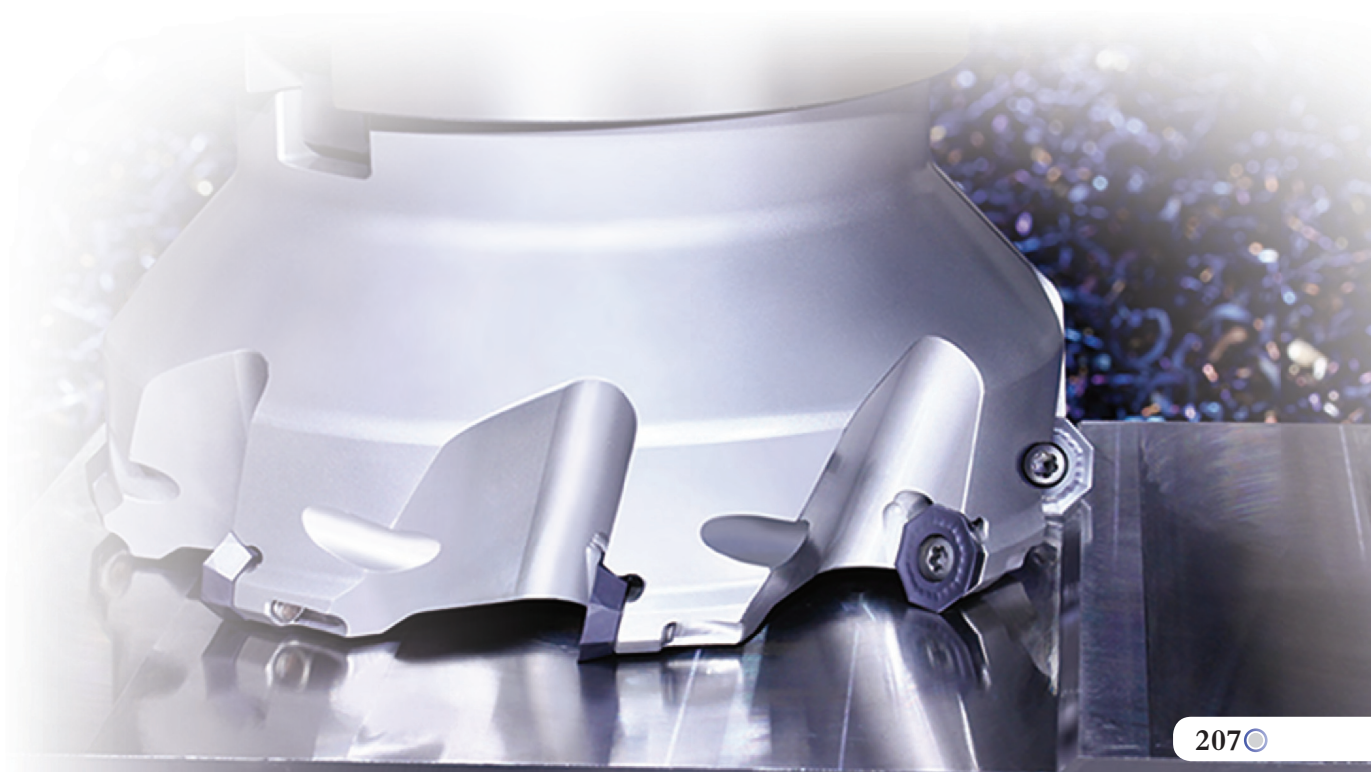
Type		Dimensions(inch)						
		ØD	ØD1	Ød	L	apmax	Z	Interface form
FMA04	-2.00" -A0.75" -OF05-04	2.000	2.356	0.750	1.500	0.138	4	A
	-2.00" -A0.75" -OF05-05	2.000	2.356	0.750	1.500	0.138	5	A
	-2.50" -A0.75" -OF05-05	2.500	2.856	0.750	2.000	0.138	5	A
	-3.00" -A1.00" -OF05-06	3.000	3.356	1.000	2.000	0.138	6	A
	-4.00" -B1.25" -OF05-07	4.000	4.356	1.250	2.000	0.138	7	B
	-5.00" -B1.50" -OF05-08	5.000	5.356	1.500	2.500	0.138	8	B
	-6.00" -B1.50" -OF05-10	6.000	6.356	1.500	2.500	0.138	10	B
	-6.00" -C1.50" -OF05-10	6.000	6.356	1.500	2.500	0.138	10	C

Spare parts

Adaptable tool holders	Insert screw	Wrench	Sketch of installation
Ø2", Ø2.5"	I60M4×8.4	WT15IS	
Ø3", Ø4", Ø5", Ø6"	I60M4×10	WT15IS	

Recommended cutting parameters

Recommended cutting parameters						
Workpiece material		Hardness HB	Insert grade	Cutting parameters		
				V(SFPM)	f(in/z)	
					-DF	-DM
P	Low-carbon steel, Soft steel	≤180	YBM251	900(700-1100)	0.008(0.004-0.012)	0.01(0.004-0.016)
			YBG202	900(650-1200)	0.008(0.004-0.012)	0.01(0.004-0.016)
			YBM351	700(600-1000)	0.008(0.004-0.012)	0.01(0.004-0.016)
			YBG302	750(550-1200)	0.008(0.004-0.012)	0.01(0.004-0.016)
	High-carbon steel, Alloy steel	180-280	YBM251	800(650-1100)	0.006(0.004-0.012)	0.008(0.004-0.016)
			YBG202	800(600-1100)	0.006(0.004-0.012)	0.008(0.004-0.016)
			YBM351	650(500-900)	0.008(0.004-0.012)	0.01(0.004-0.016)
			YBG302	700(500-1100)	0.008(0.004-0.012)	0.01(0.004-0.016)
	Alloy tool steel	280-350	YBM251	700(600-1000)	0.008(0.004-0.012)	0.008(0.004-0.016)
			YBG202	700(550-1100)	0.008(0.004-0.012)	0.008(0.004-0.016)
			YBM351	600(500-800)	0.008(0.004-0.012)	0.01(0.004-0.016)
			YBG302	600(400-1000)	0.008(0.004-0.012)	0.01(0.004-0.016)
M	Stainless steel	≤270	YBG202	450(300-800)	0.006(0.004-0.012)	0.008(0.004-0.016)
YBM251			500(400-800)	0.006(0.004-0.012)	0.008(0.004-0.016)	
K	Cast iron	180-250	YBG102	700(400-1000)	0.008(0.004-0.012)	0.01(0.004-0.016)
N					-LH	
	Aluminium alloy	-	YD101	1000-	0.006(0.002-0.012)	



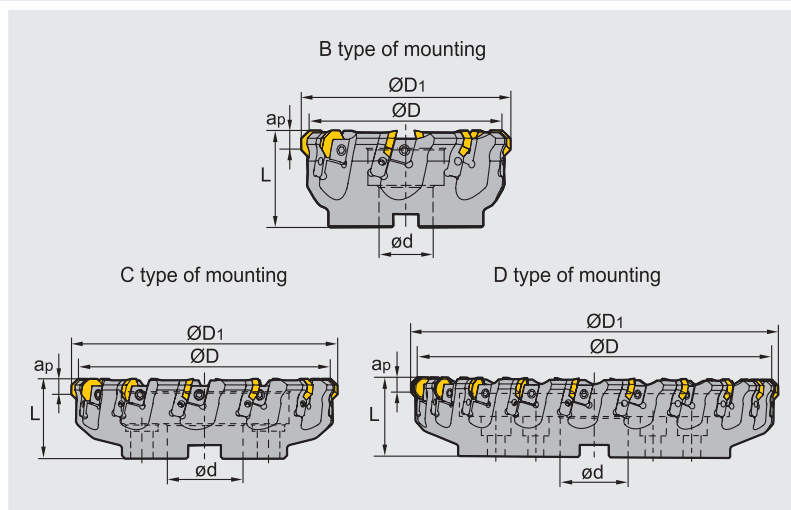
Face milling tools **Kr:45°**



FMA04 **P** **M** **K**



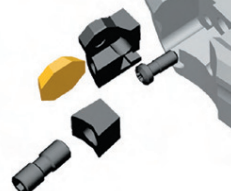
Top clamping



Specification of tools

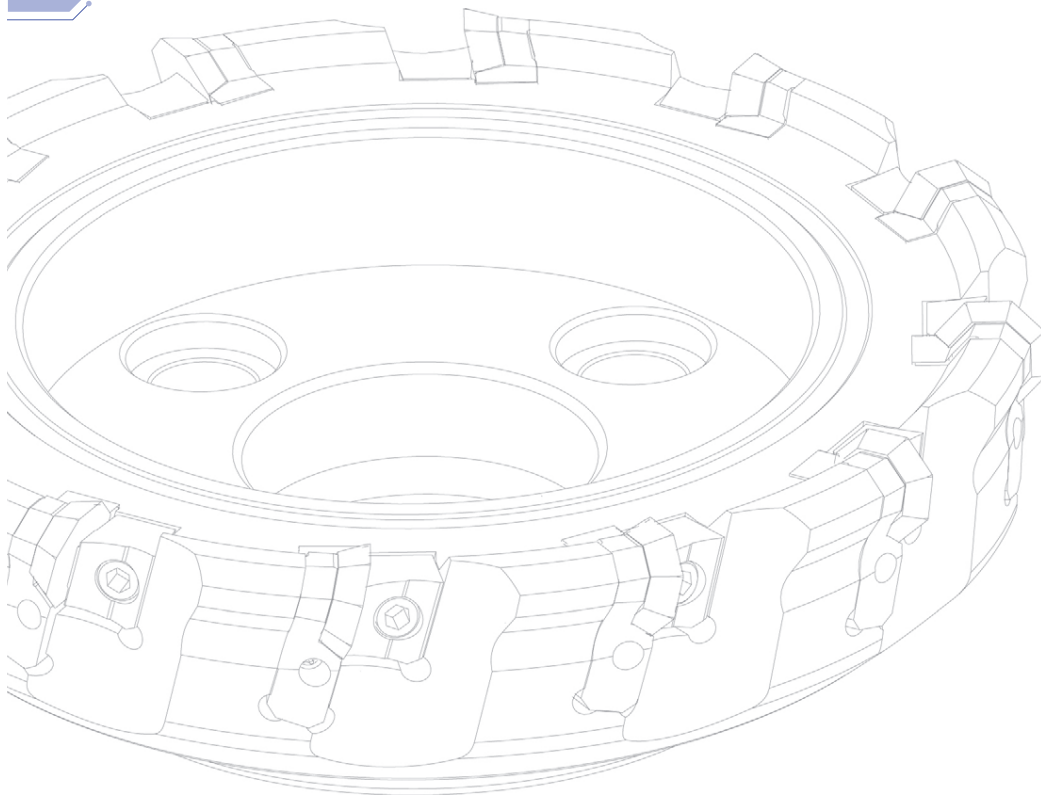
Type		Dimensions(inch)						
		ØD	ØD1	Ød	L	apmax	Z	Interface form
FMA04	-5.00"-B1.50"-OF07-08	5.000	5.469	1.500	2.500	0.197	8	B
	-6.00"-B1.50"-OF07-10	6.000	6.469	1.500	2.500	0.197	10	B
	-8.00"-C2.50"-OF07-12	8.000	8.469	2.500	2.500	0.197	12	C
	-10.0"-C2.50"-OF07-16	10.00	10.469	2.500	2.500	0.197	16	C
	-12.5"-D2.50"-OF07-20	12.50	12.969	2.500	2.500	0.197	20	D

Spare parts

Locator	Wedge	Wedge screw	Locator screw	Wrench	Sketch of installation
 LOF07R/L	 W02R/L	 DM8×21X	 LOM5×15.1	 WH20T WH40T	

Recommended cutting parameters

Workpiece material	Hardness HB	Insert grade	Cutting parameters		
			V(SFPM)	f(in/z)	
				-DF	-DM
P	Low-carbon steel, Soft steel	YBM251 YBM253	900(700-1100)	0.008(0.004-0.012)	0.01(0.004-0.016)
		YBG202	900(650-1200)	0.008(0.004-0.012)	0.01(0.004-0.016)
		YBM351	700(600-1000)	0.008(0.004-0.012)	0.01(0.004-0.016)
	High-carbon steel, Alloy steel	YBM251 YBM253	800(650-1000)	0.006(0.004-0.012)	0.008(0.004-0.016)
		YBG202	800(600-1100)	0.006(0.004-0.012)	0.008(0.004-0.016)
		YBM351	650(500-900)	0.008(0.004-0.012)	0.01(0.004-0.016)
	Alloy tool steel	YBM251 YBM253	700(600-1000)	0.006(0.004-0.012)	0.008(0.004-0.016)
		YBG202	700(550-1100)	0.006(0.004-0.012)	0.008(0.004-0.016)
		YBM351	600(500-800)	0.008(0.004-0.012)	0.01(0.004-0.016)
M	Stainless steel	YBG302	600(400-1000)	0.008(0.004-0.012)	0.01(0.004-0.016)
		YBG202	500(360-900)	0.006(0.004-0.012)	0.008(0.004-0.016)
		YBG302	450(300-800)	0.006(0.004-0.012)	0.008(0.004-0.016)
K	Cast iron	YBM251 YBM253	500(400-800) 750(550-1000)	0.006(0.004-0.012)	0.008(0.004-0.016)
		YBG102	700(400-1000) 600(500-800)	0.008(0.002-0.012)	0.01(0.004-0.016)



FMA11 Kr:45° Series Face Mills

With outstanding economy and high performance

Cutter body with PVD coating for superior corrosion and heat resistance resulting in longer service life.

4 × 2=8edge

Comprehensive upgrading of -GM geometry, good chip breaking performance, large rake angle, reduced cutting force.

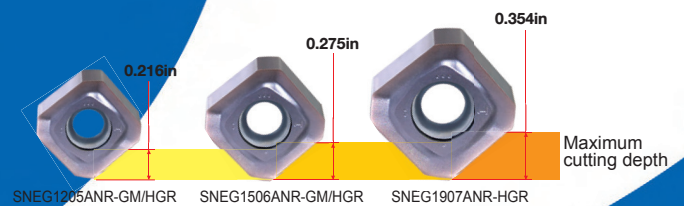
New -HGR geometry, high edge strength, excellent breakage resistance.

Insert with wiper, smoother surface roughness.

Complete range of insert specifications and geometries, for different cutting depths and different machining demands.

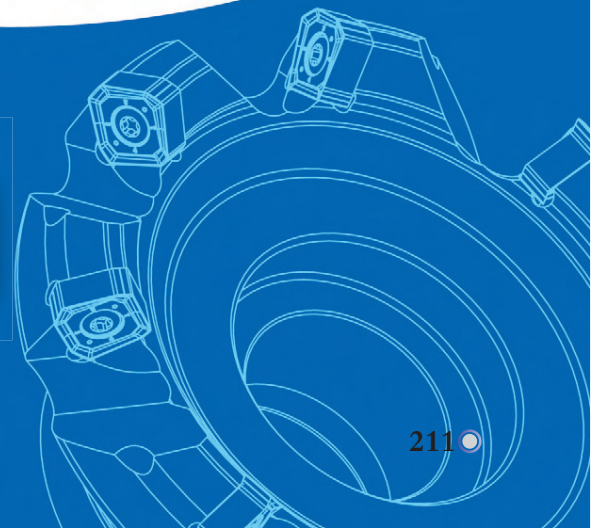
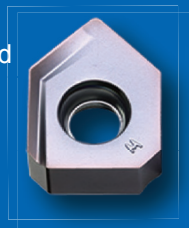
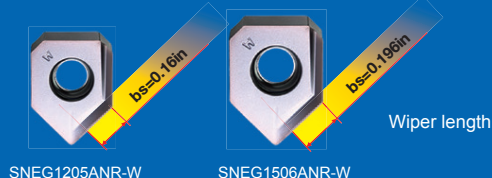
Double negative structure, excellent impact resistance.

Optimized design of pitch and chip pocket, for unobstructed chip flow and higher cutting efficiency.



-W special geometry for wiper inserts, large arc design, improved workpiece quality.

Extra long wiper, moresuited to semi-finishing and finishing with large diameter cutters.



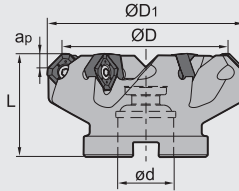
Face milling tools **Kr:45°**



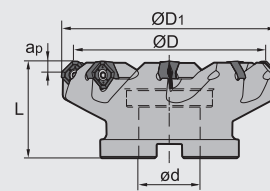
FMA11 **P** **K**



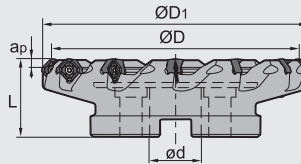
A type of mounting



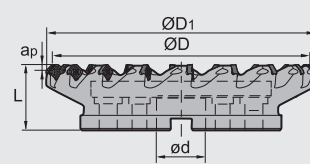
B type of mounting



C type of mounting



D type of mounting



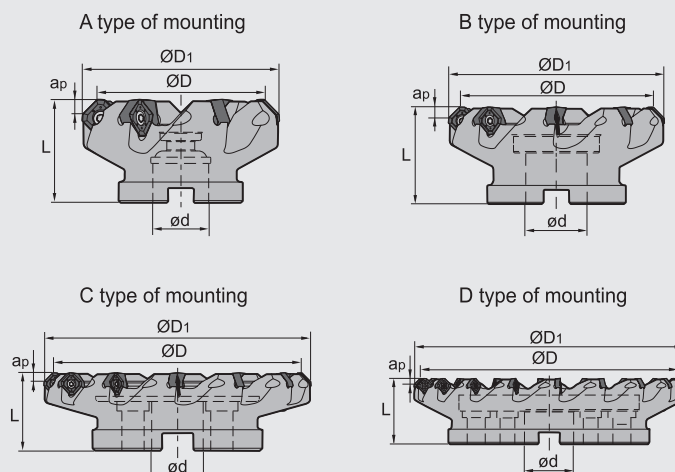
Specification of tools

Type		Basic dimensions (inch)					Z	Interface form
		ØD	ØD ₁	Ød	L	a _p max		
FMA11 Coarse pitch	-2.00"-A0.75"-SN12-04C	2.000	2.453	0.750	1.750	0.216	4	A
	-2.50"-A0.75"-SN12-05C	2.500	2.953	0.750	1.750	0.216	5	A
	-3.00"-A1.00"-SN12-06C	3.000	3.453	1.000	2.000	0.216	6	A
	-4.00"-B1.50"-SN12-07	4.000	4.453	1.500	2.500	0.216	7	B
	-5.00"-B1.50"-SN12-08	5.000	5.453	1.500	2.500	0.216	8	B
	-6.00"-B2.00"-SN12-10	6.000	6.453	2.000	2.500	0.216	10	B
	-2.00"-A0.75"-SN15-04C	2.000	2.602	0.750	1.750	0.275	4	A
	-2.50"-A0.75"-SN15-05C	2.500	3.102	0.750	1.750	0.275	5	A
	-3.00"-A1.00"-SN15-06C	3.000	3.602	1.000	2.000	0.275	6	A
	-4.00"-B1.50"-SN15-07	4.000	4.602	1.500	2.500	0.275	7	B
	-5.00"-B1.50"-SN15-08	5.000	5.602	1.500	2.500	0.275	8	B
	-6.00"-B2.00"-SN15-10	6.000	6.602	2.000	2.500	0.275	10	B
	-8.00"-C2.50"-SN15-12	8.000	8.602	2.500	2.500	0.275	12	C
	-10.00"-C2.50"-SN15-14	10.000	10.602	2.500	2.500	0.275	14	C
	-12.00"-D2.50"-SN15-18	12.000	12.602	2.500	2.500	0.275	18	D
	-5.00"-B1.50"-SN19-07	5.000	5.720	1.500	2.500	0.354	7	B
	-6.00"-B2.00"-SN19-09	6.000	6.720	2.000	2.500	0.354	9	B
	-8.00"-C2.50"-SN19-11	8.000	8.720	2.500	2.500	0.354	11	C
	-10.00"-C2.50"-SN19-13	10.000	10.720	2.500	2.500	0.354	13	C
	-12.00"-D2.50"-SN19-16	12.000	12.720	2.500	2.500	0.354	16	D

Face milling tools **Kr:45°**



FMA11 **P** **K**



Specification of tools

Type		Basic dimensions (inch)					Z	Interface form
		ØD	ØD ₁	Ød	L	a _p max		
FMA11 Close pitch	-2.50"-A0.75"-SN12-06C	2.500	2.953	0.750	1.750	0.216	6	A
	-3.00"-A1.00"-SN12-07C	3.000	3.453	1.000	2.000	0.216	7	A
	-4.00"-B1.50"-SN12-09	4.000	4.453	1.500	2.500	0.216	9	B
	-5.00"-B1.50"-SN12-10	5.000	5.453	1.500	2.500	0.216	10	B
	-6.00"-B2.00"-SN12-12	6.000	6.453	2.000	2.500	0.216	12	B
	-2.50"-A0.75"-SN15-06C	2.500	3.102	0.750	1.750	0.275	6	A
	-3.00"-A1.00"-SN15-07C	3.000	3.602	1.000	2.000	0.275	7	A
	-4.00"-B1.50"-SN15-09	4.000	4.602	1.500	2.500	0.275	9	B
	-5.00"-B1.50"-SN15-10	5.000	5.602	1.500	2.500	0.275	10	B
	-6.00"-B2.00"-SN15-12	6.000	6.602	2.000	2.500	0.275	12	B
	-8.00"-C2.50"-SN15-15	8.000	8.602	2.500	2.500	0.275	15	C
	-10.00"-C2.50"-SN15-18	10.000	10.602	2.500	2.500	0.275	18	C
	-12.00"-D2.50"-SN15-22	12.000	12.602	2.500	2.500	0.275	22	D
	-5.00"-B1.50"-SN19-09	5.000	5.720	1.500	2.500	0.354	9	B
	-6.00"-B2.00"-SN19-11	6.000	6.720	2.000	2.500	0.354	11	B
	-8.00"-C2.50"-SN19-14	8.000	8.720	2.500	2.500	0.354	14	C
	-10.00"-C2.50"-SN19-17	10.000	10.720	2.500	2.500	0.354	17	C
	-12.00"-D2.50"-SN19-20	12.000	12.720	2.500	2.500	0.354	20	D

Spare parts

Diameter ØD	Insert specification	Insert screw	Wrench		
					
Ø2.00" - Ø6.00"	SNEG1205ANR-GM/HGR/W	I60M3.5×10	--	WT15IS	
Ø2.00" - Ø12.00"	SNEG1506ANR-GM/HGR/W	I60M5×13	WT20IT	--	
Ø5.00" - Ø12.00"	SNEG1907ANR-HGR	I43M6×16	WT25IT	--	

Recommended cutting parameters

	Workpiece material	Hardness HB	Grade	Cutting data		
				V(SFPM)	f(inch/z)	a _{pmax} (inch)
P	Low carbon steel Soft steel	≤ 180	YBM253 YBC302 YBG205 YB9320	880 (720-1200)	0.008 (0.004-0.016)	0.216(SN12) 0.275(SN15) 0.354(SN19)
	High carbon steel Alloy steel	180-280	YBM253 YBC302 YBG205 YB9320	850 (650-1050)	0.008 (0.004-0.016)	
	Alloy tool steel	280-350	YBM253 YBC302 YBG205 YB9320	780 (590-1000)	0.008 (0.004-0.016)	
K	Cast iron	180-250	YBD152	880 (490-980)	0.012(0.004-0.02)	
			YBD252	650 (490-820)	0.016 (0.008-0.024)	

Case for FMA11

(Comparison of tool life)

Workpiece material: NAK80

Operation: Face milling

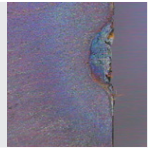
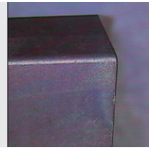
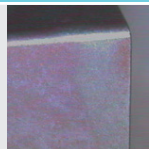
Tool: FMA11-5.00"-B1.50"-SN12-08

Insert: SNEG1205ANR-HGR/YBG205

Cutting data: V_c=650 SFPM, f_z=0.08in/z,

A_p=0.08in, A_e=2.0in



	Products of company A	-HGR/YBG205
Test Group 1		
Life	22 minutes Breakage	35 minutes, wear 0.0008in
Test Group 2		
Life	27 minutes Breakage	35 minutes, wear 0.0004 in

