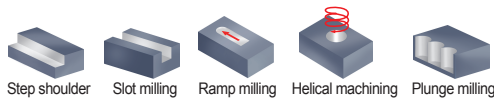


Square shoulder milling tools

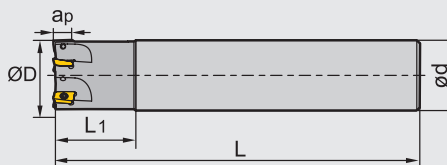
Kr:90°



EMP01 P M K S N



Straight shank



Specification of tools

Type	Stock	Basic dimensions(mm)					Number of teeth Z	Weight (kg)
		ØD	ød	L	L1	apmax		
EMP01 Straight shank								
-010-G10-AP07-02C(25/85)	△	10	10	85	25	6.0	2	0.043
-010-G10-AP07-02C(25/120)	△	10	10	120	25	6.0	2	0.063
-012-G12-AP07-02C(25/85)	△	12	12	85	25	6.0	2	0.061
-012-G12-AP07-02C(25/120)	△	12	12	120	25	6.0	2	0.089
-014-G16-AP07-03C(25/85)	△	14	16	85	25	6.0	3	0.104
-014-G16-AP07-03C(25/120)	△	14	16	120	25	6.0	3	0.153
-016-G16-AP07-03C(25/85)	△	16	16	85	25	6.0	3	0.112
-016-G16-AP07-03C(25/120)	△	16	16	120	25	6.0	3	0.162
-012-G16-AP11-01	▲	12	16	85	25	10.5	1	0.1
-016-G16-AP11-02	▲	16	16	90	25	10.5	2	0.1
-016-G16-AP11-02C(25/85)	△	16	16	85	25	10.5	2	0.108
-016-G16-AP11-02C(25/120)	△	16	16	120	25	10.5	2	0.16
-016-G16-AP11-02C(25/180)	△	16	16	180	25	10.5	2	0.248
-020-G16-AP11-03C(25/85)	△	20	16	85	25	10.5	3	0.121
-020-G20-AP11-02	▲	20	20	100	30	10.5	2	0.2
-020-G20-AP11-02C(30/100)	△	20	20	100	30	10.5	2	0.18
-020-G20-AP11-02C(30/150)	△	20	20	150	30	10.5	2	0.312
-020-G20-AP11-02C(30/200)	△	20	20	200	30	10.5	2	0.401
-020-G20-AP11-03C(30/100)	△	20	20	100	30	10.5	3	0.2
-020-G20-AP11-03C(30/150)	△	20	20	150	30	10.5	3	0.357
-020-G20-AP11-03C(30/200)	△	20	20	200	30	10.5	3	0.424
-025-G25-AP11-03	▲	25	25	115	35	10.5	3	0.4
-025-G25-AP11-03C(35/115)	△	25	25	115	35	10.5	3	0.357
-025-G25-AP11-03C(35/170)	△	25	25	170	35	10.5	3	0.577
-025-G25-AP11-03C(35/220)	△	25	25	220	35	10.5	3	0.758
-025-G25-AP11-04C(35/115)	△	25	25	115	35	10.5	4	0.376
-025-G25-AP11-04C(35/170)	△	25	25	170	35	10.5	4	0.575
-025-G25-AP11-04C(35/220)	△	25	25	220	35	10.5	4	0.686

▲Stock available △Make-to-order

EMP01-010-G10-AP07-02C(25/85)

Effective cutting depth/Overall length

Tools code key

B24-B25

Grade selection guide

B19-B23

Technical data

B234-B240

Specification of tools




Type	Stock	Basic dimensions(mm)					Number of teeth Z	Weight (kg)	
		ØD	ød	L	L ₁	apmax			
EMP01 Straight shank	-030-G25-AP11-04C(35/115)	△	30	25	115	35	10.5	4	0.411
	-030-G25-AP11-04C(35/170)	△	30	25	170	35	10.5	4	0.61
	-030-G25-AP11-04C(35/220)	△	30	25	220	35	10.5	4	0.791
	-032-G32-AP11-04	▲	32	32	125	40	10.5	4	0.7
	-032-G32-AP11-04C(45/125)	△	32	32	125	45	10.5	4	0.673
	-032-G32-AP11-04C(45/190)	△	32	32	190	45	10.5	4	1.057
	-032-G32-AP11-04C(45/260)	△	32	32	260	45	10.5	4	1.47
	-032-G32-AP11-05C(45/125)	△	32	32	125	45	10.5	5	0.71
	-032-G32-AP11-05C(45/190)	△	32	32	190	45	10.5	5	1.054
	-032-G32-AP11-05C(45/260)	△	32	32	260	45	10.5	5	1.53
	-025-G25-AP16-02	▲	25	25	115	35	15.5	2	0.4
	-025-G25-AP16-02C(35/115)	△	25	25	115	35	15.5	2	0.374
	-025-G25-AP16-02C(35/170)	△	25	25	170	35	15.5	2	0.496
	-025-G25-AP16-02C(35/220)	△	25	25	220	35	15.5	2	0.658
	-030-G25-AP16-02C(35/115)	△	30	25	115	35	15.5	2	0.521
	-030-G25-AP16-02C(35/170)	△	30	25	170	35	15.5	2	0.632
	-030-G25-AP16-02C(35/220)	△	30	25	220	35	15.5	2	0.78
	-032-G32-AP16-03	▲	32	32	125	40	15.5	3	0.7
	-032-G32-AP16-03C(45/125)	△	32	32	125	45	15.5	3	0.607
	-032-G32-AP16-03C(45/190)	△	32	32	190	45	15.5	3	0.976
	-032-G32-AP16-03C(45/260)	△	32	32	260	45	15.5	3	1.374
	-040-G32-AP16-04	▲	40	32	130	42	15.5	4	0.8
	-040-G32-AP16-04C(45/125)	△	40	32	125	45	15.5	4	0.716
	-040-G32-AP16-04C(45/190)	△	40	32	190	45	15.5	4	1.085
	-040-G32-AP16-04C(45/260)	△	40	32	260	45	15.5	4	1.483
	-050-G32-AP16-05	▲	50	32	135	45	15.5	5	1.0
	-050-G32-AP16-05C(45/125)	△	50	32	125	45	15.5	5	0.825
	-050-G32-AP16-05C(45/190)	△	50	32	190	45	15.5	5	1.195
	-050-G32-AP16-05C(45/260)	△	50	32	260	45	15.5	5	1.592
	-063-G32-AP16-06	▲	63	32	135	45	15.5	6	1.4

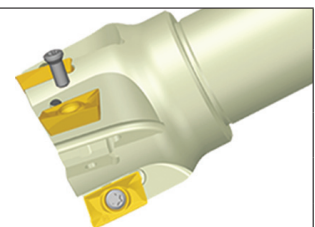
▲ Stock available △ Make-to-order

EMP01-010-G10-AP07-02C(25/85)

Effective cutting depth/Overall length

Spare parts

Diameter ØD	Inserts	Screw	Wrench	
				
Ø10-Ø16	AP07	I60M1.8×4	WT05IP	--
Ø12-Ø32	AP11	I60M2.5×6.5T	WT08IP	--
Ø25-Ø63	AP16	I60M4×8.4	--	WT15IS



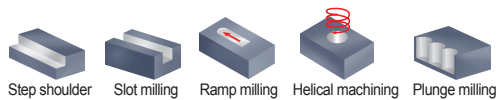
Tools code key
B24-B25

Grade selection guide
B19-B23

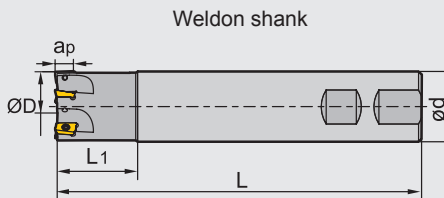
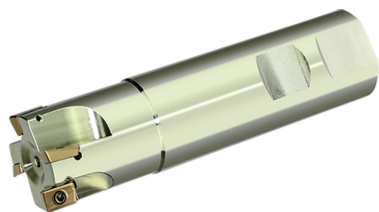
Technical data
B234-B240

Square shoulder milling tools

Kr:90°



EMP01 P M K S N



Specification of tools

Type	Stock	Basic dimensions(mm)					Number of teeth Z	Weight (kg)	
		ØD	ød	L	L ₁	apmax			
EMP01 Weldon shank	▲	-012-XP16-AP11-01	12	16	85	25	10.5	1	0.1
	▲	-016-XP16-AP11-02	16	16	90	25	10.5	2	0.1
	▲	-020-XP20-AP11-02	20	20	100	30	10.5	2	0.2
	▲	-025-XP25-AP11-03	25	25	115	35	10.5	3	0.4
	▲	-032-XP32-AP11-04	32	32	125	40	10.5	4	0.7
	▲	-025-XP25-AP16-02	25	25	115	35	15.5	2	0.4
	▲	-032-XP32-AP16-03	32	32	125	40	15.5	3	0.7
	▲	-040-XP32-AP16-04	40	32	130	42	15.5	4	0.8
	▲	-050-XP32-AP16-05	50	32	135	45	15.5	5	1.0
	▲	-063-XP32-AP16-06	63	32	135	45	15.5	6	1.4

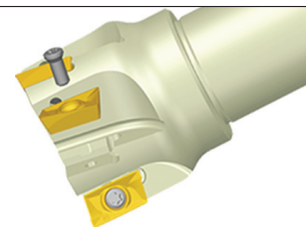
▲ Stock available △ Make-to-order

Indexable milling tools

Square shoulder milling tools

Spare parts

Diameter ØD	Inserts	Screw	Wrench	
Ø12-Ø32	AP11	I60M2.5×6.5T	WT08IP	--
Ø25-Ø63	AP16	I60M4×8.4	--	WT15IS

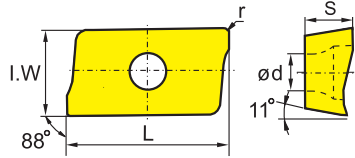


Tools code key → B24-B25

Grade selection guide → B19-B23

Technical data → B234-B240

Selection of inserts



😊 Good working condition 😐 Normal working condition 😞 Bad working condition

Workpiece material	P Steel	M Stainless steel	K Cast iron	N Non-ferrous metal	S Heat resistant alloy, Ti alloy
P Steel	😊😊😊😊😊😊	😊😊😊😊😊😊	😊😊😊😊😊😊	😊😊😊😊😊😊	😊😊😊😊😊😊
M Stainless steel	😊😊😊😊😊😊	😊😊😊😊😊😊	😊😊😊😊😊😊	😊😊😊😊😊😊	😊😊😊😊😊😊
K Cast iron	😊😊😊😊😊😊	😊😊😊😊😊😊	😊😊😊😊😊😊	😊😊😊😊😊😊	😊😊😊😊😊😊
N Non-ferrous metal	😊😊😊😊😊😊	😊😊😊😊😊😊	😊😊😊😊😊😊	😊😊😊😊😊😊	😊😊😊😊😊😊
S Heat resistant alloy, Ti alloy	😊😊😊😊😊😊	😊😊😊😊😊😊	😊😊😊😊😊😊	😊😊😊😊😊😊	😊😊😊😊😊😊

Insert shape	Type	Basic dimensions(mm)					CVD Coating				PVD Coating				Cermet		Cemented carbide												
		L	I.W	S	ød	r	YBC301	YBC302	YBM251	YBM253	YBM351	YBD152	YBD252	YBG102	YBG202	YBG205	YB9320	YBG302	YBG152	YBG252	YBS203	YBS303	YNG151	YNG151C	YC30S	YD051	YD101	YD201	
	APKT070204-APF	7.32	4.34	2.38	2	0.4	●	●							★														
	APKT11T304-APF	12.24	6.6	3.6	2.8	0.4	●	●							★														
	APKT11T308-APF	12.24	6.6	3.6	2.8	0.8	●	●							★						●	●							
	APKT160408-APF	17.877	9.33	5.76	4.4	0.8	●								★						●	●							
	APKT070204-APM	7.32	4.34	2.38	2	0.4			●	●					★														
	APKT11T304-APM	12.24	6.6	3.6	2.8	0.4			●						★														
	APKT11T308-APM	12.24	6.6	3.6	2.8	0.8			●	●					★						●	●							
	APKT11T312-APM	12.24	6.6	3.6	2.8	1.2					●				★														
	APKT11T316-APM	12.24	6.6	3.6	2.8	1.6									★														
	APKT11T320-APM	12.24	6.6	3.6	2.8	2.0			●						★														
	APKT160408-APM	17.877	9.33	5.76	4.4	0.8			●	●					★						●	●							
	APKT160416-APM	17.877	9.33	5.76	4.4	1.6			●	●					★						●								
	APKT160420-APM	17.877	9.33	5.76	4.4	2.0					●				★														
	APKT160424-APM	17.877	9.33	5.76	4.4	2.4									★														
APKT160430-APM	17.877	9.33	5.76	4.4	3.0									★															
	APKT11T304-ALH	12.24	6.6	3.6	2.8	0.4																					★	★	
	APKT11T308-ALH	12.24	6.6	3.6	2.8	0.8																					★	○	
	APKT160408-ALH	17.877	9.33	5.76	4.4	0.8																					★	★	

★Recommended grade (always stock available) ●Available grade (always stock available) ○Make-to-order

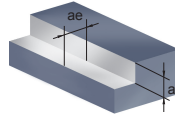
Chipbreaker selection

Classification	Application	For finishing	For semi-finishing
P		-APF	-APM
M		-APF	-APM
S		-APF	-APM
K		-APF	-APM
N		-ALH	

Indexable milling tools

Square shoulder milling tools

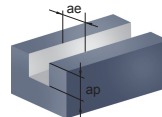
1 Square shoulder milling



Recommended cutting parameters (D: Diameter)

Workpiece material	Hardness HB	Insert grade	Cutting parameters				
			Vc(m/min)	fz(mm/z)		ae(mm)	
				-APF	-APM		
P Low-carbon steel, Soft steel	≤ 180	YBC302	320 (240-400)	0.1 (0.08-0.2)	--	≤ 0.5D	
		YB9320	320 (200-400)	0.1 (0.08-0.2)	0.2 (0.1-0.3)		
		YBM253	300 (320-350)	0.1 (0.08-0.2)	0.2 (0.1-0.3)		
	High-carbon steel, Alloy steel	180-280	YBC302	280 (210-380)	0.1 (0.08-0.2)	--	≤ 0.5D
			YB9320	280 (180-350)	0.1 (0.08-0.2)	0.2 (0.1-0.3)	
			YBM253	260 (150-380)	0.1 (0.08-0.2)	0.2 (0.1-0.3)	
Alloy tool steel	280-350	YBC302	260 (180-350)	0.1 (0.08-0.2)	--	≤ 0.5D	
		YB9320	260 (160-330)	0.1 (0.08-0.2)	0.2 (0.1-0.3)		
		YBM253	220 (150-280)	0.1 (0.08-0.2)	0.2 (0.1-0.3)		
M Stainless steel	≤ 270	YB9320	200 (110-300)	0.1 (0.08-0.2)	0.2 (0.1-0.3)	≤ 0.5D	
		YBM253	180 (150-300)				
K Cast iron	180-250	YB9320	180 (150-250)	0.1 (0.08-0.2)	0.2 (0.1-0.3)	≤ 0.5D	
		YBD152	200 (150-250)	--	0.2 (0.1-0.3)		
S Difficult-to-machine materials	≤ 400	YBS203	100 (60-120)	0.1 (0.08-0.2)	0.2 (0.1-0.3)	≤ 0.5D	
		YBS303	100 (60-120)	0.1 (0.08-0.2)	0.2 (0.1-0.3)	≤ 0.5D	
N Aluminium alloy	--	-ALH					
		YD101	300-	0.2 (0.08-0.4)		≤ 0.5D	
		YD201	300-	0.2 (0.08-0.4)		≤ 0.5D	

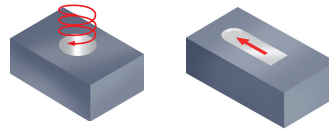
2 Slot milling



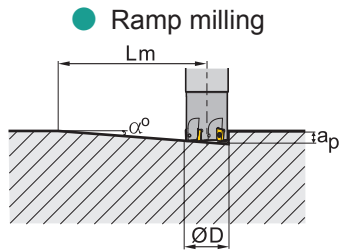
Recommended cutting parameters (D: Diameter)

Workpiece material	Hardness HB	Insert grade	Cutting parameters				
			Vc(m/min)	fz(mm/z)		ae(mm)	
				-APF	-APM		
P Low-carbon steel, Soft steel	≤ 180	YBC302	190 (170-250)	0.1 (0.08-0.15)	--	D	
		YB9320	190 (140-250)	0.1 (0.08-0.15)	0.15 (0.1-0.25)		
		YBM253	150 (130-210)	0.1 (0.08-0.15)	0.15 (0.1-0.25)		
	High-carbon steel, Alloy steel	180-280	YBC302	170 (150-220)	0.1 (0.08-0.15)	--	D
			YB9320	170 (130-250)	0.1 (0.08-0.15)	0.15 (0.1-0.25)	
			YBM253	140 (110-200)	0.1 (0.08-0.15)	0.15 (0.1-0.25)	
Alloy tool steel	280-350	YBC302	150 (130-210)	0.1 (0.08-0.15)	--	D	
		YB9320	150 (110-240)	0.1 (0.08-0.15)	0.15 (0.1-0.25)		
		YBM253	130 (110-180)	0.1 (0.08-0.15)	0.15 (0.1-0.25)		
M Stainless steel	≤ 270	YB9320	120 (80-190)	0.1 (0.08-0.15)	0.15 (0.1-0.25)	D	
		YBM253	100 (80-170)				
K Cast iron	180-250	YB9320	120 (80-180)	0.1 (0.08-0.15)	0.15 (0.1-0.25)	D	
		YBD152	120 (80-210)	--	0.15 (0.1-0.25)		
S Difficult-to-machine materials	≤ 400	YBS203	60 (45-110)	0.1 (0.08-0.15)	0.15 (0.1-0.25)	D	
		YBS303	60 (45-110)	0.1 (0.08-0.15)	0.15 (0.1-0.25)	D	
N Aluminium alloy	--	-ALH					
		YD101	300-	0.2 (0.08-0.3)		D	
		YD201	300-	0.2 (0.08-0.3)		D	

3 Ramp milling, helical interpolation milling

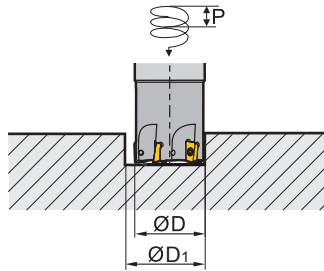


▶ Recommended cutting parameters (D: Diameter)



$$L_m = \frac{a_p}{\tan \alpha} \quad (\alpha: \text{Maximum ramp angle})$$

● Helical interpolation milling



$$\tan \alpha = \frac{P}{\pi D_1} \quad (\alpha: \text{Helical angle})$$

Diameter ØD(mm)	APKT Ramp milling, helical interpolation milling (Inserts-7)				
	Ramp milling			Helical interpolation milling	
	Maximum cutting depth	Maximum ramp angle	Minimum length	Minimum diameter	Maximum pitch
	$a_p(\text{mm})$	α°	$L_m(\text{mm})$	$\text{Ø}D_1(\text{mm})$	(mm)
10	6	6	57	12	2.0
12	6	4	85	15	2.0
14	6	3	114	18	2.0
16	6	2.5	137	21	2.0
Diameter ØD(mm)	APKT Ramp milling, helical interpolation milling (Inserts-11)				
	Ramp milling			Helical interpolation milling	
	Maximum cutting depth	Maximum ramp angle	Minimum length	Minimum diameter	Maximum pitch
	$a_p(\text{mm})$	α°	$L_m(\text{mm})$	$\text{Ø}D_1(\text{mm})$	(mm)
16	10.0	10.0	56.7	20.0	2.0
20	10.0	5.0	114.4	28.0	2.0
25	10.0	4.5	127.0	40.0	2.0
30	10.0	3.5	153.0	48.0	2.0
32	10.0	3.0	190.8	56.0	2.0
40	10.0	2.0	286.4	70.0	2.0
Diameter ØD(mm)	APKT Ramp milling, helical interpolation milling (Inserts-16)				
	Ramp milling			Helical interpolation milling	
	Maximum cutting depth	Maximum ramp angle	Minimum length	Minimum diameter	Maximum pitch
	$a_p(\text{mm})$	α°	$L_m(\text{mm})$	$\text{Ø}D_1(\text{mm})$	(mm)
25	15	6	142	32	2.0
30	15	5	171	40	2.0
32	15	4.5	214	45	2.0
40	15	2.5	343	60	2.0
50	15	1.5	572	80	2.0
63	15	1	859	105	2.0

Note: For cutting speed and feed rate per tooth, see square shoulder milling.

Case for EMP01



Machine: Vertical machining center
 Diameter: Ø40mm
 Operation: Interpolation milling
 Insert: APKT160408-APM/YB9320
 Workpiece material: P20(HRC 33-36)
 Cutting data:
 $V_c=150\text{m/min}$
 $f=0.2\text{mm/z}$

Insert specification/grade: APKT160408-APM/YB9320

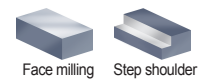
Tools specification: EMP01-040-XP32-AP16-04

● Comprehensively improve mould cavity machining efficiency

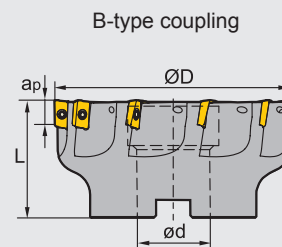
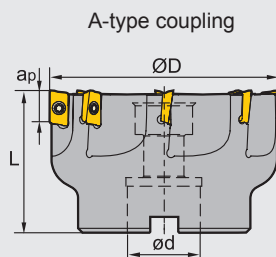
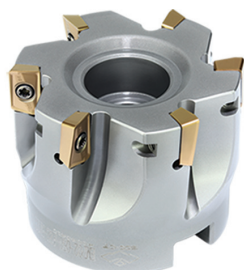


Optimized structure in combination with brand-new "golden drill" coating technique, ZCC-CT products with APM chipbreaker is more suitable for mold cavity machining, greatly improve machining efficiency when compare with competitors similar products.

Square shoulder milling tools **Kr:90°**



EMP02 P M K S N



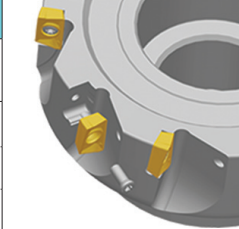
Specification of tools

Type	Stock	Basic dimensions(mm)				Number of teeth Z	Type of coupling	Weight (kg)
		ØD	ød	L	apmax			
EMP02 -050-A22-AP11-06	▲	50	22	40	10.5	6	A	0.3
-063-A22-AP11-08	▲	63	22	40	10.5	8	A	0.6
-080-A27-AP11-08	▲	80	27	50	10.5	8	A	1.2
-100-B32-AP11-10	▲	100	32	50	10.5	10	B	1.7
-050-A22-AP16-05	▲	50	22	40	15.5	5	A	0.3
-063-A22-AP16-06	▲	63	22	40	15.5	6	A	0.5
-080-A27-AP16-07	▲	80	27	50	15.5	7	A	1.1
-100-B32-AP16-08	▲	100	32	50	15.5	8	B	1.6
-125-B40-AP16-10	▲	125	40	63	15.5	10	B	3.2
-160-B40-AP16-10	▲	160	40	63	15.5	10	B	6.3

▲Stock available △Make-to-order

Spare parts

Diameter ØD	Inserts	Screw	Wrench
Ø50-Ø100	AP11	I60M2.5×6.5T	WT08IS
Ø50-Ø160	AP16	I60M4×10	WT15IS

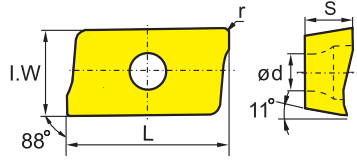


Tools code key **B24-B25**

Grade selection guide **B19-B23**

Technical data **B234-B240**

Selection of inserts



😊 Good working condition 😐 Normal working condition 😞 Bad working condition

Workpiece material	Steel	Stainless steel	Cast iron	Non-ferrous metal	Heat resistant alloy, Ti alloy
P	😊😊😊😊😊😊	😊😊😊😊😊😊	😊😊😊😊😊😊	😊😊😊😊😊😊	😊😊😊😊😊😊
M	😊😊😊😊😊😊	😊😊😊😊😊😊	😊😊😊😊😊😊	😊😊😊😊😊😊	😊😊😊😊😊😊
K	😊😊😊😊😊😊	😊😊😊😊😊😊	😊😊😊😊😊😊	😊😊😊😊😊😊	😊😊😊😊😊😊
N	😊😊😊😊😊😊	😊😊😊😊😊😊	😊😊😊😊😊😊	😊😊😊😊😊😊	😊😊😊😊😊😊
S	😊😊😊😊😊😊	😊😊😊😊😊😊	😊😊😊😊😊😊	😊😊😊😊😊😊	😊😊😊😊😊😊

Insert shape	Type	Basic dimensions(mm)					CVD Coating				PVD Coating				Cermet		Cemented carbide											
		L	I.W	S	ød	r	YBC301	YBC302	YBM251	YBM253	YBM351	YBD152	YBD252	YBG102	YBG202	YBG205	YB9320	YBG302	YBG152	YBG252	YBS203	YBS303	YNG151	YNG151C	YC30S	YD051	YD101	YD201
	APKT11T304-APF	12.24	6.6	3.6	2.8	0.4	●	●								★												
	APKT11T308-APF	12.24	6.6	3.6	2.8	0.8	●	●								★					●	●						
	APKT160408-APF	17.877	9.33	5.76	4.4	0.8	●									★					●	●						
	APKT11T304-APM	12.24	6.6	3.6	2.8	0.4			●							★												
	APKT11T308-APM	12.24	6.6	3.6	2.8	0.8			●	●						★					●	●						
	APKT11T312-APM	12.24	6.6	3.6	2.8	1.2					●					★												
	APKT11T316-APM	12.24	6.6	3.6	2.8	1.6										★												
	APKT11T320-APM	12.24	6.6	3.6	2.8	2.0			●							★												
	APKT160408-APM	17.877	9.33	5.76	4.4	0.8			●	●						★					●	●						
	APKT160416-APM	17.877	9.33	5.76	4.4	1.6			●	●						★					●							
	APKT160420-APM	17.877	9.33	5.76	4.4	2.0					●					★												
	APKT160424-APM	17.877	9.33	5.76	4.4	2.4										★												
	APKT160430-APM	17.877	9.33	5.76	4.4	3.0										★												
	APKT11T304-ALH	12.24	6.6	3.6	2.8	0.4																			★	★		
	APKT11T308-ALH	12.24	6.6	3.6	2.8	0.8																			★	○		
	APKT160408-ALH	17.877	9.33	5.76	4.4	0.8																			★	★		

★Recommended grade (always stock available) ●Available grade (always stock available) ○Make-to-order

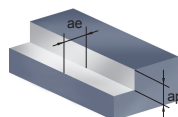
Indexable milling tools

Square shoulder milling tools

Chipbreaker selection

Classification	Function	For finishing	For semi-finishing
P		-APF	-APM
M		-APF	-APM
S		-APF	-APM
K		-APF	-APM
N		-ALH	

1 Square shoulder milling



Recommended cutting parameters (D: Diameter)

Workpiece material	Hardness HB	Insert grade	Cutting parameters				
			Vc(m/min)	fz(mm/z)		ae(mm)	
				-APF	-APM		
P	Low-carbon steel, Soft steel	YBC302	320 (240-400)	0.1 (0.08-0.2)	--	≤ 0.5D	
		YB9320	320 (200-400)	0.1 (0.08-0.2)	0.2 (0.1-0.3)		
		YBM253	300 (320-350)	0.1 (0.08-0.2)	0.2 (0.1-0.3)		
	High-carbon steel, Alloy steel	180-280	YBC302	280 (210-380)	0.1 (0.08-0.2)	--	≤ 0.5D
			YB9320	280 (180-350)	0.1 (0.08-0.2)	0.2 (0.1-0.3)	
			YBM253	260 (150-380)	0.1 (0.08-0.2)	0.2 (0.1-0.3)	
	Alloy tool steel	280-350	YBC302	260 (180-350)	0.1 (0.08-0.2)	--	≤ 0.5D
			YB9320	260 (160-330)	0.1 (0.08-0.2)	0.2 (0.1-0.3)	
			YBM253	220 (150-280)	0.1 (0.08-0.2)	0.2 (0.1-0.3)	
M	Stainless steel	YB9320	200 (110-300)	0.1 (0.08-0.2)	0.2 (0.1-0.3)	≤ 0.5D	
		YBM253	180 (150-300)				
K	Cast iron	YB9320	180 (150-250)	0.1 (0.08-0.2)	0.2 (0.1-0.3)	≤ 0.5D	
		YBD152	200 (150-250)	--	0.2 (0.1-0.3)		
S	Difficult-to-machine materials	YBS203	100 (60-120)	0.1 (0.08-0.2)	0.2 (0.1-0.3)	≤ 0.5D	
		YBS303	100 (60-120)	0.1 (0.08-0.2)	0.2 (0.1-0.3)	≤ 0.5D	
N				-ALH			
	Aluminium alloy	YD101	300-	0.2 (0.08-0.4)		≤ 0.5D	
		YD201	300-	0.2 (0.08-0.4)		≤ 0.5D	

Indexable milling tools

Square shoulder milling tools