

Chamfer Series

YOUNG
CUTTINGTOOLS



INDEXABLE CHAMFER KING

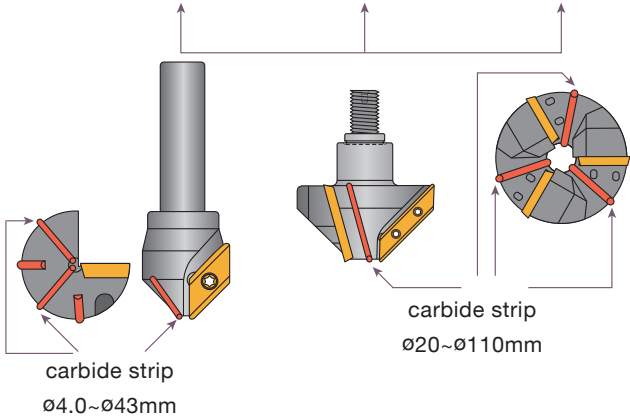
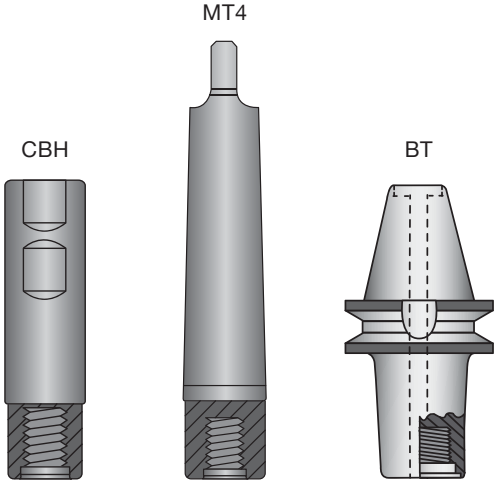


Features



Product Design

CUTTING RANGE
 $\varnothing 4.0 \sim \varnothing 110 \text{ mm}$



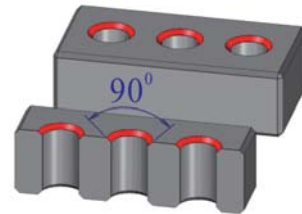
Carbide Strip Cutter With Carbide Insert:

- Special design for unstable drilling machine and electric hand tool. Lower RPM is required.
- Carbide strip supports better tool life.
- Carbide insert has a better tool life. It's economic with 2 cutting edges, one insert grade for all materials.
- Patented carbide strip cutter design has an excellent chamfering surface.



Chamfer

Geometries Application



Standard chamfer with 90°



- Excellent Design
- No burrs.



Chamfer cutter with longer shank



Chamfer with 120° used for tap holes, which reduce the loss of threads.



Chamfer with 60° used for deburring before "pin". 60° chamfer is easier than 90° or 120° to locate the pin.

Applicable Machine And Tools



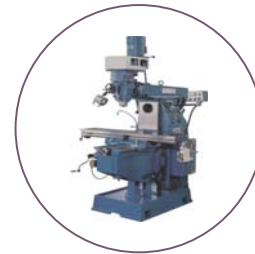
A. Drilling machine



B. Milling machine



C. Radial drilling machine



E. Conventional milling machine



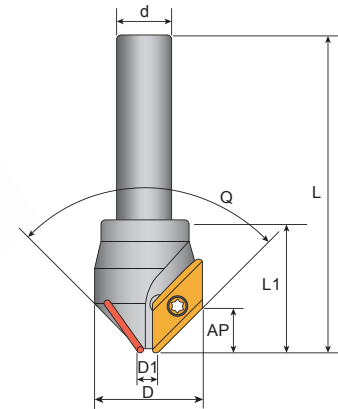
D. Electric Hand Tool

Chamfer

PRODUCT SPECIFICATIONS

Chamfer King Toolholders

- Insert P. 259
- Cutting Data P. 260 - 261



CI

• 60°

Order code	Dimensions(mm)						Q			MAX RPM	Insert	Screw	Key
	D1	D	d	L	AP	L1							
CI-17-60°	7	17	10	65	8.5	27	60°	1	0.2	35000	XDGT120308	C03506	T10P
CI-31-60°	15.5	31	12	78	13	35			0.3	25000	XDGT190408	C04011	T15P

• 90°

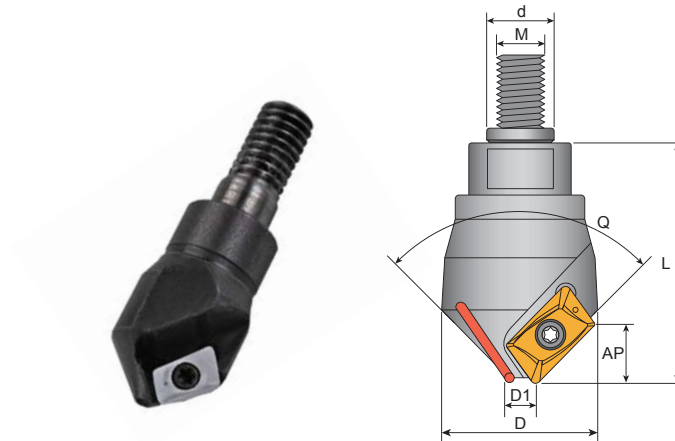
Order code	Dimensions(mm)						Q			MAX RPM	Insert	Screw	Key
	D1	D	d	L	AP	L1							
C01803	4	10	10	60	3	14	90°	1	0.1	45000	ADGT060204	C01803	T06P
CI-12-90° L				90					0.15				
CI-22-90°	5.5	22	65	8	27	0.2			35000	XDGT120308	C03506	T10P	
CI-36-90°	15	36	12	78	10	38			0.3	25000	XDGT190408	C04011	T15P

• 120°

Order code	Dimensions(mm)						Q			MAX RPM	Insert	Screw	Key
	D1	D	d	L	AP	L1							
CI-26-120°	7	26	10	65	5	27	120°	1	0.2	35000	XDGT120308	C03506	T10P
CI-39-120°	11	39	12	78	8	35			0.3	25000	XDGT190408	C04011	T15P

Chamfer King Toolholders

- Combi holders P. 257 - 258
- Insert P. 259
- Cutting Data P. 260 - 261



HCI

- 60°

Order code	Dimensions(mm)						Q		KG	MAX RPM	Insert	Screw	Key
	D1	D	d	L	AP	M							
HCI-17-60°	7	17	12	37	8.5	6	60°	1	0.2	35000	XDGT120308	C03506	T10P
HCI-31-60°	15.5	31	16	45	13	8			0.3	25000	XDGT190408	C04011	T15P

- 90°

Order code	Dimensions(mm)						Q		KG	MAX RPM	Insert	Screw	Key
	D1	D	d	L	AP	M							
HCI-12-90°	4	10	10	24	3	6	90°	1	0.1	45000	ADGT060204	C01803	T06P
HCI-22-90°	5.5	22	12	37	8				0.2	35000	XDGT120308	C03506	T10P
HCI-36-90°	15	36	16	48	10				8	0.3	25000	XDGT190408	C04011

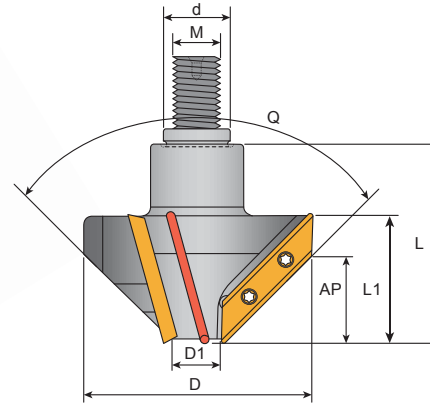
- 120°

Order code	Dimensions(mm)						Q		KG	MAX RPM	Insert	Screw	Key
	D1	D	d	L	AP	M							
HCI-26-120°	7	26	12	37	5	6	120°	1	0.2	35000	XDGT120308	C03506	T10P
HCI-39-120°	11	39	16	45	8				8	0.3	25000	XDGT190408	C04011

Chamfer



Chamfer King Toolholders

- Combi holders P. 257 - 258
- Insert P. 259
- Cutting Data P. 260 - 261

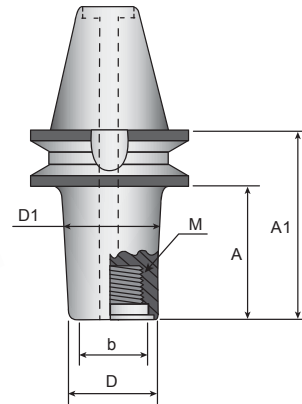


HCI

- 90°

Order code	Dimensions(mm)										MAX RPM	Insert	Screw	Key
	D1	D	d	L	AP	L1	M	Q						
HCI-76-90°	20	76	30	65	28	41	16	90°	3	1.5	13700	XDGT400408	C04011	T15P
HCI-110-90°	55	110								2.5	10900			

BT Arbor (Screw Type)

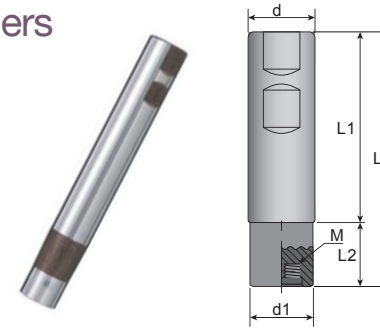


BT

Order code	Dimensions(mm)					M
	D	A	A1	b	D1	
BT40-2380A	23	53	78	14	28	M12
BT40-23120A		93	118		31	
BT40-3080A	30	53	78	22	35	M16
BT40-30120A		93	118		38	
BT40-4080A	40	53	78	28	45	M18
BT40-40120A		93	118		48	
BT50-2380A	23	42	77	14	28	M12
BT50-23120A		82	117		31	
BT50-3080A	30	42	77	22	35	M16
BT50-30120A		82	117		38	
BT50-4080A	40	42	77	28	45	M18
BT50-40120A		82	117		48	
BT50-5080A	50	42	77	36	55	M25
BT50-50120A		82	117		58	
BT50-50160A		122	157		61	

Chamfer

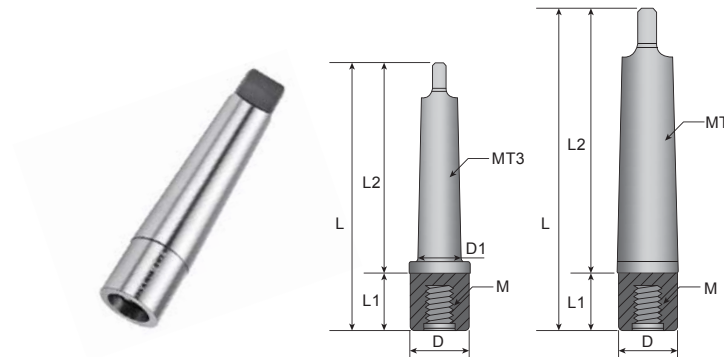
Chamfer King Combi Toolholders



CBH

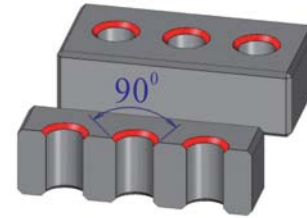
Order code	Dimensions(mm)					
	d	d1	L1	L2	L	M
CBH-1009-100	10	9	60	20	80	M6
CBH-1211-120	12	11	80		100	
CBH-1211-140			100	120		
CBH-1616-100	16	16	-	-	70	M8
CBH-1615-120		15	70	20	90	
CBH-1615-150			95	25	120	
CBH-3232-120	32	32	-	-	80	M16
CBH-3230-140		30	80	20	100	
CBH-3230-200			130	30	160	
CBH-3230-240			170		200	
CBH-3230-300			210	50	260	

MTH



Order code	Dimensions(mm)						
	D	D1	L	L1	L2	M	MT
MTH-3	30	23.83	140	40	100	M16	3
MTH-4	31.6	-	165		125	M16	4

TECHNICAL GUIDE



- Cutting data table for chamfering in hole

Material group																						
Dia. of Hole (ϕ mm)	Steel		Harden steel	Stainless steel	Cast iron			Aluminum			Titanium alloy Ni based superalloy Co-based superalloys											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
	Vc:20 m/min		Fz:0.1 mm/tooth		Vc:15m/min Fz:0.12mm/tooth			Vc:50m/min Fz:0.15mm/tooth			Vc:20m/min Fz:0.1mm/tooth											
	RPM rev/min	Feed mm/min		RPM rev/min	Feed mm/min		RPM rev/min	Feed mm/min		RPM rev/min	Feed mm/min											
	1 Tooth	3 Teeth		1 Tooth	3 Teeth		1 Tooth	3 Teeth		1 Tooth	3 Teeth											
5-7	1062	106	-	796	96	-	2654	398	-	796	80	-										
8-10	708	71	-	531	64	-	1769	265	-	531	53	-										
11-13	531	53	-	398	48	-	1327	199	-	398	40	-										
14-16	425	42	-	318	38	-	1062	159	-	318	32	-										
17-19	354	35	-	265	32	-	885	133	-	265	27	-										
20-22	303	30	91	227	27	82	758	114	341	227	23	68										
23-25	265	27	80	199	24	72	663	100	299	199	20	60										
26-28	236	24	71	177	21	64	590	88	265	177	18	53										
29-31	212	21	64	159	19	57	531	80	239	159	16	48										
32-34	193	19	58	145	17	52	483	72	217	145	14	43										
35-37	177	18	53	133	16	48	442	66	199	133	13	40										
38-40	163	16	49	122	15	44	408	61	184	122	12	37										
41-43	152	-	45	114	-	41	379	-	171	114	-	34										
44-46	142	-	42	106	-	38	354	-	159	106	-	32										
47-49	133	-	40	100	-	36	332	-	149	100	-	30										
50-52	125	-	37	94	-	34	312	-	141	94	-	28										
53-55	118	-	35	88	-	32	295	-	133	88	-	27										
56-58	112	-	34	84	-	30	279	-	126	84	-	25										

Technical Guide

Material group																						
Dia. of Hole (ϕ mm)	Steel		Harden steel	Stainless steel	Cast iron			Aluminum			Titanium alloy Ni based superalloy Co-based superalloys											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
	Vc:20 m/min Fz:0.1 mm/tooth				Vc:15m/min Fz:0.12mm/tooth				Vc:50m/min Fz:0.15mm/tooth				Vc:20m/min Fz:0.1mm/tooth									
	RPM rev/min		Feed mm/min		RPM rev/min		Feed mm/min		RPM rev/min		Feed mm/min		RPM rev/min		Feed mm/min							
		1 Tooth	3 Teeth			1 Tooth	3 Teeth			1 Tooth	3 Teeth			1 Tooth	3 Teeth							
59-61	106	-	32	80	-	29	265	-	119	80	-	24										
62-64	101	-	30	76	-	27	253	-	114	76	-	23										
65-67	97	-	29	72	-	26	241	-	109	72	-	22										
68-70	92	-	28	69	-	25	231	-	104	69	-	21										
71-73	88	-	27	66	-	24	221	-	100	66	-	20										
74-76	85	-	25	64	-	23	212	-	96	64	-	19										
77-79	82	-	24	61	-	-	204	-	92	61	-	18										
80-82	79	-	24	59	-	-	197	-	88	59	-	18										
83-85	76	-	23	57	-	-	190	-	85	57	-	17										
86-88	73	-	22	55	-	-	183	-	82	55	-	16										
89-91	71	-	21	53	-	-	177	-	80	53	-	16										
92-94	68	-	21	51	-	-	171	-	77	51	-	15										
95-97	66	-	20	50	-	-	166	-	75	50	-	15										
98-100	64	-	19	48	-	-	161	-	72	48	-	14										
101-103	62	-	19	47	-	-	156	-	70	47	-	14										
104-106	61	-	18	45	-	-	152	-	68	45	-	14										
107-109	59	-	18	44	-	-	147	-	66	44	-	13										
110	58	-	17	43	-	-	145	-	65	43	-	13										

Chamfer

DOVETAIL & CHAMFER MILLING CUTTERS SERIES

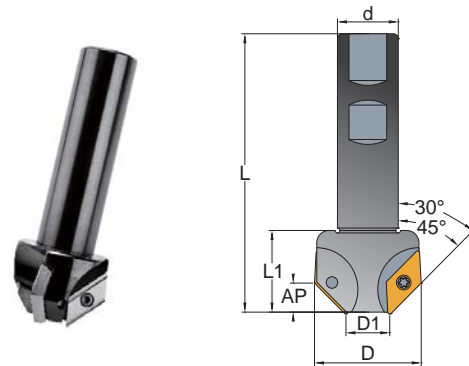


Features



Chamfer Milling Cutter

- Insert P. 277
- Cutting Data P. 277 - 278



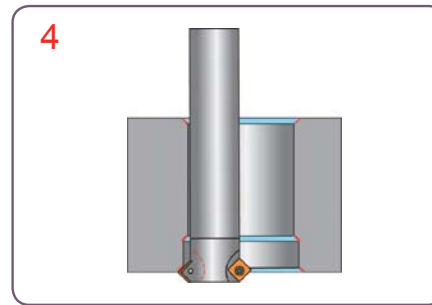
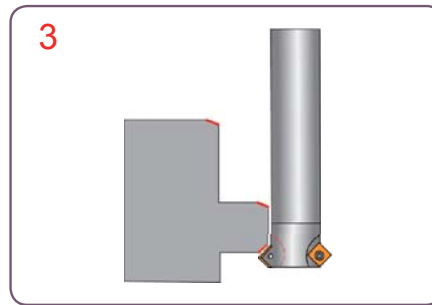
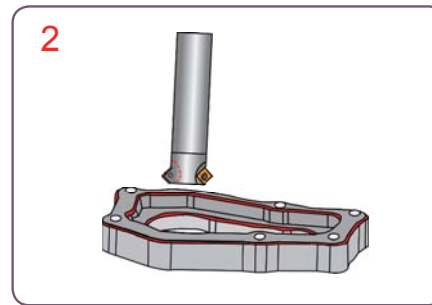
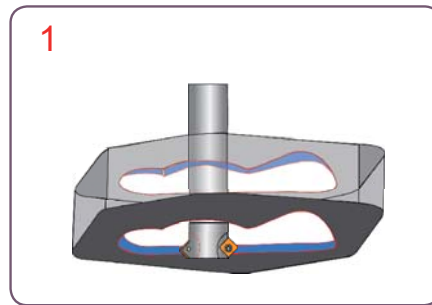
C

Order code	Dimensions(mm)						Insert	Screw	Key			
	D	D1	d	L	AP	L1						
C-1124-30°	24	10	20	80	10	30	2	0.3	35000	XDGT1203	C03506	T10P
C-1633-30°	30	16	25	95	14	35		0.5	25000	XDGT1904	C04011	T15P
C-2260-30°	60	22	32	120	33	55	3	1.1	8500	XDGT4004		
C-1128-45°	28	10	20	80	8	30	2	0.3	35000	XDGT1203	C03506	T10P
C-1740-45°	40	17	25	95	11	35		3	0.5	25000	XDGT1904	C04011
C-1770-45°	70	17	32	120	28	50	1.1		8500	XDGT4004		

Chamfer

Product Application

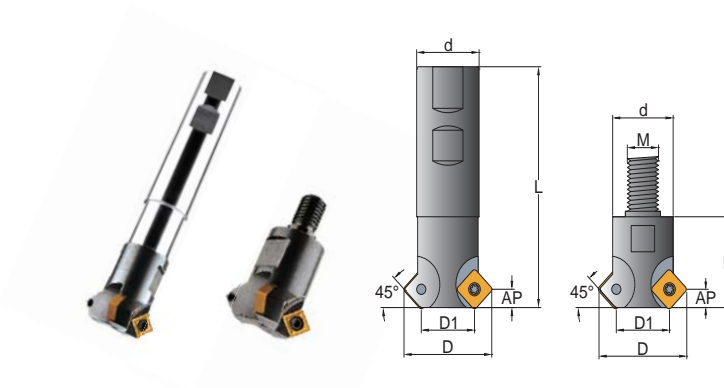
Type of operation




Two-Side Chamfer Milling Cutter

- Insert P. 266
- Cutting Data P. 266
- Combi Toolholders P. 286 - 289

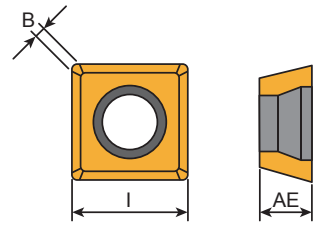
MC



Order code	Dimensions(mm)							 KG	MAX RPM	Insert	Screw	Key
	D	D1	d	L	AP	M						
MC-1218	18	11	12	90	3	-	2	0.15	35000	SD-06	C025045	T08P
MC-1625	25	19	16	100		-	3	0.25	25000			
MC-2032	32	22	20	110	6	-	2	0.45	17000	SD-09	C04011	T15P
MC-3245	45	32	32			-	3	0.7	14000	SE-13T3	C03508	T10P
HMC-18	18	11	11	20	3	6	2	0.15	35000	SD-06	C025045	T08P
HMC-25	25	19	15	30		8	3	0.2	25000			
HMC-32	32	22	19	40	6	10	2	0.3	17000	SD-09	C04011	T15P
HMC-45	45	32	31			16	3	0.5	14000	SE13T3	C03508	T10P

Chamfer

SDET / SEHT Inserts



Tolerances (mm)			
I	AE	B	
SDET	±0,03	±0,025	±0,03



Inserts 10 PCS / Box

Size	Dimensions in mm		
	I	AE	B
0602	6.0	2.3	1.0
09T3	9.0	3.97	1.2
13T3	13.4	3.97	1.5

Inserts	Part No .	Grades											
		Carbide					Metal cermet			Uncoated			
		B100	C200	C250	F20	F30	CE25	CE60		K10	CE		
	SDET060208N-ME	⊙											
	SDET09T308TN-M	⊙											
	SDET09T308TN-ME	⊙											
	SEHT13T3AFTN-M	⊙											
	SEHT13T3AFTN-ME	⊙											

- Steel Stainless Steel Steel/Stainless Steel Cast Iron Aluminum Steel/Cast Iron
- Steel/Stainless Steel/Cast Iron
- Correct price and stock are based on current situation
- Please specify model number and grade of insert, ie.: SDET060208N-ME, B100

Recommended Insert Grade

Material Group No.	Recom. feed fz mm/tooth	Insert			
		SDET... M SEHT... M	SDET...ME SEHT...ME		
1	0.08-0.20	C250/B100	B100	-	-
2	0.08-0.18	C250/B100	B100	-	-
3	0.08-0.18	C250/B100	B100	-	-
4	0.08-0.15	C250/B100	B100	-	-
5	0.06-0.13	C250/B100	B100	-	-
6	0.06-0.12	C250/B100	B100	-	-
7	0.08-0.18	C250/B100	B100	-	-
8	0.08-0.15	-	B100	-	-
9	0.07-0.13	-	B100	-	-
10	0.06-0.12	-	B100	-	-
11	0.10-0.22	-	B100	-	-
12	0.10-0.22	-	F30	-	-
13	0.10-0.15	-	F30	-	-
14	0.10-0.15	-	F30	-	-
15	0.05-0.20	-	F30	-	-
16	0.05-0.20	-	-	-	-
17	0.06-0.10	-	-	-	-
18	0.06-0.15	-	-	-	-
19	0.05-0.08	-	B100	-	-
20	0.05-0.08	-	B100	-	-
21	0.06-0.10	-	B100	-	-
22	0.05-0.06	-	B100	-	-

CORNER ROUNDING CUTTER-390 SYSTEM

Patent No.
M473882
M474588
M473881

Patent No.
201310453057.2
201320772697.5

PCT Priority No.
PCT/ CN2013/086393



Video

Features

Available in
materials



Cost
300~500%
DOWN

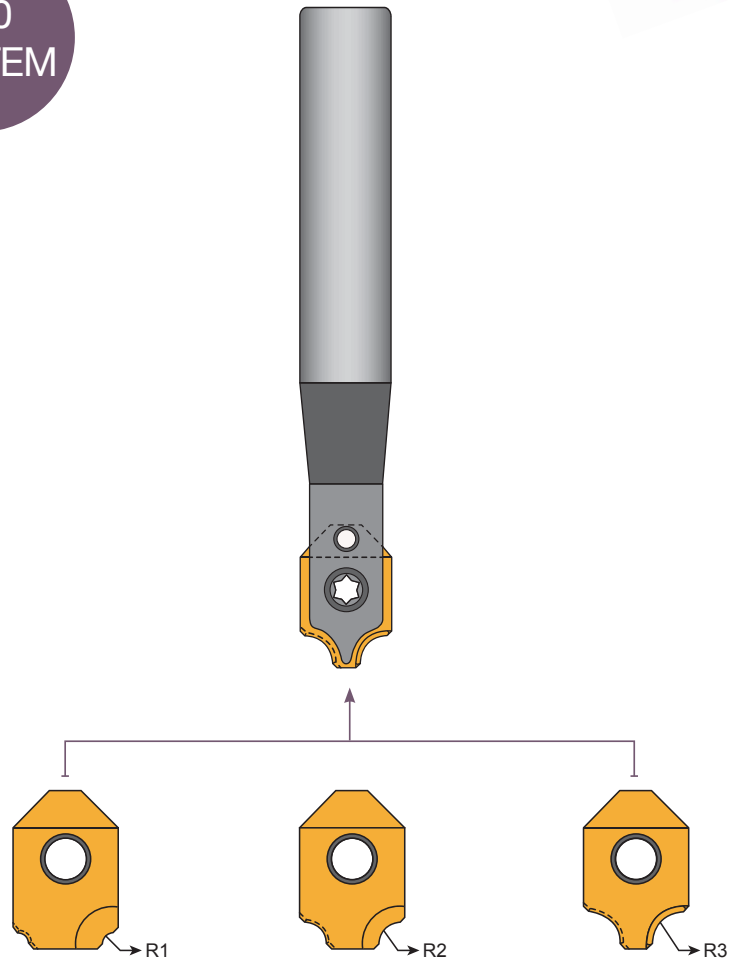
Variety of
Machines
Milling

Efficiency
300%
UP

Durability
300%
UP

Product Design

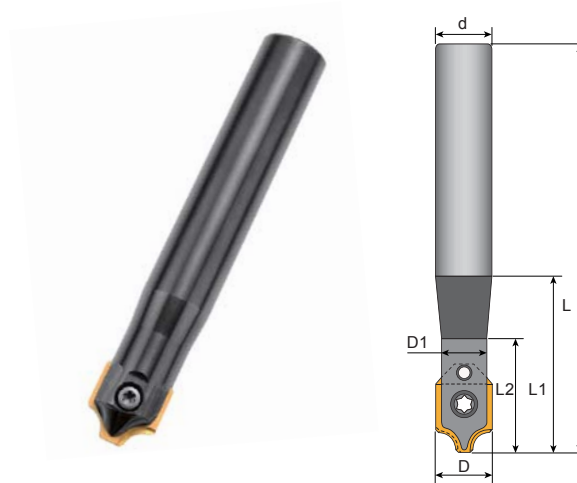
390
SYSTEM



R1~R10

Indexable Corner Rounding Toolholders (Milling)

- Insert P. 270
- Cutting Data P. 272

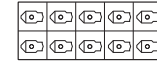


15

Order code	Dimensions(mm)						KG	Insert	Screw	Key
	D	D1	d	L	L1	L2				
15-1616-100-R1-3	16	14	16	100	30	25	0.26	C03510 S0404	T10P L02	
15-1616-130-R1-3				130			0.29			
15-1616-100-R4-5				100			0.26			
15-1616-130-R4-5				130			0.29			
15-2525-110-R6-8	25	22	25	110	35	30	0.50	C04017 S0508	T15P L025	
15-2525-140-R6-8				140			0.65			
15-2525-110-R9-10				110			0.50			
15-2525-140-R9-10				140			0.65			

Chamfer

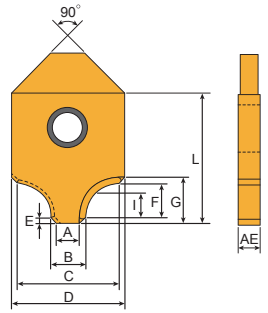
25 Carbide Inserts



Inserts 6 PCS / Box

Inserts 10 PCS / Box

Only for insert :25-25***



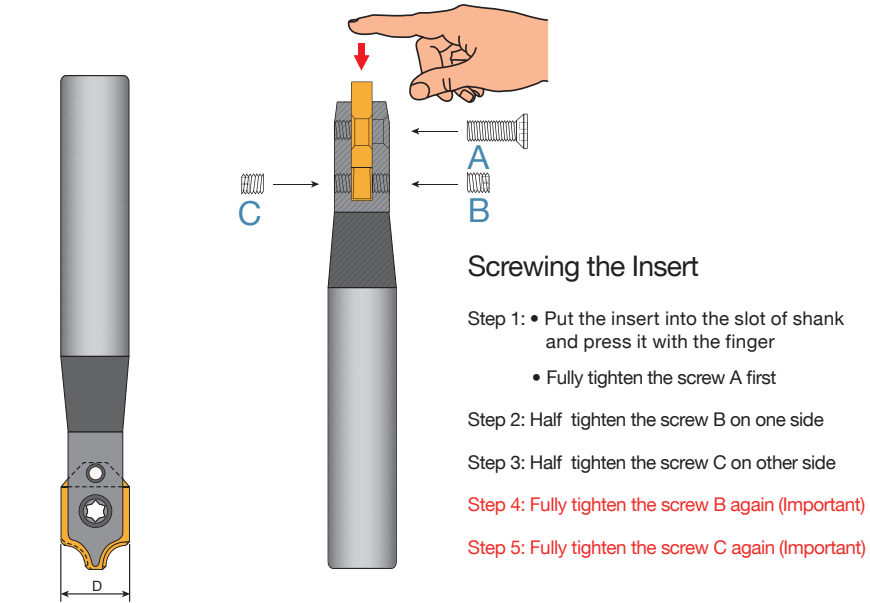
Tolerances (mm)
D : ±0.05~0.08 AE : ±0.01~0.02

Dimensions in mm													
R	A	B	C	D	E	F	G	H	I	L	AE		
1.0	12.0	13.29	15.17	16.55	0.64	0.96	2.33	13.86	1.30	21.5	3.0		
1.5	11.0	12.29	15.16		0.67	1.47	2.85	13.15	1.69				
2.0	10.0	11.30	15.15	16.54	0.68	1.97	3.36	12.27	2.09				
2.5	9.00	10.31		16.51	0.67	2.47	3.85	11.74	2.39				
3.0	7.94	9.28	15.14	16.52	0.64	3.01	4.39	10.98	2.74				
4.0	6.00	7.29	15.09	16.44	0.67	3.97	5.37	9.58	3.45				
5.0	4.92	5.14	15.04	16.58	0.66	4.99	6.36	8.04	4.17				
6.0	11.2	12.38	24.15	25.31	0.58	5.96	7.16	15.84	4.76			30.0	3.5
7.0	9.20	10.30	24.08		0.55	6.96	8.14	14.35	5.44				
8.0	7.06	8.20	24.32	25.18	0.54	7.97	9.13	12.95	6.20				
9.0	4.80	5.93	23.98		0.56	9.00	10.18	11.22	6.93				
10.0	3.00	3.78	23.96	0.59	10.0	11.23	9.70	7.69					

Inserts	Part No .	Grades										
		Carbide					Metal cermet			Uncoated		
		C125	C200	C350	F20	F30	CE25	CE60		K10	CE	
	25-1603-R1.0-E											
	25-1603-R1.5-E											
	25-1603-R2.0-E											
	25-1603-R2.5-E											
	25-1603-R3.0-E											
	25-1603-R4.0-E											
	25-1603-R5.0-E											
	25-2503-R6.0-E											
	25-2503-R7.0-E											
	25-2503-R8.0-E											
	25-2503-R9.0-E											
	25-2503-R10-E											
	25-1603-R1.0-ME											
	25-1603-R1.5-ME											
	25-1603-R2.0-ME											
	25-1603-R2.5-ME											
	25-1603-R3.0-ME											
	25-1603-R4.0-ME											
	25-1603-R5.0-ME											
	25-2503-R6.0-ME											
	25-2503-R7.0-ME											
	25-2503-R8.0-ME											
	25-2503-R9.0-ME											
	25-2503-R10-ME											

- Steel Stainless Steel Steel/Stainless Steel Cast Iron Aluminum Steel/Cast Iron
- Steel/Stainless Steel/Cast Iron
- Correct price and stock are based on current situation
- Please specify model number and grade of insert, ie.: 25-1603-R1.0-E, F20

How to Fit Insert - Screw A.B.C.



Chamfer

Standard spare parts

Insert dimension (D mm)	Screw A	Screw B/C	Key	Key
16	C03510	S0404	T10P	L02
25	C04017	S0508	T15P	L025

Recommended Cutting Data And Insert Grade

Material group No .	Recom. feed fz mm/tooth ae/Dc = 10%	Geometry	
		ME	E
1	0.10-0.12	C350	-
2	0.10-0.12	C350	-
3	0.08-0.12	C350	-
4	0.07-0.10	C350	-
5	0.07-0.10	C350	-
6	0.06-0.08	C350	-
7	0.05-0.06	C350	-
8	0.10-0.12	C350	-
9	0.10-0.12	C350	-
10	0.08-0.10	C350	-
11	0.08-0.10	C350	-
12	0.12-0.15	C350	-
13	0.12-0.15	C350	-
14	0.10-0.12	C350	-
15	0.10-0.12	C350	-
16	0.08-0.10	-	F20
17	0.08-0.10	-	F20
18	0.08-0.10	-	F20

- Corner Rounder recommended cutting speed, Vc (m/min), Feed,fz(mm/ tooth) in CHAMFERING process. The effective no. of teeth is calculated with 2 flutes.

Material group No .	Grades						
	C250	C350			CE60	F20	
		0.07	0.10	0.14			
1	-	207	186	167	-	-	-
2	-	186	167	150	-	-	-
3	-	167	150	135	-	-	-
4	-	150	135	120	-	-	-
5	-	135	120	109	-	-	-
6	-	120	108	97	-	-	-
7	-	48	43	-	-	-	-
8	-	110	96	85	-	-	-
9	-	96	85	74	-	-	-
10	-	85	74	64	-	-	-
11	-	74	64	56	-	-	-
12	-	170	145	125	-	-	-
13	-	155	125	115	-	-	-
14	-	110	90	82	-	-	-
15	-	110	90	-	-	-	-
16	-	-	-	-	-	1080	900 780
17	-	-	-	-	-	950	900 770
18	-	-	-	-	-	950	900 770