CHAMFER KING SERIES

Video

Features Description

The indexable countersink with carbide insert can be used in all kinds of machines, include drilling machine, electric hand tool...etc. The patented unique design "carbide strip"enhance the cutter toollife. Available from ø4 - ø110 mm.

INDEXABLE CHAMFER KING

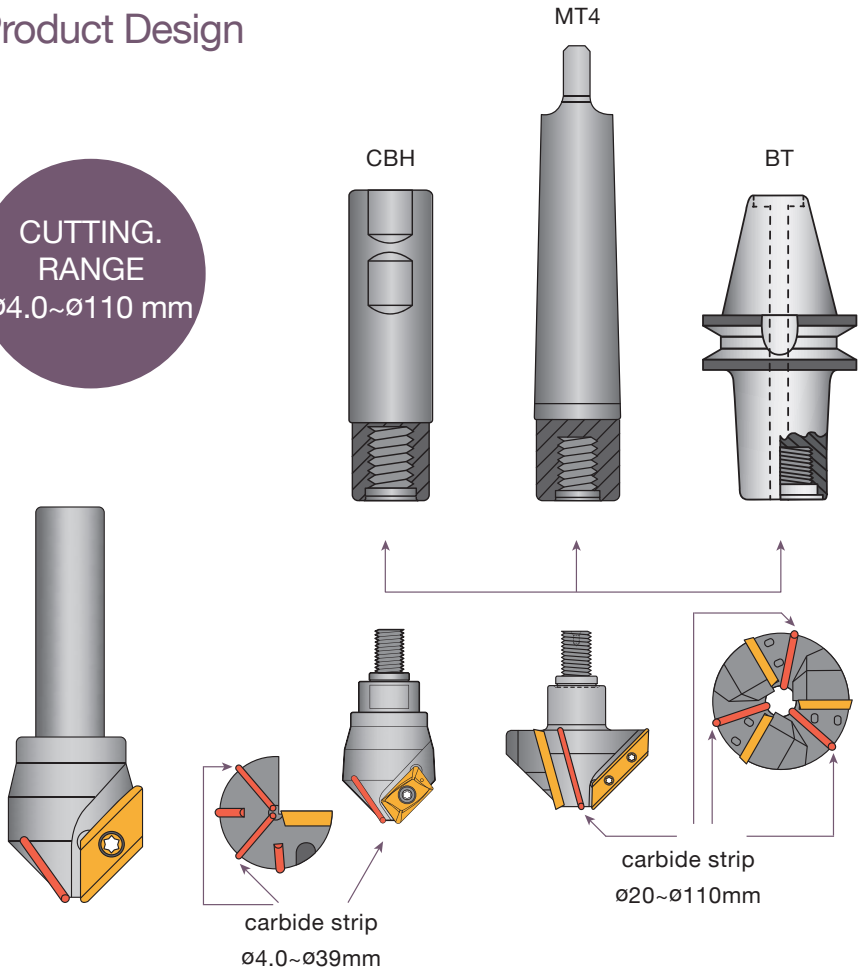
Video

Features

- Available in materials: P K M N S H
- Cost **300~500%** SAVING
- Adapter type is available: max. 300mm
- Applicable Machines: Milling / drilling / lathe / electric hand tool
- Efficiency **300%** UP
- Durability **500~1000%** UP

Product Design

CUTTING.
RANGE
ø4.0~ø110 mm



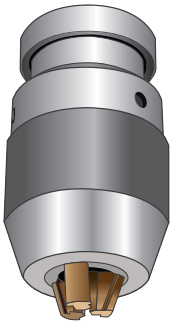
Carbide Strip Cutter With Carbide Inserts:

- Special design for unstable drilling machines and electric drills. It's working well even in lower RPM.
- Carbide strips support better tool life.
- The carbide insert performs a better tool life. It was designed with 2 cutting edges, one insert grade suitable for all materials, tend to be more economical.
- Patented carbide strip cutter design provides an excellent chamfering surface.

New coming shank

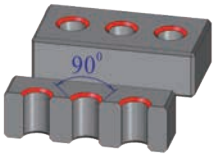
The shank with three flat designs is more suitable for drilling machine (three-jaw chuck) which achieves stable clamping and longer tool life.

▲ Optimal surface finishing



▲ Top view of the shank

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.

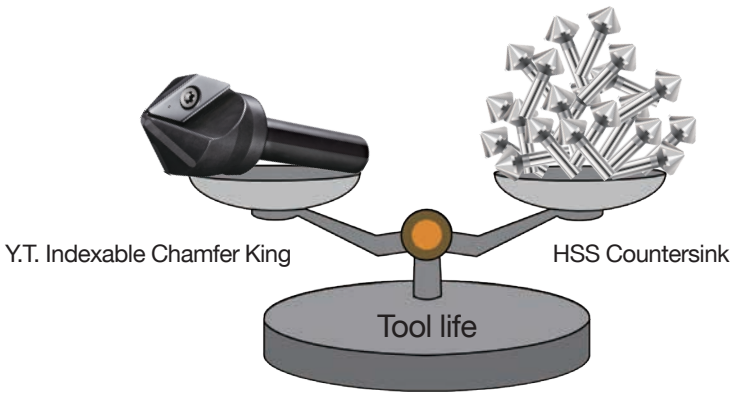
PIN

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

Applicable Machine And Tools

Cost Effective Solution

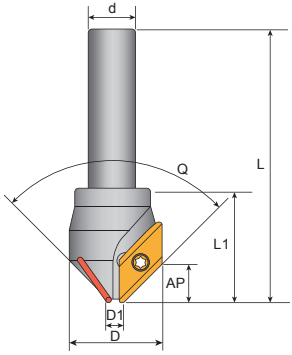
Coated carbide insert provides excellent toolife. Insert with 2 cutting edges maximizes toolcost-saving.



PRODUCT SPECIFICATIONS

Chamfer King Toolholders

- Inserts P. 320
- Cutting Data P. 321 - 322



CI

• 60°

Order Code	Dimensions (mm)						Q	Z	KG	MAX RPM	Inserts XDGT	Screw	Key
	D1	D	d	L	AP	L1							
CI-17-60°	7	17	10	65	8.5	27	60°	1	0.12	35000	120308	C03506	T10P
CI-31-60°	15.5	31	12	78	13	35			0.24	25000	190408	C04008	T15P

• 90°

Order Code	Dimensions (mm)						Q	Z	KG	MAX RPM	Inserts ADGT/XDGT	Screw	Key
	D1	D	d	L	AP	L1							
CI-12-90°	4	10	10	60	3	14	90°	1	0.08	45000	060204	C018035	T06P
CI-12-90° -L				90					0.10				
CI-22-90°	5.5	22		65	8	27			0.14	35000	120308	C03506	T10P
CI-36-90°	15	36	12	78	10	38			0.32	25000	190408	C04008	T15P
CI-36-90° -2								2	0.33				

• 100°

Order Code	Dimensions(mm)						Q	Z	KG	MAX RPM	Inserts ADGT/XDGT	Screw	Key
	D1	D	d	L	AP	L1							
CI-12-100°	4	10	10	60	3	14	100°	1	0.05	45000	060204	C018035	T06P
CI-24-100°	5	24		65	7.5	27			0.15	35000	120308	C03506	T10P
CI-38-100°	15	38	12	78	10	38			0.40	25000	190408	C04008	T15P
CI-38-100° -2								2	0.41				

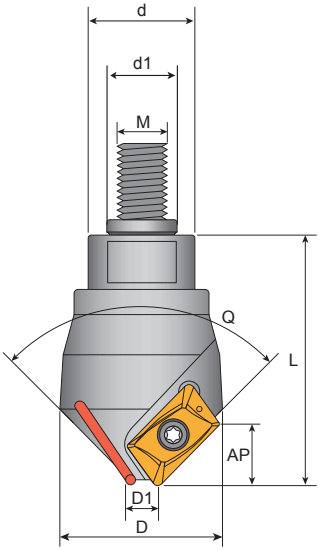
• 120°

Order Code	Dimensions(mm)						Q	Z	KG	MAX RPM	Inserts XDGT	Screw	Key
	D1	D	d	L	AP	L1							
CI-26-120°	7	26	10	65	5	27	120°	1	0.18	35000	120308	C03506	T10P
CI-39-120°	11	39	12	78	8	35			0.36	25000	190408	C04008	T15P

• Insert is included with purchase of a chamfer king.

Chamfer King Toolholders

- Combi holders P. 319
- Inserts P. 320
- Cutting Data P. 321 - 322



HCI

• 60°

Order Code	Dimensions (mm)							Q	Z	KG	MAX RPM	Inserts XDGT	Screw	Key
	D1	D	d	d1	L	AP	M							
HCI-17-60°	7	17	12	6.5	37	8.5	6	60°	1	0.12	35000	120308	C03506	T10P
HCI-31-60°	15.5	31	16	8.5	45	13	8			0.24	25000	190408	C04008	T15P

• 90°

Order Code	Dimensions(mm)							Q	Z	KG	MAX RPM	Inserts ADGT/XDGT	Screw	Key
	D1	D	d	d1	L	AP	M							
HCI-12-90°	4	10	10	6.5	24	3	6	90°	1	0.08	45000	060204	C018035	T06P
HCI-22-90°	5.5	22	12		37	8				0.14	35000	120308	C03506	T10P
HCI-36-90°	15	36	16	8.5	48	10	8			0.32	25000	190408	C04008	T15P

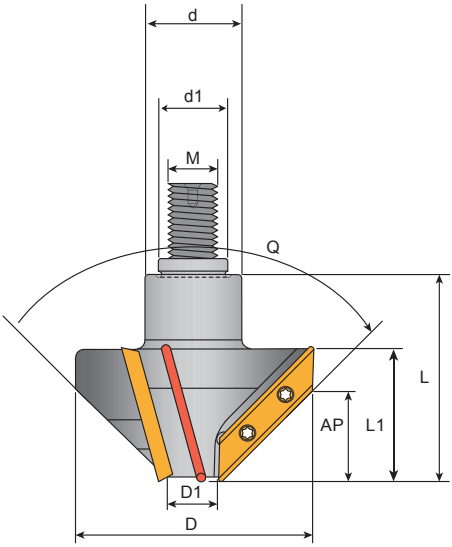
• 120°

Order Code	Dimensions(mm)							Q	Z	KG	MAX RPM	Inserts XDGT	Screw	Key
	D1	D	d	d1	L	AP	M							
HCI-26-120°	7	26	12	6.5	37	5	6	120°	1	0.18	35000	120308	C03506	T10P
HCI-39-120°	11	39	16	8.5	45	8	8			0.36	25000	190408	C04008	T15P

• Insert is included with purchase of a chamfer king.

Chamfer King Toolholders

- Combi holders P. 319
- Inserts P. 320
- Cutting Data P. 321 - 322



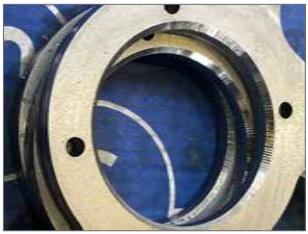
HCI

• 90°

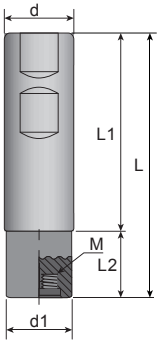
Order Code	Dimensions (mm)									Z	KG	MAX RPM	Inserts XDGT	Screw	Key
	D1	D	d	d1	L	AP	L1	M	Q						
HCI-76-90°	20	76	30	22	65	28	41	16	90°	3	0.85	13700	400408	C04008	T15P
HCI-110-90°	55	110									1.55	10900			

Note:

- For clunker radial drilling machine which is too stiff to position at the hole center of workpiece it might cause vibration and poor surface finishing during machining.
- For workpieces which are heavy and difficult to align the toolcenter, it might cause vibration and results in chatter marks on the chamfering surface.



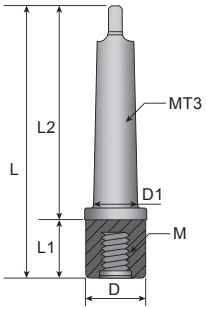
Chamfer King Combi Toolholders

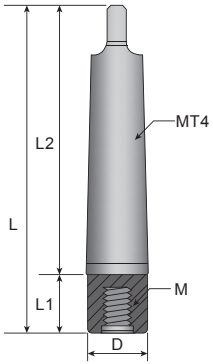


CBH

Order Code	Dimensions (mm)						
	d	d1	L1	L2	L	M	KG
CBH-1009-100	10	9	60	20	80	M6	0.05
CBH-1211-120	12	11	80		100		0.09
CBH-1211-140			100		120		0.11
CBH-1616-100	16	16	-	-	70	M8	0.11
CBH-1615-120		15	70	20	90		0.14
CBH-1615-150			95	25	120		0.18
CBH-3232-120	32	32	-	-	80	M16	0.48
CBH-3230-140		30	80	20	100		0.56
CBH-3230-200			130	30	160		0.92
CBH-3230-240			170		200		1.16
CBH-3230-300			210	50	260		1.53

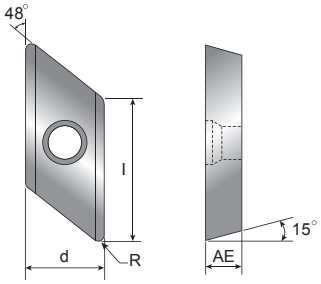
MTH





Order Code	Dimensions (mm)							
	D	D1	L	L1	L2	M	MT	KG
MTH-3	30	23.83	140	40	100	M16	3	0.50
MTH-4	31.6	-	165		125	M16	4	0.60

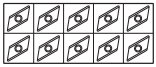
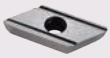
XDGT Chamfer King Insert



Tolerances (mm)

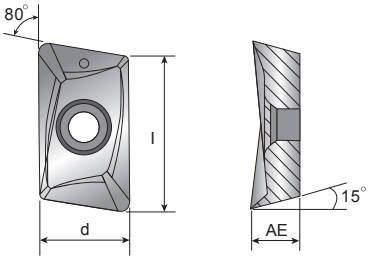
d	AE
±0.015	±0.015

Code	Dimensions (mm)				
	l	d	AE	R	Angle
120308	13	8.3	3.10	0.8	48°
190408	16	10.45	4.45		
400408	40		4.70		

Inserts	Order Code	Grades										
		Coated					Cermet			Uncoated		ME
		B100	C200	C250	F20	F30	CE25	CE100	CE60	K10	CE	
	XDGT120308TR-ME-C	★										 Inserts 10 PCS / Box
	XDGT190408TR-ME	★										
	XDGT400408TR-ME	★										Inserts 2 PCS / Box

★ All Materials

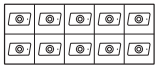
ADGT Chamfer King Insert



Tolerances (mm)

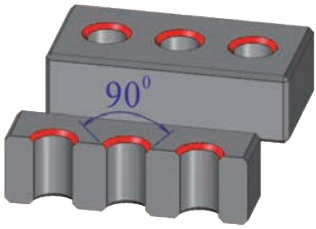
d	AE
±0.015	±0.015

Code	Dimensions (mm)		
	d	l	AE
060204	4.15	6.5	2.6

Inserts	Order Code	Grades										
		Coated					Cermet			Uncoated		ME
		B100	C200	C250	F20	F30	CE25	CE100	CE60	K10	CE	
	ADGT060204TR-ME-C	★										 Inserts 10 PCS / Box

★ All Materials

TECHNICAL GUIDE



- Cutting data for hole countersinking.
- This data is for drilling machine application.

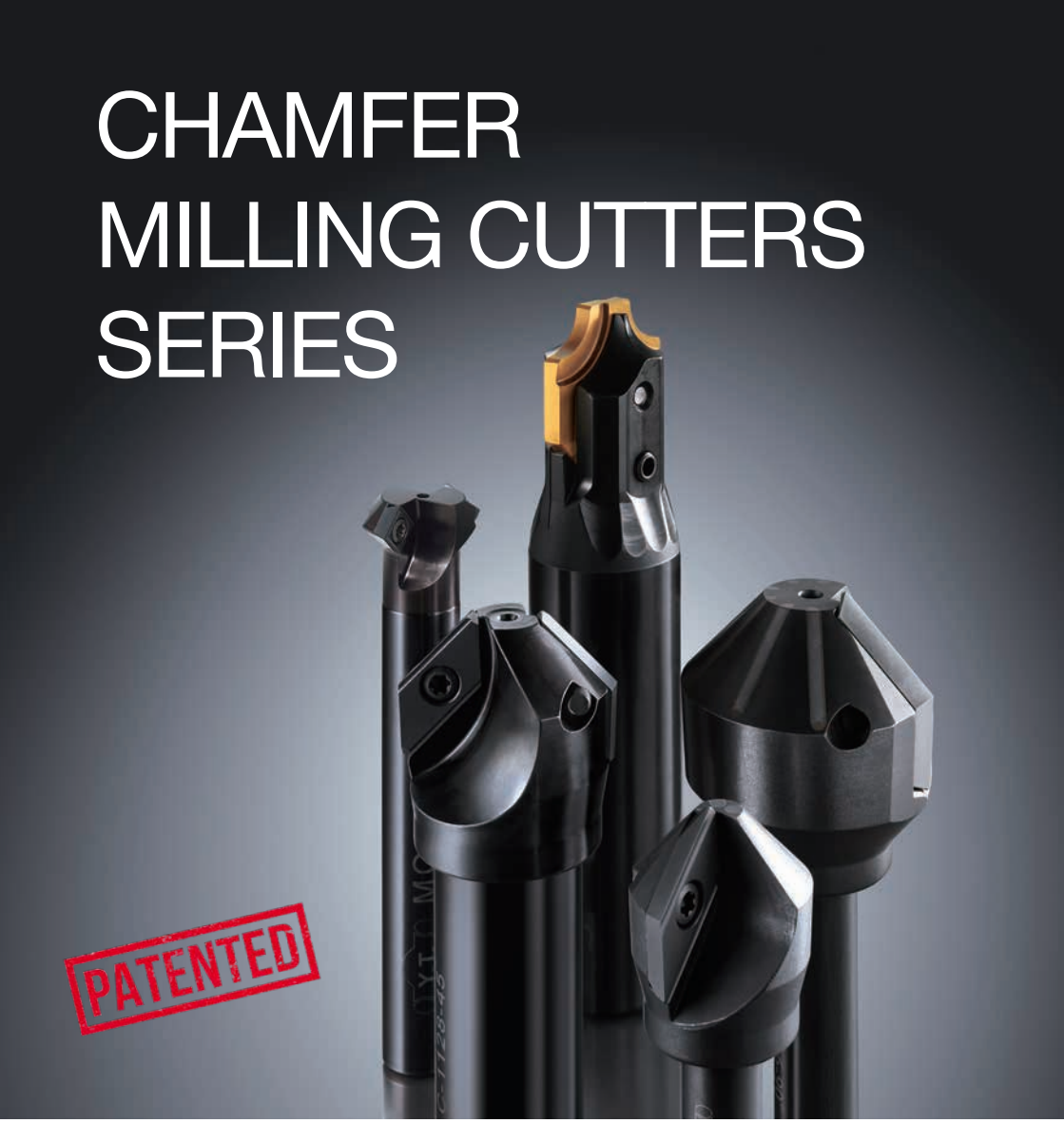
Material group												
Dia. of Hole (ψmm)	Steel	Harden steel	Stainless steel	Cast iron			Aluminum			Titanium alloy Ni based superalloy Co-based superalloys		
	1 2 3 4 5 6	7	8 9 10 11	12 13 14 15			16 17 18			19 20 21 22		
	Vc:20 m/min Fn:0.1 mm/rev			Vc:15m/min Fn:0.12mm/rev			Vc:50m/min Fn:0.15mm/rev			Vc:20m/min Fn:0.1mm/rev		
	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		1Tooth	3Teeth		1Tooth	3Teeth		1Tooth	3Teeth
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

- Cutting data for hole countersinking.
- This data is for drilling machine application.

Material group												
Dia. of Hole (ϕmm)	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 Fn:0.1 mm/rev			Vc:15m/min Fn:0.12mm/rev			Vc:50m/min Fn:0.15mm/rev			Vc:20m/min Fn:0.1mm/rev		
	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		1Tooth	3Teeth		1Tooth	3Teeth		1Tooth	3Teeth
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 MILLING CUTTERS SERIES



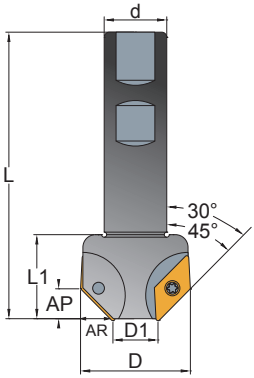
Features

- Available in materials: P K M N S H
- Cost **100~300%** SAVING
- Applicable Machines: CNC Milling machine
- Efficiency **300%** UP
- Durability **300%** UP

PRODUCT SPECIFICATIONS

Chamfer Milling Cutters

- Inserts P. 337
- Cutting Data P. 338 - 339



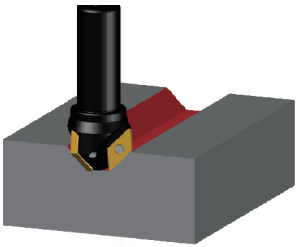
C

Order Code	Dimensions (mm)							Z	KG	MAX RPM	Inserts XDGT	Screw	Key
	D	D1	d	L	L1	AP	AR						
C-1124-30°	24	10	20	80	30	10	5	2	0.23	35000	120308	C03506	T10P
C-1633-30°	33	16	25	95	35	14	7.5		0.42	25000	190408	C04008	T15P
C-2260-30°	60	22	32	120	55	33	18.5	3	0.88	8500	400408		
C-1128-45°	28	10	20	80	30	8	8	2	0.28	35000	120308	C03506	T10P
C-1740-45°	40	17	25	95	35	11	11	3	0.48	25000	190408	C04008	T15P
C-1770-45°	70	17	32	110	50	28	28		0.96	8500	400408		

Product Applications

Type of operation

1



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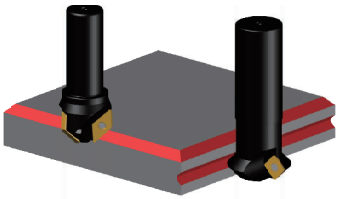

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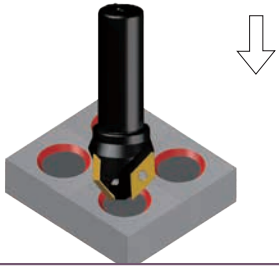

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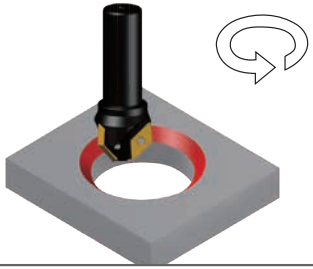
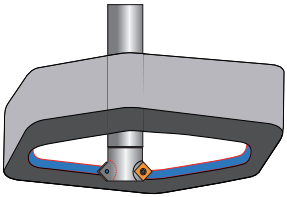


1



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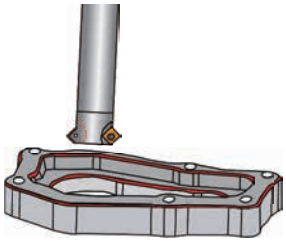

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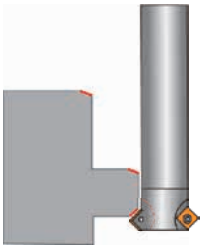

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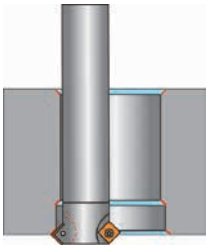
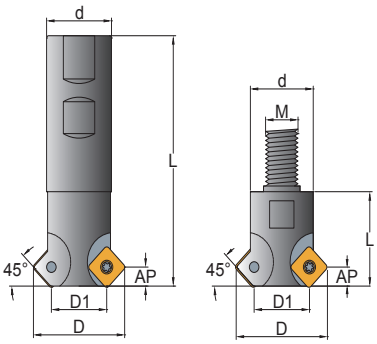


Dual Chamfer Milling Cutters

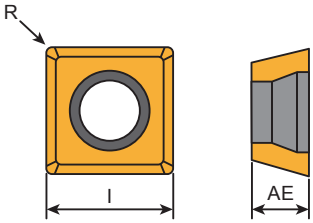
- Inserts P. 327
- Cutting Data P. 327
- Combi Toolholders P. 347 - 348

MC / HMC



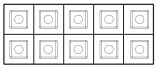
Order Code	Dimensions (mm)						Z	KG	MAX RPM	Inserts **SDET**	Screw	Key
	D	D1	d	L	AP	M						
MC-1218	18	11	12	90	3	-	2	0.12	35000	060208	C025045	T08P
MC-1625	25	19	16	100		-	3	0.21	25000			
MC-2032	32	22	20		6	-	2	0.31	17000	09T308	C04008	T15P
HMC-18	18	11	11	20	3	6	2	0.06	35000	060208	C025045	T08P
HMC-25	25	19	15	30		8	3	0.09	25000			
HMC-32	32	22	19		6	10	2	0.17	17000	09T308	C04008	T15P

SDET Inserts



Tolerances (mm)

I	AE
±0.03	±0.025



Inserts 10 PCS / Box

Code	Dimensions (mm)		
	I	AE	R
060208	6.0	2.3	0.3
09T308	9.0	3.97	0.5

Inserts	Order Code	Grades									
		Carbide					Metal cermet			Uncoated	
		B100	C200	C250	F20	F30	CE25	CE60		K10	CE
	SDET060208N-ME	◎				■					
	SDET09T308TN-M	◎									
	SDET09T308TN-ME	◎				■					

- ■ Steel ■ Stainless Steel ◎ Steel/Stainless Steel/Super alloy ■ Cast Iron ■ Aluminum ■ Steel/Cast Iron ◎ Steel/Stainless Steel/Cast Iron
- Prices and stocks are based on presen conditions
- Please specify model numbers the and grade of inserts, ie.: SDET060208N-ME,B100

Recommended Cutting Data Insert Grades

Material Group	Recom. fz (mm/tooth)	Cutting Speed Vc (m/min)	Grades		
			SDET... M	SDET...ME	
1	0.08-0.20	130 160 185	-	B100	-
2	0.08-0.18		-	B100	-
3	0.08-0.18		-	B100	-
4	0.08-0.15	120 140 160	-	B100	-
5	0.06-0.13		-	B100	-
6	0.06-0.12	100 120 140	-	B100	-
7	0.08-0.18	65 80 90	B100	B100	-
8	0.08-0.15		-	B100	-
9	0.07-0.13		-	B100	-
10	0.06-0.12	60 70 80	-	B100	-
11	0.10-0.22		-	B100	-
12	0.10-0.22	100 120 140	-	F30	-
13	0.10-0.15		-	F30	-
14	0.10-0.15		-	F30	-
15	0.05-0.20		-	F30	-
16	0.05-0.20	400 500 600	-	-	-
17	0.06-0.10		-	-	-
18	0.06-0.15		-	-	-
19	0.05-0.08	30 40 50	-	B100	-
20	0.05-0.08		-	B100	-
21	0.06-0.10		-	B100	-
22	0.05-0.06		-	B100	-