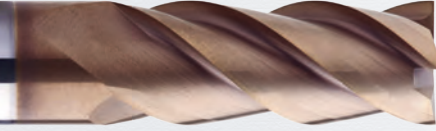


NiTiCo 45

Uncover the high performance series
for Stainless Steel and Superalloys,
with hardness **36 - 52 HRC**



SQUARE ENDMILLS



EDP No.	Design	Z	Diameter Range	Page	Stock
K92	DP/DH	4	3.0 - 20.0	3	●
K93	DP/DH with recess	4	3.0 - 20.0	3	●
K94	DP/DH with weldon	4	3.0 - 20.0	3	○
K95	DP/DH with recess, weldon	4	3.0 - 20.0	3	●

TORUS ENDMILLS



EDP No.	Design	Z	Diameter Range	Page	Stock
K96	DP/DH	4	3.0 - 20.0	5	●
K97	DP/DH with recess	4	3.0 - 20.0	5	●
K98	DP/DH with weldon	4	3.0 - 20.0	5	○
K99	DP/DH with recess, weldon	4	3.0 - 20.0	5	●

ROUGHING ENDMILLS



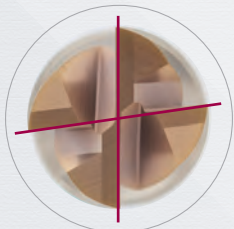
EDP No.	Design	Z	Diameter Range	Page	Stock
G38	DP	4	6.0 - 20.0	8	○
G41	DP with recess	4	6.0 - 20.0	8	○
G44	DP with weldon	4	6.0 - 20.0	8	○
G47	DP with recess, weldon	4	6.0 - 20.0	8	●

MULTIFLUTES ENDMILLS

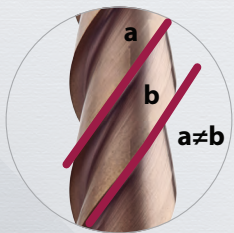


EDP No.	Design	Z	Diameter Range	Page	Stock
K76	DH Square with recess	6/7	3 - 20	10	●
K77	DH Square	6/7	3 - 20	10	●
K73	DH Torus with recess	6/7	3 - 20	12	●

Legend : ● Ex stock ○ Upon Request



Top View



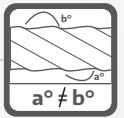
1 Differential Pitch (DP)

- Reduces chatter to provide excellent surface finishing



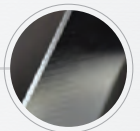
2 Differential Helix (DH)

- Reduces the cutting force:
- Allows high speed machining
 - Improves surface finishing



3 Ideal Cutting Edge

- Provides edge protection to prolong tool life



4 Superior Coating to Reduce Friction

- Enhances heat resistance to reduce tool wear
- Increases hardness and higher abrasive wear resistance
- Higher thermal resistance
- Smoother chip evacuation



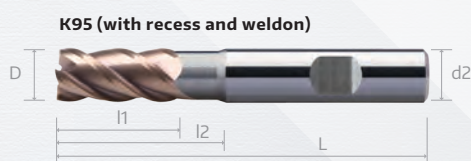
K92 / K93 / K94 / K95

DP/DH SQUARE ENDMILLS, 4 FLUTES



Order Number	Dimension (mm)					Stock
	D	l1	l2	L	d2(h6)	
K92 0300	3	8		57	6	•
K92 0400	4	11		57	6	•
K92 0500	5	13		57	6	•
K92 0600	6			57	6	•
K92 0800	8	19		63	8	•
K92 1000	10	22		72	10	•
K92 1200	12	26		83	12	•
K92 1400	14			83	14	•
K92 1600	16	32		92	16	•
K92 1800	18			92	18	•
K92 2000	20	38		104	20	•

Order Number	Dimension (mm)					Stock
	D	l1	l2	L	d2(h6)	
K93 0300	3	8	14	57	6	•
K93 0400	4	11	18	57	6	•
K93 0500	5	13	18	57	6	•
K93 0600	6			20	57	6
K93 0800	8	19	26	63	8	•
K93 1000	10	22	32	72	10	•
K93 1200	12	26	36	83	12	•
K93 1400	14			36	83	14
K93 1600	16	32	42	92	16	•
K93 1800	18			42	92	18
K93 2000	20	38	52	104	20	•



Order Number	Dimension (mm)					Stock
	D	l1	l2	L	d2(h6)	
K94 0300	3	8		57	6	○
K94 0400	4	11		57	6	○
K94 0500	5	13		57	6	○
K94 0600	6			57	6	○
K94 0800	8	19		63	8	○
K94 1000	10	22		72	10	○
K94 1200	12	26		83	12	○
K94 1400	14			83	14	○
K94 1600	16	32		92	16	○
K94 1800	18			92	18	○
K94 2000	20	38		104	20	○

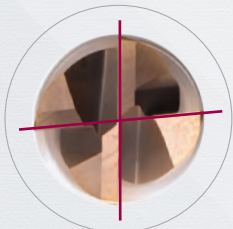
Order Number	Dimension (mm)					Stock
	D	l1	l2	L	d2(h6)	
K95 0300	3	8	14	57	6	•
K95 0400	4	11	18	57	6	•
K95 0500	5	13	18	57	6	•
K95 0600	6			20	57	6
K95 0800	8	19	26	63	8	•
K95 1000	10	22	32	72	10	•
K95 1200	12	26	36	83	12	•
K95 1400	14			36	83	14
K95 1600	16	32	42	92	16	•
K95 1800	18			42	92	18
K95 2000	20	38	52	104	20	•

• Ex Stock	ab Lager	De Stock	Da Magazzino	有存库
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无存库

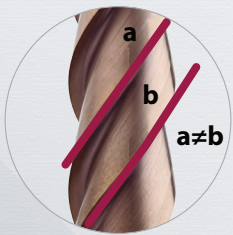
Material Group | Material-Gruppe | Groupe Matière | Gruppo Materiali | 材质主类

N01 N02 N03 K01 K02 P01 P02 P03 M01 M02 S01 S02 S03 H01 H02 O01 O02

Cutting Parameters
Page 14



Top View



1 Differential Pitch (DP)

- Reduces chatter to provide excellent surface finishing



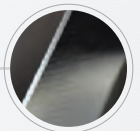
2 Differential Helix (DH)

- Reduces the cutting force:
- Allows high speed machining
 - Improves surface finishing



3 Ideal Cutting Edge

- Provides edge protection to prolong tool life



4 Superior Coating to Reduce Friction

- Enhances heat resistance to reduce tool wear
- Increases hardness and higher abrasive wear resistance
- Higher thermal resistance
- Smoother chip evacuation

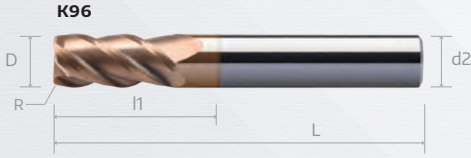
5 Corner Radius

- Reduces chipping and providing longer tool life



K96 / K97 / K98 / K99

DP/DH TORUS ENDMILLS, 4 FLUTES



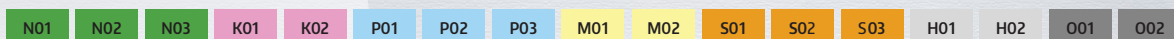
Order Number	Dimension (mm)						Stock
	D	l1	l2	L	d2(h6)	R	
K96 0300 050 0600 030	3	8		57	6	0.3	•
K96 0300 050 0600 050				57	6	0.5	•
K96 0400 057 0600 030	4	11		57	6	0.3	•
K96 0400 057 0600 050				57	6	0.5	•
K96 0400 057 0600 100	5	13		57	6	1	•
K96 0500 057 0600 030				57	6	0.3	•
K96 0500 057 0600 050	6	13		57	6	0.5	•
K96 0600 057 0600 030				57	6	0.3	•
K96 0600 057 0600 050	8	19		57	6	0.5	•
K96 0600 057 0600 100				57	6	1	•
K96 0800 064 0800 030	8	19		64	8	0.3	•
K96 0800 064 0800 050				64	8	0.5	•
K96 0800 064 0800 100	10	22		64	8	1	•
K96 0800 064 0800 150				64	8	1.5	•
K96 0800 064 0800 200	12	26		64	8	2	•
K96 1000 072 1000 030				72	10	0.3	•
K96 1000 072 1000 050	14	22		72	10	0.5	•
K96 1000 072 1000 100				72	10	1	•
K96 1000 072 1000 150	14	22		72	10	1.5	•
K96 1000 072 1000 200				72	10	2	•
K96 1200 083 1200 030	16	26		83	12	0.3	•
K96 1200 083 1200 050				83	12	0.5	•
K96 1200 083 1200 100	18	32		83	12	1	•
K96 1200 083 1200 200				83	12	2	•
K96 1200 083 1200 250	20	38		83	12	2.5	•
K96 1200 083 1200 300				83	12	3	•
K96 1400 083 1400 030	16	26		83	14	0.3	•
K96 1400 083 1400 050				83	14	0.5	•
K96 1400 083 1400 100	18	32		83	14	1	•
K96 1400 083 1400 200				83	14	2	•
K96 1400 083 1400 300	20	38		83	14	3	•
K96 1600 092 1600 030				92	16	0.3	•
K96 1600 092 1600 050	18	32		92	16	0.5	•
K96 1600 092 1600 100				92	16	1	•
K96 1600 092 1600 200	20	38		92	16	2	•
K96 1600 092 1600 250				92	16	2.5	•
K96 1600 092 1600 300	18	32		92	16	3	•
K96 1600 092 1600 400				92	16	4	•
K96 1800 092 1800 030	20	38		92	18	0.3	•
K96 1800 092 1800 050				92	18	0.5	•
K96 1800 092 1800 100	20	38		92	18	1	•
K96 1800 092 1800 200				92	18	2	•
K96 1800 092 1800 300	20	38		92	18	3	•
K96 2000 104 2000 030				104	20	0.3	•
K96 2000 104 2000 050	18	32		104	20	0.5	•
K96 2000 104 2000 100				104	20	1	•
K96 2000 104 2000 200	20	38		104	20	2	•
K96 2000 104 2000 250				104	20	2.5	•
K96 2000 104 2000 300	18	32		104	20	3	•
K96 2000 104 2000 400				104	20	4	•

Order Number	Dimension (mm)						Stock
	D	l1	l2	L	d2(h6)	R	
K97 0300 050 0600 030	3	8	15	57	6	0.3	•
K97 0300 050 0600 050				15	57	6	0.5
K97 0400 057 0600 030	4	11	18	57	6	0.3	•
K97 0400 057 0600 050				18	57	6	0.5
K97 0400 057 0600 100	5	13	18	57	6	1	•
K97 0500 057 0600 030				18	57	6	0.3
K97 0500 057 0600 050	6	13	18	57	6	0.5	•
K97 0600 057 0600 030				20	57	6	0.3
K97 0600 057 0600 050	8	19	20	57	6	0.5	•
K97 0600 057 0600 100				20	57	6	1
K97 0800 064 0800 030	8	19	26	64	8	0.3	•
K97 0800 064 0800 050				26	64	8	0.5
K97 0800 064 0800 100	10	22	26	64	8	1	•
K97 0800 064 0800 150				26	64	8	1.5
K97 0800 064 0800 200	12	26	26	64	8	2	•
K97 1000 072 1000 030				30	72	10	0.3
K97 1000 072 1000 050	14	22	30	72	10	0.5	•
K97 1000 072 1000 100				30	72	10	1
K97 1000 072 1000 150	14	22	30	72	10	1.5	•
K97 1000 072 1000 200				30	72	10	2
K97 1200 083 1200 030	16	26	36	83	12	0.3	•
K97 1200 083 1200 050				36	83	12	0.5
K97 1200 083 1200 100	18	32	36	83	12	1	•
K97 1200 083 1200 200				36	83	12	2
K97 1200 083 1200 250	20	38	36	83	12	2.5	•
K97 1200 083 1200 300				36	83	12	3
K97 1400 083 1400 030	16	26	36	83	14	0.3	•
K97 1400 083 1400 050				36	83	14	0.5
K97 1400 083 1400 100	18	32	36	83	14	1	•
K97 1400 083 1400 200				36	83	14	2
K97 1400 083 1400 300	20	38	36	83	14	3	•
K97 1600 092 1600 030				42	92	16	0.3
K97 1600 092 1600 050	18	32	42	92	16	0.5	•
K97 1600 092 1600 100				42	92	16	1
K97 1600 092 1600 200	20	38	42	92	16	2	•
K97 1600 092 1600 250				42	92	16	2.5
K97 1600 092 1600 300	18	32	42	92	16	3	•
K97 1600 092 1600 400				42	92	16	4
K97 1800 092 1800 030	20	38	42	92	18	0.3	•
K97 1800 092 1800 050				42	92	18	0.5
K97 1800 092 1800 100	20	38	42	92	18	1	•
K97 1800 092 1800 200				42	92	18	2
K97 1800 092 1800 300	20	38	42	92	18	3	•
K97 2000 104 2000 030				52	104	20	0.3
K97 2000 104 2000 050	18	32	52	104	20	0.5	•
K97 2000 104 2000 100				52	104	20	1
K97 2000 104 2000 200	20	38	52	104	20	2	•
K97 2000 104 2000 250				52	104	20	2.5
K97 2000 104 2000 300	18	32	52	104	20	3	•
K97 2000 104 2000 400				52	104	20	4

cont'd ▶

• Ex Stock	ab Lager	De Stock	Da Magazzino	有存库
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无存库

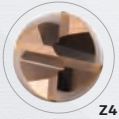
Material Group | Materialgruppe | Groupe Matière | Gruppo Materiali | 材质主类



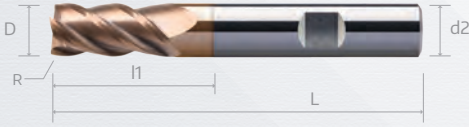
Cutting Parameters
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K96 / K97 / K98 / K99

DP/DH TORUS ENDMILLS, 4 FLUTES



K98 (with weldon)



K99 (with recess and weldon)



Order Number	Dimension (mm)						Stock
	D	l1	l2	L	d2(h6)	R	
K98 0300 050 0600 030	3	8		57	6	0.3	o
K98 0300 050 0600 050				57	6	0.5	o
K98 0400 057 0600 030	4	11		57	6	0.3	o
K98 0400 057 0600 050				57	6	0.5	o
K98 0400 057 0600 100				57	6	1	o
K98 0500 057 0600 030	5	13		57	6	0.3	o
K98 0500 057 0600 050				57	6	0.5	o
K98 0600 057 0600 030	6	13		57	6	0.3	o
K98 0600 057 0600 050				57	6	0.5	o
K98 0600 057 0600 100				57	6	1	o
K98 0800 064 0800 030	8	19		63	8	0.3	o
K98 0800 064 0800 050				63	8	0.5	o
K98 0800 064 0800 100				63	8	1	o
K98 0800 064 0800 150				63	8	1.5	o
K98 0800 064 0800 200				63	8	2	o
K98 1000 072 1000 030	10	22		72	10	0.3	o
K98 1000 072 1000 050				72	10	0.5	o
K98 1000 072 1000 100				72	10	1	o
K98 1000 072 1000 150				72	10	1.5	o
K98 1000 072 1000 200				72	10	2	o
K98 1200 083 1200 030	12	26		83	12	0.3	o
K98 1200 083 1200 050				83	12	0.5	o
K98 1200 083 1200 100				83	12	1	o
K98 1200 083 1200 200				83	12	2	o
K98 1200 083 1200 250				83	12	2.5	o
K98 1200 083 1200 300				83	12	3	o
K98 1400 083 1400 030	14	26		83	14	0.3	o
K98 1400 083 1400 050				83	14	0.5	o
K98 1400 083 1400 100				83	14	1	o
K98 1400 083 1400 200				83	14	2	o
K98 1400 083 1400 300				83	14	3	o
K98 1600 092 1600 030	16	32		92	16	0.3	o
K98 1600 092 1600 050				92	16	0.5	o
K98 1600 092 1600 100				92	16	1	o
K98 1600 092 1600 200				92	16	2	o
K98 1600 092 1600 250				92	16	2.5	o
K98 1600 092 1600 300				92	16	3	o
K98 1600 092 1600 400				92	16	4	o
K98 1800 092 1800 030	18	32		92	18	0.3	o
K98 1800 092 1800 050				92	18	0.5	o
K98 1800 092 1800 100				92	18	1	o
K98 1800 092 1800 200				92	18	2	o
K98 1800 092 1800 300				92	18	3	o
K98 2000 104 2000 030	20	38		104	20	0.3	o
K98 2000 104 2000 050				104	20	0.5	o
K98 2000 104 2000 100				104	20	1	o
K98 2000 104 2000 200				104	20	2	o
K98 2000 104 2000 250				104	20	2.5	o
K98 2000 104 2000 300				104	20	3	o
K98 2000 104 2000 400				104	20	4	o

Order Number	Dimension (mm)						Stock	
	D	l1	l2	L	d2(h6)	R		
K99 0300 050 0600 030	3	8	15	57	6	0.3	•	
K99 0300 050 0600 050				15	57	6	0.5	•
K99 0400 057 0600 030	4	11	18	57	6	0.3	•	
K99 0400 057 0600 050				18	57	6	0.5	•
K99 0400 057 0600 100				18	57	6	1	•
K99 0500 057 0600 030	5	13	18	57	6	0.3	•	
K99 0500 057 0600 050				18	57	6	0.5	•
K99 0600 057 0600 030	6	13	20	57	6	0.3	•	
K99 0600 057 0600 050				20	57	6	0.5	•
K99 0600 057 0600 100				20	57	6	1	•
K99 0800 064 0800 030	8	19	26	63	8	0.3	•	
K99 0800 064 0800 050				26	63	8	0.5	•
K99 0800 064 0800 100				26	63	8	1	•
K99 0800 064 0800 150				26	63	8	1.5	•
K99 0800 064 0800 200				26	63	8	2	•
K99 1000 072 1000 030	10	22	30	72	10	0.3	•	
K99 1000 072 1000 050				30	72	10	0.5	•
K99 1000 072 1000 100				30	72	10	1	•
K99 1000 072 1000 150				30	72	10	1.5	•
K99 1000 072 1000 200				30	72	10	2	•
K99 1200 083 1200 030	12	26	36	83	12	0.3	•	
K99 1200 083 1200 050				36	83	12	0.5	•
K99 1200 083 1200 100				36	83	12	1	•
K99 1200 083 1200 200				36	83	12	2	•
K99 1200 083 1200 250				36	83	12	2.5	•
K99 1200 083 1200 300				36	83	12	3	•
K99 1400 083 1400 030	14	26	36	83	14	0.3	•	
K99 1400 083 1400 050				36	83	14	0.5	•
K99 1400 083 1400 100				36	83	14	1	•
K99 1400 083 1400 200				36	83	14	2	•
K99 1400 083 1400 300				36	83	14	3	•
K99 1600 092 1600 030	16	32	42	92	16	0.3	•	
K99 1600 092 1600 050				42	92	16	0.5	•
K99 1600 092 1600 100				42	92	16	1	•
K99 1600 092 1600 200				42	92	16	2	•
K99 1600 092 1600 250				42	92	16	2.5	•
K99 1600 092 1600 300				42	92	16	3	•
K99 1600 092 1600 400				42	92	16	4	•
K99 1800 092 1800 030	18	32	42	92	18	0.3	•	
K99 1800 092 1800 050				42	92	18	0.5	•
K99 1800 092 1800 100				42	92	18	1	•
K99 1800 092 1800 200				42	92	18	2	•
K99 1800 092 1800 300				42	92	18	3	•
K99 2000 104 2000 030	20	38	52	104	20	0.3	•	
K99 2000 104 2000 050				52	104	20	0.5	•
K99 2000 104 2000 100				52	104	20	1	•
K99 2000 104 2000 200				52	104	20	2	•
K99 2000 104 2000 250				52	104	20	2.5	•
K99 2000 104 2000 300				52	104	20	3	•
K99 2000 104 2000 400				52	104	20	4	•

● Ex Stock	ab Lager	De Stock	Da Magazzino	有库存
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无库存

Material Group | Materialgruppe | Groupe Matière | Gruppo Materiali | 材质主类

- N01
- N02
- N03
- K01
- K02
- P01
- P02
- P03
- M01
- M02
- S01
- S02
- S03
- H01
- H02
- O01
- O02

Cutting Parameters
Page 15



Top View



1 Differential Pitch (DP)

- Reduces chatter to provide excellent surface finishing



2 Superior Coating to Reduce Friction

- Enhances heat resistance to reduce tool wear
- Increases hardness and higher abrasive wear resistance
- Higher thermal resistance
- Smoother chip evacuation



G38
DP/DH



G41
DP/DH with
recess



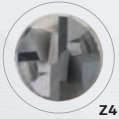
G44
DP/DH with
weldon



G47
DP/DH with
recess & weldon

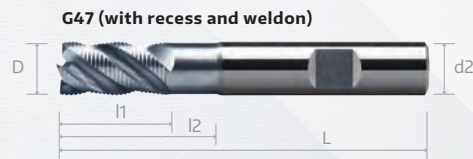
G38 / G41 / G44 / G47

DP ROUGHING ENDMILLS, 4 FLUTES



Order Number	Dimension (mm)						Stock
	D	l1	l2	L	d2(h6)	C	
G38 0600	6	13		57	6	0.1	○
G38 0800	8	20		64	8	0.2	○
G38 1000	10	22		72	10	0.2	○
G38 1200	12	26		83	12	0.2	○
G38 1400	14			83	14	0.3	○
G38 1600	16	32		92	16	0.3	○
G38 1800	18			92	18	0.3	○
G38 2000	20	38		104	20	0.4	○

Order Number	Dimension (mm)						Stock
	D	l1	l2	L	d2(h6)	C	
G41 0600 *	6	13	20	57	6	0.1	○
G41 0800	8	20	30	64	8	0.2	○
G41 1000 *	10	22	32	72	10	0.2	○
G41 1200 *	12	26	37	83	12	0.2	○
G41 1400	14			44	83	14	0.3
G41 1600	16	32	46	92	16	0.3	○
G41 1800	18			53	92	18	0.3
G41 2000	20	38	58	104	20	0.4	○



Order Number	Dimension (mm)						Stock
	D	l1	l2	L	d2(h6)	C	
G44 0600	6	13		57	6	0.1	○
G44 0800	8	20		64	8	0.2	○
G44 1000	10	22		72	10	0.2	○
G44 1200	12	26		83	12	0.2	○
G44 1400	14			83	14	0.3	○
G44 1600	16	32		92	16	0.3	○
G44 1800	18			92	18	0.3	○
G44 2000	20	38		104	20	0.4	○

Order Number	Dimension (mm)						Stock
	D	l1	l2	L	d2(h6)	C	
G47 0600 *	6	13	20	57	6	0.1	●
G47 0800	8	20	30	64	8	0.2	●
G47 1000 *	10	22	32	72	10	0.2	●
G47 1200 *	12	26	37	83	12	0.2	●
G47 1400	14			44	83	14	0.3
G47 1600	16	32	46	92	16	0.3	●
G47 1800	18			53	92	18	0.3
G47 2000	20	38	58	104	20	0.4	●

* - DIN 6535

● Ex Stock	ab Lager	De Stock	Da Magazzino	有存库
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无存库

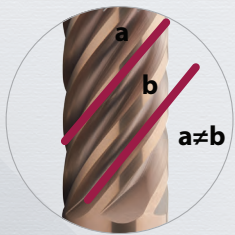
Material Group | Materialgruppe | Groupe Matière | Gruppo Materiali | 材质主类

N01 N02 N03 K01 K02 P01 P02 P03 M01 M02 S01 S02 S03 H01 H02 O01 O02

Cutting Parameters
Page 16



Top View



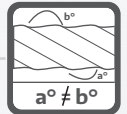
1 Multiflute

- Large number of cutting edges up to 7 flutes
- Higher feed rate (up to 75% more compared to 4 flutes design)
- Greater core strength and minimized tool deflection
- Higher quality of surface finishing

2 Differential Helix (DH)

Reduces the cutting force:

- Allows high speed machining
- Improves surface finishing



3 Gash Land Design

- Reinforces edge protection of the cutting tool corner
- Higher mechanical strength to withstand greater cutting force
- Longer machining time consistency and greater tool durability



4 High Helix Angle

- Lower radial cutting force to reduce vibration during machining
- Better shearing to deliver higher quality of surface finishing
- Higher efficient in chip evacuation with lower engagement in cutting edge

5 Ultra Fine Grain Cemented Carbide (UF+)

- Higher durability for material removal rate (MRR)
- Higher overall tool toughness, strength and edge retention
- Excellent performance in machining high hardness materials
- Reduces the risk of chipping and increases reliability



K76

DH Square with recess

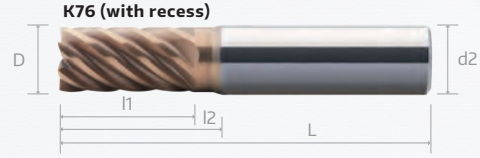
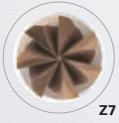


K77

DH Square

K76 / K77

DH SQUARE ENDMILLS, 6 - 7 FLUTES



Order Number	Dimension (mm)						Stock
	D	l1	l2	L	d2(h6)	Z	
K77 0300 057 06	3	8		57	6	6	•
K77 0400 057 06	4	11		57	6	6	•
K77 0500 057 06	5	12		57	6	6	•
K77 0600 057	6	15		57	6	7	•
K77 0800 064	8	20		64	8	7	•
K77 1000 072	10	22		72	10	7	•
K77 1200 083	12	25		83	12	7	•
K77 1600 092	16	30		92	16	7	•
K77 2000 104	20	38		104	20	7	•

Order Number	Dimension (mm)						Stock
	D	l1	l2	L	d2(h6)	Z	
K76 0300 057 06	3	8	20	57	6	6	•
K76 0400 057 06	4	11	20	57	6	6	•
K76 0500 057 06	5	12	20	57	6	6	•
K76 0600 057	6	15	20	57	6	7	•
K76 0800 064	8	20	26	64	8	7	•
K76 1000 072	10	22	30	72	10	7	•
K76 1200 083	12	25	36	83	12	7	•
K76 1600 092	16	30	42	92	16	7	•
K76 2000 104	20	38	52	104	20	7	•

• Ex Stock	ab Lager	De Stock	Da Magazzino	有库存
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无库存

Diameter (mm)	Tolerance
D ≤ 2.5	-0.015 ~ +0
2.5 ≤ D ≤ 5	-0.020 ~ +0
6 ≤ D ≤ 10	-0.025 ~ +0
10 < D ≤ 12	-0.005 ~ -0.030
D > 12	-0.010 ~ -0.035

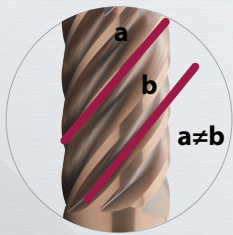
Material Group | Materialgruppe | Groupe Matière | Gruppo Materiali | 材质主类

N01 N02 N03 K01 K02 P01 P02 P03 M01 M02 S01 S02 S03 H01 H02 O01 O02

Cutting Parameters
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Top View



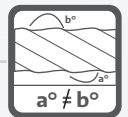
1 Multiflute

- Large number of cutting edges up to 7 flutes
- Higher feed rate (up to 75% more compared to 4 flutes design)
- Greater core strength and minimized tool deflection
- Higher quality of surface finishing

2 Differential Helix (DH)

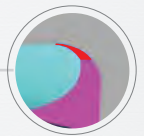
Reduces the cutting force:

- Allows high speed machining
- Improves surface finishing



3 S-Gash Radius Design

- Ensure precise contour via seamless corner and outer diameter connection
- Increase corner radius reliability with reduced chipping risk
- Improve machining component surface finishing quality
- Enhance tool life with a robust corner radius design
- Ensure machinist well-being with quieter operations



4 High Helix Angle

- Lower radial cutting force to reduce vibration during machining
- Better shearing to deliver higher quality of surface finishing
- Higher efficient in chip evacuation with lower engagement in cutting edge

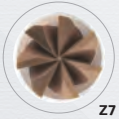


K73

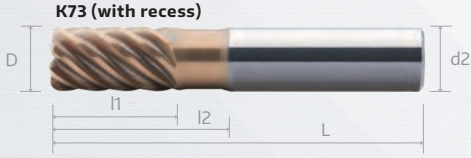
DH Torus with recess

K73

DH TORUS ENDMILLS, 6 - 7 FLUTES



Z7



Order Number	Dimension (mm)							Stock
	D	l1	l2	L	d2(h6)	R	Z	
K73 0300 057 0600 020	3	8	20	57	6	0.2	6	•
K73 0400 057 0600 020	4	11	20	57	6	0.2	6	•
K73 0500 057 0600 030	5	12	20	57	6	0.3	6	•
K73 0600 057 0600 050	6	15	20	57	6	0.5	7	•
K73 0600 057 0600 100			20	57	6	1	7	•
K73 0800 064 0800 050	8	20	26	64	8	0.5	7	•
K73 0800 064 0800 080			26	64	8	0.8	7	•
K73 1000 072 1000 050			30	72	10	0.5	7	•
K73 1000 072 1000 080	10	22	30	72	10	0.8	7	•
K73 1000 072 1000 100			30	72	10	1	7	•
K73 1200 083 1200 050	12	25	36	83	12	0.5	7	•
K73 1200 083 1200 100			36	83	12	1	7	•
K73 1200 083 1200 150			36	83	12	1.5	7	•
K73 1600 092 1600 200			42	92	16	2	7	•
K73 1600 092 1600 300	16	30	42	92	16	3	7	•
K73 2000 104 2000 300			20	38	52	104	20	3

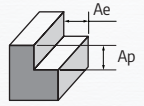
• Ex Stock	ab Lager	De Stock	Da Magazzino	有库存
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无库存

Diameter (mm)	Tolerance
D ≤ 2.5	-0.015 ~ +0
2.5 ≤ D ≤ 5	-0.020 ~ +0
6 ≤ D ≤ 10	-0.025 ~ +0
10 < D ≤ 12	-0.005 ~ -0.030
D > 12	-0.010 ~ -0.035

Material Group | Materialgruppe | Groupe Matière | Gruppo Materiali | 材质主类

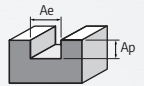
N01 N02 N03 K01 K02 P01 P02 P03 M01 M02 S01 S02 S03 H01 H02 O01 O02

Cutting Parameters
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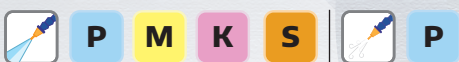
DP/DH Square Endmills, 4 Flutes - K92, K93, K94, K95

Side Milling	P03		M02		K02		S03	
Working Material	Carbon Steel		Stainless Steel		Ductile Cast Iron		Nickel Alloy	
Properties	35 ≤ HRC < 45		Low Machinability		-		-	
Cutting Depth, Ap (mm)	1.00 x D		1.00 x D		1.00 x D		1.00 x D	
Cutting Width, Ae (mm)	0.18 x D		0.18 x D		0.18 x D		0.10 x D	
D (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)
3	120	0.014	70	0.016	90	0.014	35	0.014
4		0.021		0.023		0.019		0.019
5		0.027		0.029		0.026		0.024
6		0.032		0.035		0.031		0.030
8		0.045		0.048		0.043		0.041
10		0.058		0.062		0.055		0.052
12		0.072		0.078		0.068		0.067
14		0.081		0.088		0.077		0.076
16		0.090		0.098		0.087		0.084
18		0.099		0.106		0.095		0.094
20	0.108	0.113	0.102	0.101				



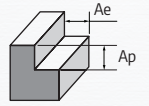
DP/DH Square Endmills, 4 Flutes - K92, K93, K94, K95

Slotting	P03		M02		K02		S03	
Working Material	Carbon Steel		Stainless Steel		Ductile Cast Iron		Nickel Alloy	
Properties	35 ≤ HRC < 45		Low Machinability		-		-	
Cutting Depth, Ap (mm)	0.80 x D		0.45 x D		0.80 x D		0.30 x D	
Cutting Width, Ae (mm)	1.00 x D		1.00 x D		1.00 x D		1.00 x D	
D (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)
3	100	0.013	55	0.014	80	0.012	25	0.011
4		0.018		0.018		0.017		0.015
5		0.023		0.023		0.022		0.019
6		0.028		0.029		0.027		0.024
8		0.038		0.039		0.036		0.032
10		0.049		0.050		0.046		0.043
12		0.059		0.061		0.057		0.054
14		0.069		0.070		0.065		0.060
16		0.077		0.078		0.073		0.065
18		0.086		0.087		0.081		0.073
20	0.095	0.095	0.088	0.079				



Recommended Cutting Data

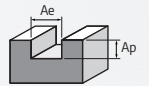
Note: These recommended cutting data indicators are just for reference. They should be adjusted according to the different cutting condition.



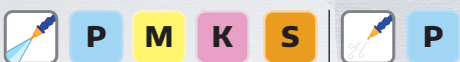
DP/DH Torus Endmills, 4 Flutes - K96, K97, K98, K99

Side Milling	P03		M02		K02		S03	
Working Material	Carbon Steel		Stainless Steel		Ductile Cast Iron		Nickel Alloy	
Properties	35 ≤ HRC < 45		Low Machinability		-		-	
Cutting Depth, Ap (mm)	1.00 × D		1.00 × D		1.00 × D		1.00 × D	
Cutting Width, Ae (mm)	0.18 × D		0.18 × D		0.18 × D		0.10 × D	
D (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)
3	150	0.014	85	0.017	110	0.014	45	0.013
4		0.021		0.023		0.019		0.019
5		0.027		0.030		0.026		0.024
6		0.032		0.036		0.032		0.029
8		0.045		0.050		0.045		0.041
10		0.058		0.064		0.056		0.051
12		0.072		0.081		0.070		0.067
14		0.081		0.091		0.079		0.074
16		0.091		0.102		0.089		0.081
18		0.099		0.112		0.097		0.091
20	0.109	0.117	0.104	0.101				

DP/DH Torus Endmills, 4 Flutes - K96, K97, K98, K99

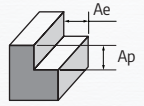


Slotting	P03		M02		K02		S03	
Working Material	Carbon Steel		Stainless Steel		Ductile Cast Iron		Nickel Alloy	
Properties	35 ≤ HRC < 45		Low Machinability		-		-	
Cutting Depth, Ap (mm)	0.80 × D		0.80 × D		0.45 × D		0.30 × D	
Cutting Width, Ae (mm)	1.00 × D		1.00 × D		1.00 × D		1.00 × D	
D (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)
3	125	0.013	70	0.013	100	0.012	30	0.011
4		0.018		0.018		0.017		0.016
5		0.023		0.024		0.022		0.020
6		0.028		0.029		0.027		0.027
8		0.038		0.039		0.036		0.036
10		0.049		0.049		0.046		0.047
12		0.059		0.060		0.057		0.056
14		0.070		0.069		0.065		0.066
16		0.078		0.077		0.073		0.071
18		0.087		0.087		0.082		0.080
20	0.094	0.097	0.090	0.089				



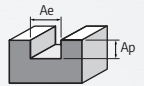
Recommended Cutting Data

Note: These recommended cutting data indicators are just for reference. They should be adjusted according to the different cutting condition.



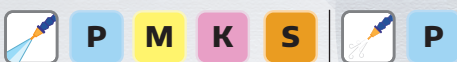
DP Roughing Endmills, 4 Flutes - G38, G41, G44, G47

Side Milling	P03		M02		K02		S03	
Working Material	Carbon Steel		Stainless Steel		Ductile Cast Iron		Nickel Alloy	
Properties	35 ≤ HRC < 45		Low Machinability		-		-	
Cutting Depth, Ap (mm)	1.00 × D		1.00 × D		1.00 × D		1.00 × D	
Cutting Width, Ae (mm)	0.18 × D		0.18 × D		0.18 × D		0.10 × D	
D (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)
6	130	0.041	65	0.043	100	0.038	45	0.037
8		0.055		0.058		0.053		0.051
10		0.070		0.076		0.066		0.063
12		0.088		0.096		0.083		0.081
14		0.099		0.108		0.093		0.092
16		0.110		0.119		0.105		0.101
18		0.121		0.129		0.115		0.113
20		0.132		0.139		0.125		0.122



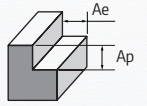
DP Roughing Endmills, 4 Flutes - G38, G41, G44, G47

Slotting	P03		M02		K02		S03	
Working Material	Carbon Steel		Stainless Steel		Ductile Cast Iron		Nickel Alloy	
Properties	35 ≤ HRC < 45		Low Machinability		-		-	
Cutting Depth, Ap (mm)	0.80 × D		0.80 × D		0.45 × D		0.30 × D	
Cutting Width, Ae (mm)	1.00 × D		1.00 × D		1.00 × D		1.00 × D	
D (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)
6	115	0.034	55	0.035	90	0.033	35	0.030
8		0.046		0.048		0.044		0.040
10		0.059		0.061		0.056		0.052
12		0.073		0.075		0.069		0.065
14		0.084		0.086		0.079		0.072
16		0.095		0.096		0.089		0.079
18		0.106		0.108		0.099		0.089
20		0.116		0.116		0.108		0.098



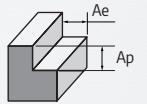
Recommended Cutting Data

Note: These recommended cutting data indicators are just for reference. They should be adjusted according to the different cutting condition.



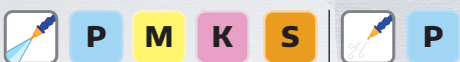
Multiflute Endmills, 6 Flutes - K73, K76, K77

Side Milling	P03		M02		K02		S03	
Working Material	Pre-Hardened Steel		Stainless Steel		Ductile Cast Iron		Nickel Alloy	
Properties	35 ≤ HRC < 45		Low Machinability		-		-	
Cutting Depth, Ap (mm)	1.00 × D		1.00 × D		1.00 × D		1.00 × D	
Cutting Width, Ae (mm)	0.10 × D		0.05 × D		0.10 × D		0.05 × D	
D (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)
3	130	0.028	70	0.023	90	0.025	60	0.021
4		0.029		0.026		0.027		0.024
5		0.036		0.030		0.033		0.027



Multiflute Endmills, 7 Flutes - K73, K76, K77

Side Milling	P03		M02		K02		S03	
Working Material	Pre-Hardened Steel		Stainless Steel		Ductile Cast Iron		Nickel Alloy	
Properties	35 ≤ HRC < 45		Low Machinability		-		-	
Cutting Depth, Ap (mm)	1.00 × D		1.00 × D		1.00 × D		1.00 × D	
Cutting Width, Ae (mm)	0.10 × D		0.05 × D		0.10 × D		0.05 × D	
D (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)
6	130	0.038	70	0.032	90	0.035	60	0.030
8		0.044		0.037		0.040		0.034
10		0.050		0.042		0.046		0.039
12		0.059		0.047		0.053		0.042
16		0.071		0.056		0.063		0.049
20		0.073		0.061		0.067		0.055



Recommended Cutting Data

Note: These recommended cutting data indicators are just for reference. They should be adjusted according to the different cutting condition.

Certificate

Standard **ISO 9001:2015**

Certificate Registr. No. **01 100 053515**

Certificate Holder:



HPMT Industries Sdn. Bhd.

No. 5, Jalan Sungai Kayu Ara 32/39, Taman Berjaya,
Seksyen 32, Shah Alam, Selangor Darul Ehsan, Malaysia

Scope:

Design and Manufacturing of Standard and Custom-made Metal
Removing Cutting Tools

Proof has been furnished by means of an audit that the
requirements of ISO 9001:2015 are met.

Validity:

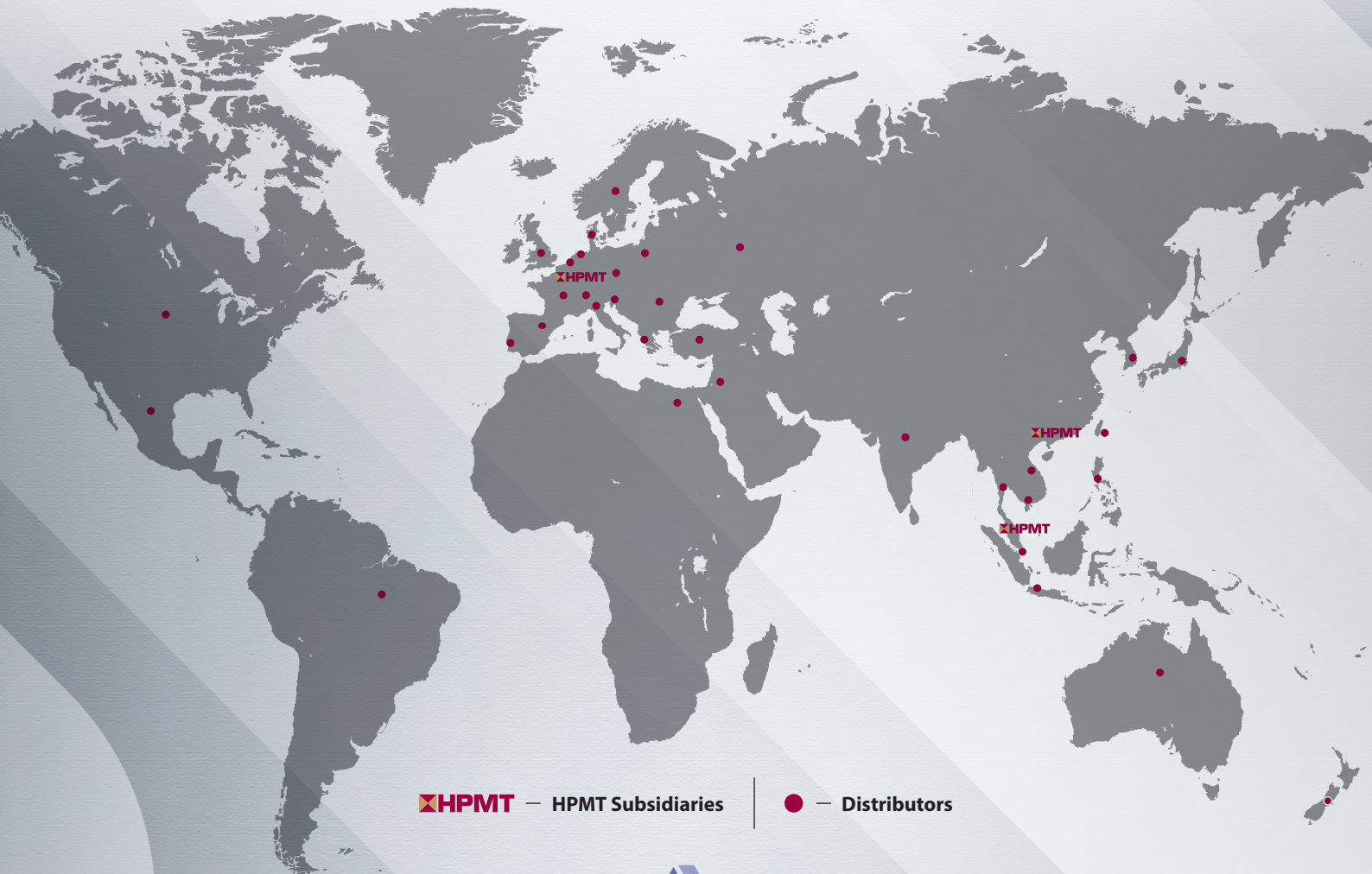
The certificate is valid from 2021-08-15 until 2024-08-14.
First certification 2005

2021-12-13

A handwritten signature in blue ink, appearing to read 'Kudlas', is written over a horizontal line.

TÜV Rheinland Cert GmbH
Am Grauen Stein · 51105 Köln





 — HPMT Subsidiaries

 — Distributors



ZIBTRPRO

tehnologija obdelave · vpenjalni sistemi

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