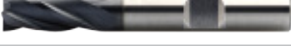
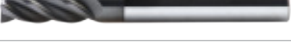
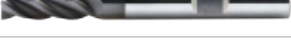
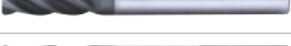
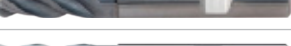
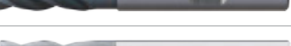
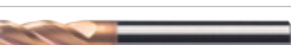
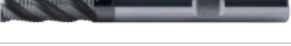


NiTiCo 30

The High Performance Series for exotic materials Titanium,
Ni-Co alloys and stainless steel up to 45 HRC.



NiTiCo 30

	EDP No.	Type	Z	Diameter Range	Page
	C30	NiTiCo 30 Endmill	2	1 - 20	4
	C42	NiTiCo 30 Endmill with Weldon	2	3 - 20	5
	C31	NiTiCo 30 Endmill	3	1 - 20	7
	C43	NiTiCo 30 Endmill with Weldon	3	3 - 20	8
	C44	NiTiCo 30 Endmill with Weldon	4	3 - 20	10
	951	NiTiCo 30 DP Endmill	4	3 - 20	12
	972	NiTiCo 30 DP Endmill with Weldon	4	3 - 20	13
	C46	NiTiCo 30 DP Torus Endmill	4	3 - 20	14-17
	C50	NiTiCo 30 DP/DH Torus Endmill with Weldon	4	4 - 20	18-19
	K70	NiTiCo 30 DP/DH Internal Oil Hole Endmill with Recess and Weldon	4	4 - 20	22
	949	NiTiCo 30 DP/DH Endmill	4	4 - 20	25
	C49	NiTiCo 30 DP/DH Endmill with Weldon	4	4 - 20	26
	K78	NiTiCo 30 DP/DH Endmill with Recess and Weldon	4	4 - 20	27
	C48	NiTiCo 30 DP/DH Torus Endmill	4	4 - 20	28-29
	C52	NiTiCo 30 DP/DH Torus Endmill with Weldon	4	4 - 20	30-33
	AIR	NiTiCo 30 DP/DH Torus Endmill	4	4 - 20	34-35
	AIT	NiTiCo 30 DP/DH Torus Endmill with Weldon	4	4 - 20	36-37
	J01	NiTiCo 30 DP/DH Torus Endmill with Recess	4	4 - 20	38
	H98	NiTiCo 30 DP/DH Torus Endmill with Recess and Weldon	4	4 - 20	39
	J97	NiTiCo 30 DP/DH Torus Long Endmill	4	4 - 20	42
	J98	NiTiCo 30 DP/DH Torus Long Endmill with Weldon	4	4 - 20	43
	H38	NiTiCo 30 DP/DH Long Endmill with Recess	4	4 - 20	44
	H39	NiTiCo 30 DP/DH Long Endmill with Recess and Weldon	4	4 - 20	45
	C47	NiTiCo 30 DP Roughing Endmill	4	6 - 20	47
	C64	NiTiCo 30 DP Roughing Endmill with Weldon	4	6 - 20	48

NiTiCo 30

	EDP No.	Type	Z	Diameter Range	Page
	J89	NiTiCo 30 DH Endmill	5	4 - 20	51
	J90	NiTiCo 30 DH Endmill with Weldon	5	4 - 20	52
	J92	NiTiCo 30 DH Long Endmill	5	6 - 20	54
	J93	NiTiCo 30 DH Long Endmill with Weldon	5	6 - 20	55
	K50	NiTiCo 30 DH Endmill with Chip Breaker, Recess and Weldon	5	4 - 20	58
	K51	NiTiCo 30 DH Long Endmill with Chip Breaker, Recess & Weldon	5	6 - 20	60
	K65	NiTiCo 30 DH Internal Oil Hole Endmill with Recess and Weldon	5	4 - 20	63
	K67	NiTiCo 30 DH Long Internal Oil Hole Endmill with Recess and Weldon	5	4 - 20	65
	G87	NiTiCo 30 Miniature Endmill with Long Neck	2	0.2 - 4	67-70
	H56	NiTiCo 30 Miniature Torus Endmill with Long Neck	2	0.2 - 4	71-74
	G88	NiTiCo 30 Miniature Ballnose Endmill with Long Neck	2	0.2 - 4	77-79
	M01	NiTiCo 30 DP Multiflute Torus with Recess	9	8 - 25	83
	M02	NiTiCo 30 Long DP Multiflute Torus with Chip Breaker and Recess	9	8 - 25	85
		NiTiCo 30 Extra-Long DP Multiflute Torus with Chip Breaker and Recess			87
	M03	NiTiCo 30 Long Reach DP Multiflute Torus with Recess	9	10 - 25	89
	M13	NiTiCo 30 High Feed Endmill with Recess	3 - 4	1 - 3	92
	M14	NiTiCo 30 High Feed Oil Hole Endmill with Recess	4 - 8	4 - 25	93

951



4 Flutes Design

- Up to 25% higher feed rate than a 3 flutes design.
- Optimised for slotting and side milling.



Optimised Tool Geometry

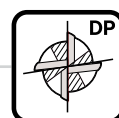
- Allows for improved shearing and decreased spindle loads.

Stable Cutting Edge

- Allows for high speeds and feed rates, greatly improving productivity.

Differential Pitch (DP)

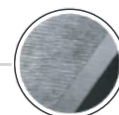
- Reduces chatter for an excellent surface finish.



The Perfect Edge Design

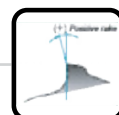
Prolongs tool life

- Provides a stable cutting edge with a much lower risk of chipping.



Positive Rake Angle

- Enables smooth chip evacuation due to small chips generated.



951

NiTiCo 30 DP



C46

NiTiCo 30 DP
Torus

C30 NiTiCo 30 Endmill, 2 Flutes



Order Number	D	I1	I2	L	d2 h6	Availability
C30 0100 040 03	1	3		40	3	○
C30 0100 050 04				50	4	●
C30 0150 040 03	1.5	4.5		40	3	○
C30 0150 050 04 *				50	4	○
C30 0200 040 03	2	6.5		40	3	○
C30 0200 050 04				50	4	○
C30 0250 040 03	2.5			40	3	○
C30 0250 050 04				50	4	○
C30 0300	3	9		40	3	○
C30 0300 050 06				50	6	○
C30 0400	4	12		50	4	○
C30 0400 050 06				50	6	○
C30 0500	5	15		50	5	○
C30 0500 050 06				50	6	○
C30 0600 050	6	16		50	6	○
C30 0600 060		20		60	6	○
C30 0800	8			64	8	○
C30 1000 070	10	22		70	10	○
C30 1000 075				75	10	○
C30 1200	12	25		75	12	○
C30 1400	14	32		90	14	○
C30 1600	16			90	16	○
C30 1800	18	38		100	18	○
C30 2000	20			100	20	○

* - DIN 6535

● 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
●			○		●	●		●		●	○	●				

C42 NiTiCo 30 Endmill with Weldon, 2 Flutes



Order Number	D	l1	l2	L	d2 h6	Availability
C42 0300 050 06	3	9		50	6	●
C42 0400 050 06	4	12		50	6	●
C42 0500 050 06	5	15		50	6	○
C42 0600 050	6	16		50	6	○
C42 0800	8	20		64	8	○
C42 1000 070	10	22		70	10	○
C42 1200	12	25		75	12	○
C42 1400	14	32		90	14	○
C42 1600	16			90	16	○
C42 1800	18	38		100	18	○
C42 2000	20			100	20	○

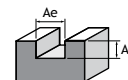
	Germany	France	Italy	China
● Ex Stock	ab Lager	De Stock	Da Magazzino	有库存
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无库存

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
●	○	●	●	●	●	○	●	●	○	●	○	●				

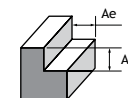


NiTiCo 30 Endmill, 2 Flutes – C30, C42



Slotting	K		P				M		S	
Working Material	Grey Cast Iron		Carbon Steel		Alloy steel		Stainless Steel		Titanium Alloy	
Properties	-		-		520 < Rm < 1200		High Machinability		-	
Ap (mm)	0.50 x D		0.50 x D		0.50 x D		0.40 x D		0.35 x D	
Ae (mm)	1.00 x D		1.00 x D		1.00 x D		1.00 x D		1.00 x D	
D	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)
1	90	0.004	115	0.004	100	0.002	80	0.002	35	0.002
2		0.009		0.009		0.005		0.005		
3		0.016		0.014		0.008		0.008		0.011
4		0.023		0.020		0.012		0.012		0.016
5		0.030		0.027		0.016		0.016		0.022
6		0.039		0.034		0.021		0.020		0.029
8		0.057		0.049		0.031		0.031		0.045
10		0.078		0.067		0.043		0.043		0.066
12		0.101		0.087		0.057		0.057		0.091
14		0.113		0.098		0.063		0.063		0.097
16		0.124		0.107		0.067		0.068		0.105
18		0.134		0.116		0.070		0.072		0.101
20		0.143		0.123		0.072		0.075		0.099

NiTiCo 30 Endmill, 2 Flutes – C30, C42



Side Milling	K		P				M		S	
Working Material	Grey Cast Iron		Carbon Steel		Alloy steel		Stainless Steel		Titanium Alloy	
Properties	-		-		520 < Rm < 1200		High Machinability		-	
Ap (mm)	1.00 x D		1.00 x D		1.00 x D		1.00 x D		1.00 x D	
Ae (mm)	0.25 x D		0.25 x D		0.20 x D		0.18 x D		0.15 x D	
D	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)
1	115	0.005	135	0.005	110	0.004	90	0.003	50	0.003
2		0.012		0.011		0.009		0.008		0.008
3		0.019		0.018		0.015		0.013		0.016
4		0.026		0.024		0.021		0.019		0.024
5		0.034		0.032		0.028		0.025		0.032
6		0.043		0.040		0.035		0.032		0.042
8		0.061		0.058		0.051		0.048		0.066
10		0.082		0.078		0.068		0.066		0.094
12		0.105		0.101		0.087		0.086		0.126
14		0.118		0.113		0.095		0.096		0.138
16		0.129		0.124		0.104		0.104		0.147
18		0.140		0.134		0.111		0.111		0.153
20		0.149		0.143		0.117		0.117		0.157

C31 NiTiCo 30 Endmill, 3 Flutes



Order Number	D	I1	I2	L	d2 h6	Availability
C31 0100 040 03	1	3		40	3	○
C31 0100 050 04				50	4	○
C31 0150 040 03	1.5	4.5		40	3	○
C31 0150 050 04 *				50	4	○
C31 0200 040 03	2	6.5		40	3	○
C31 0200 050 04				50	4	○
C31 0250 040 03	2.5			40	3	○
C31 0250 050 04				50	4	○
C31 0300	3	9		40	3	○
C31 0300 050 06				50	6	○
C31 0400	4	12		50	4	○
C31 0400 050 06				50	6	○
C31 0500	5	15		50	5	○
C31 0500 050 06				50	6	○
C31 0600 050	6	16		50	6	○
C31 0600 060		20		60	6	○
C31 0800	8			64	8	○
C31 1000 070	10	22		70	10	○
C31 1000 075				75	10	○
C31 1200	12	25		75	12	○
C31 1400	14	32		90	14	○
C31 1600	16			90	16	○
C31 1800	18	38		100	18	○
C31 2000	20			100	20	○

* - DIN 6535

● 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
●			○		●	●		●		●		○	●			

C43 NiTiCo 30 Endmill with Weldon, 3 Flutes



Order Number	D	L1	L2	L	d2 h6	Availability
C43 0300 050 06	3	9		50	6	●
C43 0400 050 06	4	12		50	6	●
C43 0500 050 06	5	15		50	6	○
C43 0600 050	6	16		50	6	○
C43 0800	8	20		64	8	○
C43 1000 070	10	22		70	10	○
C43 1200	12	25		75	12	○
C43 1400	14	32		90	14	○
C43 1600	16			90	16	○
C43 1800	18	38		100	18	○
C43 2000	20			100	20	○

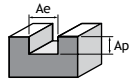
● Ex Stock	ab Lager	De Stock	Da Magazzino	有存库
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无存库

Material Group | 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
			●	○	●	●		●		●	○	●				

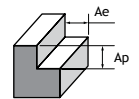


NiTiCo 30 Endmill, 3 Flutes – C31, C43



Slotting	K		P				M		S	
Working Material	Grey Cast Iron		Carbon Steel		Alloy steel		Stainless Steel		Titanium Alloy	
Properties	-		-		520 < Rm < 1200		High Machinability		-	
Ap (mm)	0.50 x D		0.50 x D		0.50 x D		0.40 x D		0.35 x D	
Ae (mm)	1.00 x D		1.00 x D		1.00 x D		1.00 x D		1.00 x D	
D	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)
1	100	0.003	125	0.003	110	0.001	90	0.001	40	0.001
2		0.008		0.007		0.003		0.003		0.004
3		0.013		0.011		0.006		0.006		0.007
4		0.018		0.016		0.009		0.009		0.010
5		0.023		0.020		0.012		0.011		0.015
6		0.030		0.026		0.015		0.015		0.020
8		0.043		0.038		0.023		0.022		0.033
10		0.059		0.052		0.032		0.031		0.049
12		0.075		0.067		0.042		0.042		0.067
14		0.086		0.075		0.046		0.047		0.070
16		0.093		0.083		0.050		0.050		0.070
18		0.100		0.089		0.053		0.052		0.071
20		0.106		0.093		0.056		0.053		0.073

NiTiCo 30 Endmill, 3 Flutes – C31, C43



Side Milling	K		P				M		S	
Working Material	Grey Cast Iron		Carbon Steel		Alloy steel		Stainless Steel		Titanium Alloy	
Properties	-		-		520 < Rm < 1200		High Machinability		-	
Ap (mm)	1.00 x D		1.00 x D		1.00 x D		1.00 x D		1.00 x D	
Ae (mm)	0.25 x D		0.25 x D		0.20 x D		0.18 x D		0.15 x D	
D	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)
1	130	0.005	150	0.004	120	0.003	100	0.002	55	0.002
2		0.012		0.008		0.007		0.006		0.006
3		0.019		0.013		0.012		0.010		0.012
4		0.026		0.019		0.017		0.014		0.017
5		0.034		0.024		0.022		0.020		0.024
6		0.043		0.030		0.027		0.025		0.032
8		0.061		0.044		0.038		0.037		0.050
10		0.082		0.059		0.050		0.050		0.070
12		0.105		0.075		0.065		0.064		0.096
14		0.118		0.085		0.072		0.072		0.105
16		0.129		0.094		0.080		0.078		0.111
18		0.140		0.102		0.085		0.083		0.115
20		0.149		0.107		0.089		0.088		0.117

C44 NiTiCo 30 Endmill with Weldon, 4 Flutes



Order Number	D	l1	l2	L	d2 h6	Availability
C44 0300 050 06	3	9		50	6	●
C44 0400 050 06	4	12		50	6	●
C44 0500 050 06	5	15		50	6	○
C44 0600 050	6	16		50	6	○
C44 0800	8	20		64	8	○
C44 1000 070	10	22		70	10	○
C44 1200	12	25		75	12	○
C44 1400	14	32		90	14	○
C44 1600	16			90	16	○
C44 1800	18	38		100	18	○
C44 2000	20			100	20	○

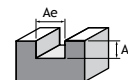
● Ex Stock	ab Lager	De Stock	Da Magazzino	有库存
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无库存

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
●			○		●	●		●		●	○	●				

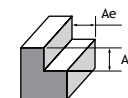


NiTiCo 30 Endmill, 4 Flutes - C44



Slotting	K		P				M		S	
Working Material	Grey Cast Iron		Carbon Steel		Alloy steel		Stainless Steel		Titanium Alloy	
Properties	-		-		520 < Rm < 1200		High Machinability		-	
Ap (mm)	0.50 x D		0.50 x D		0.50 x D		0.40 x D		0.35 x D	
Ae (mm)	1.00 x D		1.00 x D		1.00 x D		1.00 x D		1.00 x D	
D	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)
1	100	0.003	125	0.003	110	0.001	90	0.001	40	0.001
2		0.008		0.007		0.003		0.003		0.004
3		0.013		0.011		0.006		0.006		0.007
4		0.018		0.016		0.009		0.009		0.010
5		0.023		0.020		0.012		0.011		0.015
6		0.030		0.026		0.015		0.015		0.020
8		0.043		0.038		0.023		0.022		0.033
10		0.059		0.052		0.032		0.031		0.049
12		0.075		0.067		0.042		0.042		0.067
14		0.086		0.075		0.046		0.047		0.070
16		0.093		0.083		0.050		0.050		0.070
18		0.100		0.089		0.053		0.052		0.071
20		0.106		0.093		0.056		0.053		0.073

NiTiCo 30 Endmill, 4 Flutes - C44

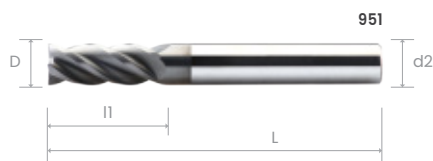


Side Milling	K		P				M		S	
Working Material	Grey Cast Iron		Carbon Steel		Alloy steel		Stainless Steel		Titanium Alloy	
Properties	-		-		520 < Rm < 1200		High Machinability		-	
Ap (mm)	1.00 x D		1.00 x D		1.00 x D		1.00 x D		1.00 x D	
Ae (mm)	0.25 x D		0.25 x D		0.20 x D		0.18 x D		0.15 x D	
D	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)
1	130	0.004	150	0.004	120	0.003	100	0.002	55	0.002
2		0.008		0.008		0.007		0.006		0.006
3		0.014		0.013		0.012		0.010		0.012
4		0.019		0.019		0.017		0.014		0.017
5		0.025		0.024		0.022		0.020		0.024
6		0.031		0.030		0.027		0.025		0.032
8		0.045		0.044		0.038		0.037		0.050
10		0.060		0.059		0.050		0.050		0.070
12		0.077		0.075		0.065		0.064		0.096
14		0.088		0.085		0.072		0.072		0.105
16		0.096		0.094		0.080		0.078		0.111
18		0.104		0.102		0.085		0.083		0.115
20		0.110		0.107		0.089		0.088		0.117

951

NiTiCo 30 DP Endmill, 4 Flutes

HPMT



Order Number	D	I1	I2	L	d2 h6	Availability
951 0300 040 03	3	9		40	3	●
951 0300 040 04				40	4	●
951 0300 050 06				50	6	●
951 0300 057 06				57	6	●
951 0400 050 04	4	12		50	4	●
951 0400 050 06				50	6	●
951 0400 057 06				57	6	●
951 0500 050 05	5	13		50	5	●
951 0500 050 06				50	6	●
951 0500 057 06				57	6	●
951 0600 050 *	6			50	6	●
951 0600 057			57	6	●	
951 0800 064	8	20		64	8	●
951 1000 070	10	22		70	10	●
951 1000 072				72	10	●
951 1000 075				75	10	●
951 1200 075	12	26		75	12	●
951 1200 083				83	12	●
951 1400 083	14	32		83	14	●
951 1400 090				90	14	●
951 1600 090	16			90	16	●
951 1600 092				92	16	●
951 1800 092	18	38		92	18	●
951 1800 100				100	18	●
951 2000 100	20			100	20	●
951 2000 104				104	20	●

* - 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

CNC Repeatability

Ø1 - Ø3 within 10µm
 Ø4 - Ø8 within 15µm
 ≥ Ø10 within 20µm

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
●	○	●	●	●	●	○	●	●	○	●	○	●				

972

NiTiCo 30 DP Endmill with Weldon, 4 Flutes

HPMT



Order Number	D	I1	I2	L	d2 h6	Availability
972 0300 050 06	3	9		50	6	○
972 0300 057 06				57	6	○
972 0400 050 06	4	12		50	6	○
972 0400 057 06				57	6	○
972 0500 050 06	5	13		50	6	○
972 0500 057 06				57	6	○
972 0600 050 *	6	13		50	6	○
972 0600 057				57	6	●
972 0800 064	8	20		64	8	●
972 1000 070	10	22		70	10	○
972 1000 072				72	10	●
972 1000 075	12	26		75	10	○
972 1200 075				75	12	●
972 1200 083	14	32		83	12	●
972 1400 083				83	14	●
972 1400 090	16	32		90	14	○
972 1600 090				90	16	○
972 1600 092	18	38		92	16	●
972 1800 092				92	18	○
972 1800 100	20	38		100	18	○
972 2000 100				100	20	●
972 2000 104				104	20	○

* - DIN 6535

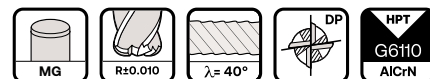
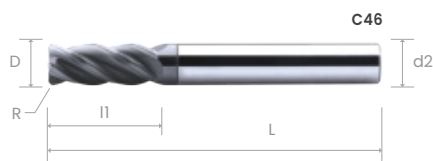
● Ex Stock	ab Lager	De Stock	Da Magazzino	有库存
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无库存

CNC Repeatability
Ø1 - Ø3 within 10µm
Ø4 - Ø8 within 15µm
≥ Ø10 within 20µm

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
●	○	●	●	●	●	●	●	●	●	●	○	●				

C46 NiTiCo 30 DP Torus Endmill, 4 Flutes



Order Number	D	l1	l2	L	d2 h6	R	Availability
C46 0300 040 0300 030	3	9		40	3	0.3	●
C46 0300 040 0300 050				40	3	0.5	●
C46 0300 040 0400 030				40	4	0.3	○
C46 0300 040 0400 050				40	4	0.5	●
C46 0300 050 0600 030				50	6	0.3	○
C46 0300 050 0600 050				50	6	0.5	●
C46 0300 057 0600 030				57	6	0.3	●
C46 0300 057 0600 050				57	6	0.5	●
C46 0400 050 0400 030	4	12		50	4	0.3	●
C46 0400 050 0400 050				50	4	0.5	●
C46 0400 050 0400 100				50	4	1	●
C46 0400 050 0600 030				50	6	0.3	●
C46 0400 050 0600 050				50	6	0.5	●
C46 0400 050 0600 100				50	6	1	●
C46 0400 057 0600 030				57	6	0.3	●
C46 0400 057 0600 050				57	6	0.5	●
C46 0400 057 0600 100				57	6	1	○
C46 0500 050 0500 030	5	15		50	5	0.3	●
C46 0500 050 0500 050				50	5	0.5	●
C46 0500 050 0500 100				50	5	1	●
C46 0500 050 0600 030				50	6	0.3	●
C46 0500 050 0600 050				50	6	0.5	●
C46 0500 050 0600 100				50	6	1	●
C46 0500 057 0600 030				57	6	0.3	●
C46 0500 057 0600 050				57	6	0.5	●
C46 0600 050 0600 030	6	16		50	6	0.3	●
C46 0600 050 0600 050				50	6	0.5	●
C46 0600 050 0600 100				50	6	1	●
C46 0600 057 0600 030				57	6	0.3	●
C46 0600 057 0600 050				57	6	0.5	●
C46 0600 057 0600 100				57	6	1	●
C46 0600 060 0600 030				60	6	0.3	●
C46 0600 060 0600 050				60	6	0.5	●
C46 0600 060 0600 100				60	6	1	●

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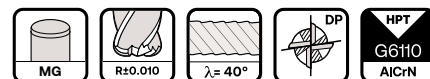
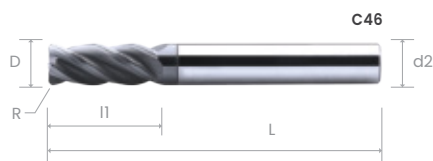
● Ex Stock	ab Lager	De Stock	Da Magazzino	有库存
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无库存

CNC Repeatability
Ø1 - Ø3 within 10µm
Ø4 - Ø8 within 15µm
≥ Ø10 within 20µm

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
●	○	●	●	●	●	○	●	●	○	●	○	●				

C46 NiTiCo 30 DP Torus Endmill, 4 Flutes



Order Number	D	l1	l2	L	d2 h6	R	Availability
C46 0800 064 0800 030	8	20		64	8	0.3	●
C46 0800 064 0800 050				64	8	0.5	●
C46 0800 064 0800 100				64	8	1	●
C46 0800 064 0800 150				64	8	1.5	●
C46 0800 064 0800 200				64	8	2	●
C46 1000 070 1000 030	10	22		70	10	0.3	●
C46 1000 070 1000 050				70	10	0.5	●
C46 1000 070 1000 100				70	10	1	●
C46 1000 070 1000 150				70	10	1.5	●
C46 1000 070 1000 200				70	10	2	●
C46 1000 072 1000 030				72	10	0.3	●
C46 1000 072 1000 050				72	10	0.5	●
C46 1000 072 1000 100				72	10	1	●
C46 1000 075 1000 030				75	10	0.3	●
C46 1000 075 1000 050				75	10	0.5	●
C46 1000 075 1000 100				75	10	1	○
C46 1000 075 1000 150				75	10	1.5	○
C46 1000 075 1000 200				75	10	2	●
C46 1200 075 1200 030	12	25		75	12	0.3	●
C46 1200 075 1200 050				75	12	0.5	●
C46 1200 075 1200 100				75	12	1	●
C46 1200 075 1200 150				75	12	1.5	●
C46 1200 075 1200 200				75	12	2	●
C46 1200 075 1200 250				75	12	2.5	●
C46 1200 075 1200 300				75	12	3	●
C46 1200 083 1200 030				83	12	0.3	●
C46 1200 083 1200 050				83	12	0.5	●
C46 1200 083 1200 100				83	12	1	●
C46 1200 083 1200 200				83	12	2	●
C46 1200 083 1200 250				83	12	2.5	○
C46 1200 083 1200 300				83	12	3	●

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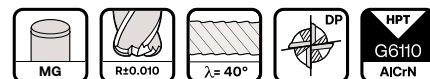
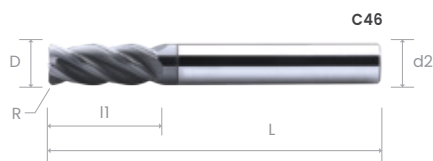
● Ex Stock	ab Lager	De Stock	Da Magazzino	有库存
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无库存

CNC Repeatability
Ø1 - Ø3 within 10µm
Ø4 - Ø8 within 15µm
≥ Ø10 within 20µm

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
●	○	●	●	●	●	○	●	●	○	●	○	●				

C46 NiTiCo 30 DP Torus Endmill, 4 Flutes



Order Number	D	l1	l2	L	d2 h6	R	Availability
C46 1400 083 1400 030	14			83	14	0.3	●
C46 1400 083 1400 050				83	14	0.5	○
C46 1400 083 1400 100				83	14	1	○
C46 1400 083 1400 150				83	14	1.5	○
C46 1400 083 1400 200				83	14	2	○
C46 1400 083 1400 300				83	14	3	○
C46 1400 090 1400 050				90	14	0.5	●
C46 1400 090 1400 100				90	14	1	○
C46 1400 090 1400 150				90	14	1.5	●
C46 1400 090 1400 200				90	14	2	○
C46 1400 090 1400 300				90	14	3	●
C46 1600 090 1600 050	16	32		90	16	0.5	●
C46 1600 090 1600 100				90	16	1	●
C46 1600 090 1600 150				90	16	1.5	●
C46 1600 090 1600 200				90	16	2	●
C46 1600 090 1600 250				90	16	2.5	●
C46 1600 090 1600 300				90	16	3	●
C46 1600 090 1600 400				90	16	4	●
C46 1600 092 1600 030				92	16	0.3	●
C46 1600 092 1600 050				92	16	0.5	●
C46 1600 092 1600 100				92	16	1	●
C46 1600 092 1600 200				92	16	2	○
C46 1600 092 1600 250				92	16	2.5	○
C46 1600 092 1600 300				92	16	3	○
C46 1600 092 1600 400				92	16	4	●
C46 1800 092 1800 030	18	38		92	18	0.3	○
C46 1800 092 1800 050				92	18	0.5	○
C46 1800 092 1800 100				92	18	1	○
C46 1800 092 1800 200				92	18	2	○
C46 1800 092 1800 300				92	18	3	○
C46 1800 100 1800 050				100	18	0.5	○
C46 1800 100 1800 100				100	18	1	○
C46 1800 100 1800 150				100	18	1.5	○
C46 1800 100 1800 200				100	18	2	●
C46 1800 100 1800 300				100	18	3	○

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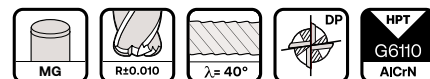
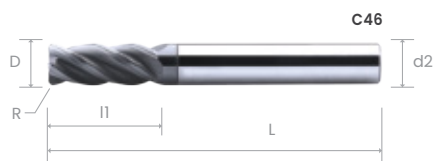
● Ex Stock	ab Lager	De Stock	Da Magazzino	有库存
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无库存

CNC Repeatability
Ø1 - Ø3 within 10µm
Ø4 - Ø8 within 15µm
≥ Ø10 within 20µm

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
●	○	●	●	●	●	○	●	●	○	●	○	●				

C46 NiTiCo 30 DP Torus Endmill, 4 Flutes



Order Number	D	l1	l2	L	d2 h6	R	Availability
C46 2000 100 2000 050	20	38		100	20	0.5	●
C46 2000 100 2000 100				100	20	1	●
C46 2000 100 2000 150				100	20	1.5	●
C46 2000 100 2000 200				100	20	2	●
C46 2000 100 2000 250				100	20	2.5	○
C46 2000 100 2000 300				100	20	3	●
C46 2000 100 2000 400				100	20	4	○
C46 2000 104 2000 030				104	20	0.3	○
C46 2000 104 2000 050				104	20	0.5	●
C46 2000 104 2000 100				104	20	1	○
C46 2000 104 2000 200				104	20	2	○
C46 2000 104 2000 250				104	20	2.5	●
C46 2000 104 2000 300				104	20	3	●
C46 2000 104 2000 400				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

CNC Repeatability
Ø1 - Ø3 within 10µm
Ø4 - Ø8 within 15µm
≥ Ø10 within 20µm

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
●		○	●	●				●		●	○	●				

C50 NiTiCo 30 DP Torus Endmill with Weldon, 4 Flutes



Order Number	D	l1	l2	L	d2 h6	R	Availability
C50 0400 057 0600 030	4	11		57	6	0.3	○
C50 0400 057 0600 050				57	6	0.5	○
C50 0500 057 0600 030	5			57	6	0.3	○
C50 0500 057 0600 050				57	6	0.5	○
C50 0600 057 0600 030	6	13		57	6	0.3	○
C50 0600 057 0600 050				57	6	0.5	○
C50 0600 057 0600 100				57	6	1	○
C50 0800 064 0800 030	8	20		64	8	0.3	○
C50 0800 064 0800 050				64	8	0.5	○
C50 0800 064 0800 100				64	8	1	○
C50 1000 072 1000 030	10	22		72	10	0.3	○
C50 1000 072 1000 050				72	10	0.5	○
C50 1000 072 1000 100				72	10	1	○
C50 1200 083 1200 030	12			83	12	0.3	○
C50 1200 083 1200 050				83	12	0.5	●
C50 1200 083 1200 100				83	12	1	○
C50 1200 083 1200 200				83	12	2	○
C50 1200 083 1200 250				83	12	2.5	○
C50 1200 083 1200 300				83	12	3	○
C50 1400 083 1400 030	14	26		83	14	0.3	○
C50 1400 083 1400 050				83	14	0.5	○
C50 1400 083 1400 100				83	14	1	○
C50 1400 083 1400 200				83	14	2	○
C50 1400 083 1400 300				83	14	3	○
C50 1600 092 1600 030	16			92	16	0.3	○
C50 1600 092 1600 050				92	16	0.5	○
C50 1600 092 1600 100				92	16	1	○
C50 1600 092 1600 200				92	16	2	○
C50 1600 092 1600 250				92	16	2.5	○
C50 1600 092 1600 300				92	16	3	○
C50 1600 092 1600 400	18	32		92	16	4	○
C50 1800 092 1800 030				92	18	0.3	○
C50 1800 092 1800 050				92	18	0.5	○
C50 1800 092 1800 100				92	18	1	○
C50 1800 092 1800 200				92	18	2	○
C50 1800 092 1800 300				92	18	3	○

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

CNC Repeatability
Ø1 - Ø3 within 10µm
Ø4 - Ø8 within 15µm
≥ Ø10 within 20µm

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
●	○	●	●	●	●	●	●	●	●	●	○	●				

C50 NiTiCo 30 DP Torus Endmill with Weldon, 4 Flutes



Order Number	D	l1	l2	L	d2 h6	R	Availability
C50 2000 104 2000 030	20	38		104	20	0.3	○
C50 2000 104 2000 050				104	20	0.5	○
C50 2000 104 2000 100				104	20	1	○
C50 2000 104 2000 200				104	20	2	○
C50 2000 104 2000 250				104	20	2.5	○
C50 2000 104 2000 300				104	20	3	○
C50 2000 104 2000 400				104	20	4	○

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

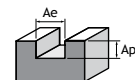
CNC Repeatability
Ø1 - Ø3 within 10µm
Ø4 - Ø8 within 15µm
≥ Ø10 within 20µm

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
●		○	●					●		○	●					

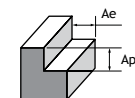


NiTiCo 30 DP Endmill, 4 Flutes – 951, 972, C46, C50



Slotting	K		P				M		S	
Working Material	Grey Cast Iron		Carbon Steel		Alloy steel		Stainless Steel		Titanium Alloy	
Properties	-		-		520 < Rm < 1200		High Machinability		-	
Ap (mm)	1.00 x D		1.00 x D		1.00 x D		1.00 x D		0.50 x D	
Ae (mm)	1.00 x D		1.00 x D		1.00 x D		1.00 x D		1.00 x D	
D	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)
1	170	0.003	200	0.003	160	0.002	120	0.003	60	0.004
2		0.005		0.005		0.005		0.006		0.008
3		0.008		0.008		0.008		0.009		0.013
4		0.011		0.011		0.011		0.012		0.017
5		0.015		0.015		0.014		0.016		0.023
6		0.018		0.018		0.018		0.020		0.027
8		0.025		0.025		0.025		0.028		0.039
10		0.033		0.033		0.033		0.037		0.052
12		0.041		0.042		0.041		0.048		0.064
14		0.048		0.047		0.047		0.054		0.074
16		0.054		0.053		0.053		0.060		0.081
18		0.058		0.058		0.058		0.065		0.086
20		0.063		0.063		0.063		0.069		0.093

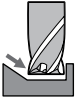
NiTiCo 30 DP Endmill, 4 Flutes – 951, 972, C46, C50



Side Milling	K		P				M		S	
Working Material	Grey Cast Iron		Carbon Steel		Alloy steel		Stainless Steel		Titanium Alloy	
Properties	-		-		520 < Rm < 1200		High Machinability		-	
Ap (mm)	1.00 x D		1.00 x D		1.00 x D		1.00 x D		1.00 x D	
Ae (mm)	0.25 x D		0.25 x D		0.20 x D		0.18 x D		0.15 x D	
D	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)
1	250	0.007	280	0.008	230	0.006	160	0.004	85	0.006
2		0.010		0.010		0.009		0.010		0.012
3		0.016		0.016		0.014		0.015		0.019
4		0.021		0.022		0.019		0.021		0.026
5		0.027		0.028		0.025		0.027		0.033
6		0.033		0.034		0.030		0.034		0.040
8		0.046		0.047		0.043		0.046		0.057
10		0.060		0.060		0.056		0.059		0.075
12		0.075		0.074		0.069		0.074		0.094
14		0.086		0.086		0.080		0.084		0.105
16		0.097		0.097		0.090		0.095		0.115
18		0.106		0.107		0.099		0.103		0.123
20		0.114		0.117		0.107		0.110		0.130



NiTiCo 30 DP Endmill, 4 Flutes – 951, 972, C46, C50

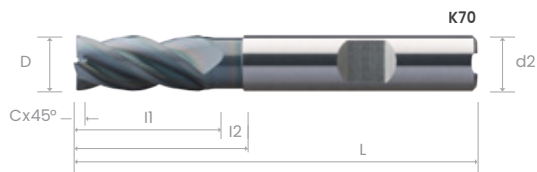


Ramp/Helical	K		P				M		S	
Working Material	Grey Cast Iron		Carbon Steel		Alloy steel		Stainless Steel		Titanium Alloy	
Properties	-		-		520 < Rm < 1200		High Machinability		-	
Ap (mm)	1.00 x D		1.00 x D		1.00 x D		1.00 x D		1.00 x D	
Ramping Angle	5°		5°		5°		3°		2°	
D	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)
3	200	0.007	200	0.007	140	0.006	70	0.006	50	0.004
4		0.010		0.010		0.009		0.010		0.006
5		0.013		0.014		0.013		0.014		0.010
6		0.016		0.017		0.016		0.019		0.013
8		0.023		0.024		0.023		0.028		0.021
10		0.030		0.032		0.031		0.038		0.030
12		0.038		0.040		0.039		0.051		0.038
14		0.043		0.046		0.045		0.058		0.042
16		0.048		0.051		0.049		0.063		0.045
18		0.051		0.056		0.053		0.064		0.047
20		0.054		0.059		0.055		0.063		0.047

K70

NiTiCo 30 DP/DH Internal Oil Hole Endmill with Recess and Weldon, 4 Flutes

HPMT



Order Number	D	l1	l2	L	d2 h6	C	Availability
K70 0400	4	11	15	57	6	0.1	●
K70 0500	5	13	18	57	6	0.1	●
K70 0600	6		19	57	6	0.1	●
K70 0800	8	20	26	64	8	0.2	●
K70 1000	10	22	30	72	10	0.2	●
K70 1200	12	26	36	83	12	0.2	●
K70 1400	14		36	83	14	0.3	●
K70 1600	16	32	42	92	16	0.3	●
K70 2000	20	38	52	104	20	0.4	●

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

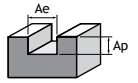
CNC Repeatability
Ø1 - Ø3 within 10µm
Ø4 - Ø8 within 15µm
≥ Ø10 within 20µm

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
●	○	●	●	●	●	●	●	●	●	●	○	●				

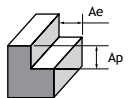


NiTiCo 30 DP/DH Internal Oil Hole Endmill with Recess and Weldon, 4 Flutes – K70



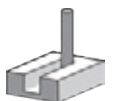
Slotting	K		P				M		S	
Working Material	Grey Cast Iron		Carbon Steel		Alloy steel		Stainless Steel		Titanium Alloy	
Properties	-		-		520 < Rm < 1200		High Machinability		-	
Ap (mm)	1.00 x D		1.00 x D		1.00 x D		1.00 x D		0.50 x D	
Ae (mm)	1.00 x D		1.00 x D		1.00 x D		1.00 x D		1.00 x D	
D	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)
4	200	0.015	230	0.015	190	0.014	140	0.016	75	0.020
5		0.019		0.019		0.018		0.020		0.026
6		0.023		0.024		0.022		0.024		0.032
8		0.031		0.032		0.030		0.033		0.043
10		0.040		0.040		0.038		0.041		0.055
12		0.049		0.049		0.047		0.052		0.069
16		0.064		0.065		0.062		0.067		0.091
20		0.079		0.080		0.077		0.080		0.111

NiTiCo 30 DP/DH Internal Oil Hole Endmill with Recess and Weldon, 4 Flutes – K70



Side Milling	K		P				M		S	
Working Material	Grey Cast Iron		Carbon Steel		Alloy steel		Stainless Steel		Titanium Alloy	
Properties	-		-		520 < Rm < 1200		High Machinability		-	
Ap (mm)	1.00 x D		1.00 x D		1.00 x D		1.00 x D		0.50 x D	
Ae (mm)	0.25 x D		0.25 x D		0.25 x D		0.18 x D		0.15 x D	
D	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)	Vc (m/min)	Fz (mm)
4	280	0.020	310	0.023	260	0.018	180	0.023	100	0.025
5		0.027		0.030		0.025		0.031		0.033
6		0.034		0.037		0.032		0.038		0.041
8		0.049		0.051		0.047		0.053		0.057
10		0.065		0.068		0.063		0.070		0.072
12		0.084		0.087		0.083		0.089		0.099
16		0.107		0.109		0.105		0.113		0.118
20		0.123		0.127		0.121		0.131		0.137

NiTiCo 30 DP/DH Internal Oil Hole Endmill with Recess and Weldon, 4 Flutes – K70



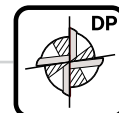
Trochoidal Milling	K		P				M		S	
Working Material	Grey Cast Iron		Carbon Steel		Alloy steel		Stainless Steel		Titanium Alloy	
Properties	-		-		520 < Rm < 1200		High Machinability		-	
Maximum Slot Width	1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D	
Ap (mm)	1.00 x D		1.00 x D		1.00 x D		1.00 x D		0.50 x D	
Ae (mm)	0.25 x D		0.25 x D		0.25 x D		0.18 x D		0.15 x D	
D	Vc (m/min) 330	Fz (mm)	Vc (m/min) 360	Fz (mm)	Vc (m/min) 300	Fz (mm)	Vc (m/min) 220	Fz (mm)	Vc (m/min) 130	Fz (mm)
4		0.021		0.023		0.019		0.024		0.024
5		0.027		0.029		0.025		0.030		0.031
6		0.034		0.037		0.032		0.037		0.039
8		0.049		0.051		0.047		0.051		0.055
10		0.065		0.067		0.063		0.067		0.074
12		0.087		0.089		0.085		0.090		0.101
14		0.093		0.095		0.090		0.095		0.106
16		0.098		0.102		0.095		0.100		0.111
18		0.104		0.108		0.100		0.110		0.120
20	0.110	0.114	0.106	0.116	0.126					

949



Differential Pitch (DP)

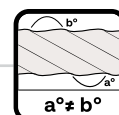
- Reduces chatter to provide excellent surface finishing.



Differential Helix (DH)

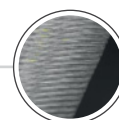
Reduces the cutting force:

- Allows high speed machining, increasing productivity.
- Improves surface finishing.



The Perfect Edge Design

- Provides a stable cutting edge with much reduced possibility of chipping while prolonging the tool life.

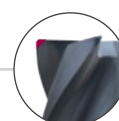


Optimized Tool Geometry

- Allows for improved shearing and decreased spindle loads.

Small Corner Radius

- For less chipping of the cutting edges and longer tool life.



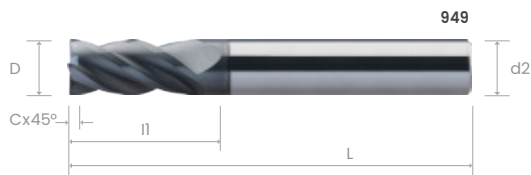
949

NiTiCo 30 DP/DH

C49

NiTiCo 30 DP/DH
with Weldon

949 NiTiCo 30 DP/DH Endmill, 4 Flutes



Order Number	D	l1	l2	L	d2 h6	C	Availability
949 0400	4	11		57	6	0.1	●
949 0500	5	13		57	6	0.1	●
949 0600	6			57	6	0.1	●
949 0800	8	20		64	8	0.2	●
949 1000	10	22		72	10	0.2	●
949 1200	12	26		83	12	0.2	●
949 1400	14			83	14	0.3	●
949 1600	16	32		92	16	0.3	●
949 1800	18			92	18	0.3	●
949 2000	20	38		104	20	0.4	●

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

CNC Repeatability
Ø1 - Ø3 within 10µm
Ø4 - Ø8 within 15µm
≥ Ø10 within 20µm

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
●	●	●	○	●	●	●	●	●	●	●	○	●				

C49 NiTiCo 30 DP/DH Endmill with Weldon, 4 Flutes



Order Number	D	l1	l2	L	d2 h6	C	Availability
C49 0400	4	11		57	6	0.1	○
C49 0500	5	13		57	6	0.1	○
C49 0600	6			57	6	0.1	○
C49 0800	8	20		64	8	0.2	○
C49 1000	10	22		72	10	0.2	○
C49 1200	12	26		83	12	0.2	○
C49 1400	14			83	14	0.3	○
C49 1600	16	32		92	16	0.3	○
C49 1800	18			92	18	0.3	○
C49 2000	20	38		104	20	0.4	○

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

CNC Repeatability
Ø1 - Ø3 within 10µm
Ø4 - Ø8 within 15µm
≥ Ø10 within 20µm

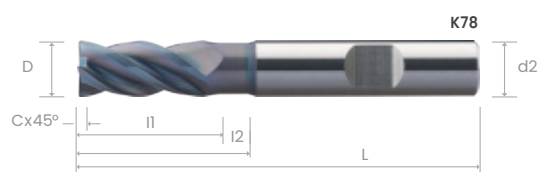
Material Group | Materialgruppe | Groupe Matière | Gruppo Materiali | 材质主类

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

K78

NiTiCo 30 DP/DH Endmill with Recess and Weldon, 4 Flutes

HPMT



Order Number	D	l1	l2	L	d2 h6	C	Availability
K78 0400	4	11	15	57	6	0.1	○
K78 0500	5	13	18	57	6	0.1	○
K78 0600	6		19	57	6	0.1	○
K78 0800	8	20	26	64	8	0.2	○
K78 1000	10	22	30	72	10	0.2	○
K78 1200	12	26	36	83	12	0.2	○
K78 1400	14		36	83	14	0.3	○
K78 1600	16	32	42	92	16	0.3	○
K78 2000	20	38	52	104	20	0.4	○

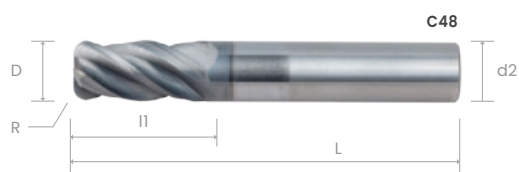
	Germany	France	Italy	China
● Ex Stock	ab Lager	De Stock	Da Magazzino	有库存
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无库存

CNC Repeatability
Ø1 - Ø3 within 10µm
Ø4 - Ø8 within 15µm
≥ Ø10 within 20µm

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
●	●	●	○	●	●	●	●	●	●	●	○	●				

C48 NiTiCo 30 DP/DH Torus Endmill, 4 Flutes



Order Number	D	l1	l2	L	d2 h6	R	Availability
C48 0400 057 0600 030	4	11		57	6	0.3	○
C48 0400 057 0600 050				57	6	0.5	●
C48 0500 057 0600 030	5	13		57	6	0.3	●
C48 0500 057 0600 050				57	6	0.5	●
C48 0600 057 0600 030	6	13		57	6	0.3	●
C48 0600 057 0600 050				57	6	0.5	●
C48 0600 057 0600 100	6	13		57	6	1	●
C48 0800 064 0800 030				64	8	0.3	●
C48 0800 064 0800 050	8	20		64	8	0.5	●
C48 0800 064 0800 100				64	8	1	●
C48 1000 072 1000 030	10	22		72	10	0.3	○
C48 1000 072 1000 050				72	10	0.5	●
C48 1000 072 1000 100	10	22		72	10	1	●
C48 1200 083 1200 030				83	12	0.3	●
C48 1200 083 1200 050	12	26		83	12	0.5	●
C48 1200 083 1200 100				83	12	1	●
C48 1200 083 1200 200	12	26		83	12	2	●
C48 1200 083 1200 250				83	12	2.5	●
C48 1200 083 1200 300	12	26		83	12	3	●
C48 1400 083 1400 030				83	14	0.3	○
C48 1400 083 1400 050	14	26		83	14	0.5	○
C48 1400 083 1400 100				83	14	1	○
C48 1400 083 1400 200	14	26		83	14	2	○
C48 1400 083 1400 300				83	14	3	○
C48 1600 092 1600 030	16	32		92	16	0.3	●
C48 1600 092 1600 050				92	16	0.5	●
C48 1600 092 1600 100	16	32		92	16	1	●
C48 1600 092 1600 200				92	16	2	○
C48 1600 092 1600 250	16	32		92	16	2.5	○
C48 1600 092 1600 300				92	16	3	○
C48 1600 092 1600 400	16	32		92	16	4	●
C48 1800 092 1800 030				92	18	0.3	○
C48 1800 092 1800 050	18	32		92	18	0.5	○
C48 1800 092 1800 100				92	18	1	○
C48 1800 092 1800 200	18	32		92	18	2	○
C48 1800 092 1800 300				92	18	3	○

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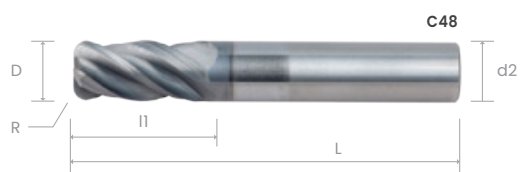
● Ex Stock	ab Lager	De Stock	Da Magazzino	有库存
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无库存

CNC Repeatability
Ø1 - Ø3 within 10µm
Ø4 - Ø8 within 15µm
≥ Ø10 within 20µm

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
●	○	●	●	●	●	○	●	●	○	●	○	●				

C48 NiTiCo 30 DP/DH Torus Endmill, 4 Flutes



Order Number	D	l1	l2	L	d2 h6	R	Availability
C48 2000 104 2000 030	20	38		104	20	0.3	○
C48 2000 104 2000 050				104	20	0.5	●
C48 2000 104 2000 100				104	20	1	●
C48 2000 104 2000 200				104	20	2	○
C48 2000 104 2000 250				104	20	2.5	●
C48 2000 104 2000 300				104	20	3	●
C48 2000 104 2000 400				104	20	4	●

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

CNC Repeatability
Ø1 - Ø3 within 10µm
Ø4 - Ø8 within 15µm
≥ Ø10 within 20µm

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
●					○											

C52 NiTiCo 30 DP/DH Torus Endmill with Weldon, 4 Flutes



Order Number	D	l1	l2	L	d2 h6	R	Availability
C52 0300 040 0300 030	3	9		40	3	0.3	○
C52 0300 040 0300 050				40	3	0.5	○
C52 0300 040 0400 030				40	4	0.3	○
C52 0300 040 0400 050				40	4	0.5	○
C52 0300 050 0600 030				50	6	0.3	○
C52 0300 050 0600 050				50	6	0.5	○
C52 0300 057 0600 030				57	6	0.3	○
C52 0300 057 0600 050				57	6	0.5	○
C52 0400 050 0400 030	4	12		50	4	0.3	○
C52 0400 050 0400 050				50	4	0.5	○
C52 0400 050 0400 100				50	4	1	○
C52 0400 050 0600 030				50	6	0.3	○
C52 0400 050 0600 050				50	6	0.5	○
C52 0400 050 0600 100				50	6	1	○
C52 0400 057 0600 030				57	6	0.3	○
C52 0400 057 0600 050				57	6	0.5	○
C52 0400 057 0600 100				57	6	1	○
C52 0500 050 0500 030	5	15		50	5	0.3	○
C52 0500 050 0500 050				50	5	0.5	○
C52 0500 050 0500 100				50	5	1	○
C52 0500 050 0600 030				50	6	0.3	○
C52 0500 050 0600 050				50	6	0.5	○
C52 0500 050 0600 100				50	6	1	○
C52 0500 057 0600 030				57	6	0.3	○
C52 0500 057 0600 050				57	6	0.5	○
C52 0600 050 0600 030	6	16		50	6	0.3	○
C52 0600 050 0600 050				50	6	0.5	○
C52 0600 050 0600 100				50	6	1	○
C52 0600 057 0600 030				57	6	0.3	○
C52 0600 057 0600 050				57	6	0.5	○
C52 0600 057 0600 100				57	6	1	○
C52 0600 060 0600 030				60	6	0.3	○
C52 0600 060 0600 050				60	6	0.5	○
C52 0600 060 0600 100				60	6	1	○

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

CNC Repeatability
Ø1 - Ø3 within 10µm
Ø4 - Ø8 within 15µm
≥ Ø10 within 20µm

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
●	○	●	●	●	●	○	●	●	○	●	○	●				

C52 NiTiCo 30 DP/DH Torus Endmill with Weldon, 4 Flutes



Order Number	D	l1	l2	L	d2 h6	R	Availability
C52 0800 064 0800 030	8	20		64	8	0.3	○
C52 0800 064 0800 050				64	8	0.5	○
C52 0800 064 0800 100				64	8	1	○
C52 0800 064 0800 150				64	8	1.5	○
C52 0800 064 0800 200				64	8	2	○
C52 1000 070 1000 030	10	22		70	10	0.3	○
C52 1000 070 1000 050				70	10	0.5	○
C52 1000 070 1000 100				70	10	1	○
C52 1000 070 1000 150				70	10	1.5	○
C52 1000 070 1000 200				70	10	2	○
C52 1000 072 1000 030				72	10	0.3	○
C52 1000 072 1000 050				72	10	0.5	○
C52 1000 072 1000 100				72	10	1	○
C52 1000 075 1000 030				75	10	0.3	○
C52 1000 075 1000 050				75	10	0.5	○
C52 1000 075 1000 100				75	10	1	○
C52 1000 075 1000 150				75	10	1.5	○
C52 1000 075 1000 200				75	10	2	○
C52 1200 075 1200 030	12	25		75	12	0.3	○
C52 1200 075 1200 050				75	12	0.5	○
C52 1200 075 1200 100				75	12	1	○
C52 1200 075 1200 150				75	12	1.5	○
C52 1200 075 1200 200				75	12	2	○
C52 1200 075 1200 250				75	12	2.5	○
C52 1200 075 1200 300				75	12	3	○
C52 1200 083 1200 030				83	12	0.3	○
C52 1200 083 1200 050				83	12	0.5	○
C52 1200 083 1200 100				83	12	1	○
C52 1200 083 1200 200				83	12	2	○
C52 1200 083 1200 250				83	12	2.5	○
C52 1200 083 1200 300				83	12	3	○

cont'd ▶

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

CNC Repeatability
Ø1 - Ø3 within 10µm
Ø4 - Ø8 within 15µm
≥ Ø10 within 20µm

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
●	○	●	●	●	●	●	●	●	●	●	○	●				

C52 NiTiCo 30 DP/DH Torus Endmill with Weldon, 4 Flutes



Order Number	D	l1	l2	L	d2 h6	R	Availability
C52 1400 083 1400 030	14	32		83	14	0.3	○
C52 1400 083 1400 050				83	14	0.5	○
C52 1400 083 1400 100				83	14	1	○
C52 1400 083 1400 150				83	14	1.5	○
C52 1400 083 1400 200				83	14	2	○
C52 1400 083 1400 300				83	14	3	○
C52 1400 090 1400 050				90	14	0.5	○
C52 1400 090 1400 100				90	14	1	○
C52 1400 090 1400 150				90	14	1.5	○
C52 1400 090 1400 200				90	14	2	○
C52 1400 090 1400 300				90	14	3	○
C52 1600 090 1600 050	16	32		90	16	0.5	○
C52 1600 090 1600 100				90	16	1	○
C52 1600 090 1600 150				90	16	1.5	○
C52 1600 090 1600 200				90	16	2	○
C52 1600 090 1600 250				90	16	2.5	○
C52 1600 090 1600 300				90	16	3	●
C52 1600 090 1600 400				90	16	4	○
C52 1600 092 1600 030				92	16	0.3	○
C52 1600 092 1600 050				92	16	0.5	○
C52 1600 092 1600 100				92	16	1	○
C52 1600 092 1600 200				92	16	2	○
C52 1600 092 1600 250				92	16	2.5	○
C52 1600 092 1600 300				92	16	3	○
C52 1600 092 1600 400				92	16	4	○
C52 1800 092 1800 030	18	38		92	18	0.3	○
C52 1800 092 1800 050				92	18	0.5	○
C52 1800 092 1800 100				92	18	1	○
C52 1800 092 1800 200				92	18	2	○
C52 1800 092 1800 300				92	18	3	○
C52 1800 100 1800 050				100	18	0.5	○
C52 1800 100 1800 100				100	18	1	○
C52 1800 100 1800 150				100	18	1.5	○
C52 1800 100 1800 200				100	18	2	○
C52 1800 100 1800 300				100	18	3	○

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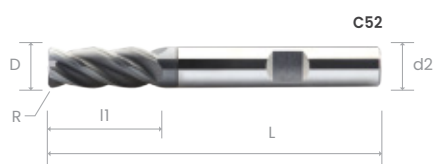
● Ex Stock	ab Lager	De Stock	Da Magazzino	有库存
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无库存

CNC Repeatability
Ø1 - Ø3 within 10µm
Ø4 - Ø8 within 15µm
≥ Ø10 within 20µm

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
●	○	●	●	●	●	○	●	●	○	●	○	●				

C52 NiTiCo 30 DP/DH Torus Endmill with Weldon, 4 Flutes



Order Number	D	l1	l2	L	d2 h6	R	Availability
C52 2000 100 2000 050	20	38		100	20	0.5	○
C52 2000 100 2000 100				100	20	1	○
C52 2000 100 2000 150				100	20	1.5	○
C52 2000 100 2000 200				100	20	2	○
C52 2000 100 2000 250				100	20	2.5	○
C52 2000 100 2000 300				100	20	3	○
C52 2000 100 2000 400				100	20	4	○
C52 2000 104 2000 030				104	20	0.3	○
C52 2000 104 2000 050				104	20	0.5	○
C52 2000 104 2000 100				104	20	1	○
C52 2000 104 2000 200				104	20	2	○
C52 2000 104 2000 250				104	20	2.5	○
C52 2000 104 2000 300				104	20	3	○
C52 2000 104 2000 400				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

CNC Repeatability
Ø1 - Ø3 within 10µm
Ø4 - Ø8 within 15µm
≥ Ø10 within 20µm

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
●	○	●	●	●	●	●	●	●	●	●	○	●				



Order Number	D	I1	I2	L	d2 h6	R	Availability
A1R 0400 057 0600 030	4	11		57	6	0.3	○
A1R 0400 057 0600 050				57	6	0.5	●
A1R 0500 057 0600 030	5	13		57	6	0.3	●
A1R 0500 057 0600 050				57	6	0.5	●
A1R 0600 057 0600 030	6			57	6	0.3	●
A1R 0600 057 0600 050				57	6	0.5	●
A1R 0600 057 0600 100			57	6	1	○	
A1R 0800 064 0800 030	8	20		64	8	0.3	●
A1R 0800 064 0800 050				64	8	0.5	○
A1R 0800 064 0800 100				64	8	1	○
A1R 1000 072 1000 030	10	22		72	10	0.3	●
A1R 1000 072 1000 050				72	10	0.5	○
A1R 1000 072 1000 100				72	10	1	●
A1R 1200 083 1200 030	12	26		83	12	0.3	●
A1R 1200 083 1200 050				83	12	0.5	○
A1R 1200 083 1200 100				83	12	1	○
A1R 1200 083 1200 200				83	12	2	●
A1R 1200 083 1200 250				83	12	2.5	○
A1R 1200 083 1200 300	14			83	12	3	●
A1R 1400 083 1400 030				83	14	0.3	○
A1R 1400 083 1400 050				83	14	0.5	○
A1R 1400 083 1400 100			83	14	1	○	
A1R 1400 083 1400 200			83	14	2	○	
A1R 1400 083 1400 300		83	14	3	○		
A1R 1600 092 1600 030	16	32		92	16	0.3	○
A1R 1600 092 1600 050				92	16	0.5	○
A1R 1600 092 1600 100				92	16	1	○
A1R 1600 092 1600 200				92	16	2	●
A1R 1600 092 1600 250				92	16	2.5	○
A1R 1600 092 1600 300	18			92	16	3	○
A1R 1600 092 1600 400				92	16	4	●
A1R 1800 092 1800 030				92	18	0.3	○
A1R 1800 092 1800 050			92	18	0.5	○	
A1R 1800 092 1800 100			92	18	1	○	
A1R 1800 092 1800 200			92	18	2	○	
A1R 1800 092 1800 300			92	18	3	○	

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

CNC Repeatability
Ø1 - Ø3 within 10µm
Ø4 - Ø8 within 15µm
≥ Ø10 within 20µm

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
●	○	●	●	●	●	○	●	●	○	●	○	●				

A1R NiTiCo 30 DP/DH Torus Endmill, 4 Flutes



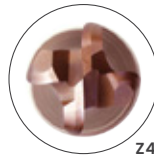
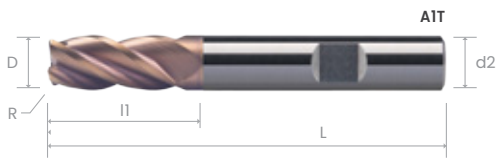
Order Number	D	l1	l2	L	d2 h6	R	Availability
A1R 2000 104 2000 030	20	38		104	20	0.3	○
A1R 2000 104 2000 050				104	20	0.5	○
A1R 2000 104 2000 100				104	20	1	○
A1R 2000 104 2000 200				104	20	2	○
A1R 2000 104 2000 250				104	20	2.5	○
A1R 2000 104 2000 300				104	20	3	○
A1R 2000 104 2000 400				104	20	4	○

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

CNC Repeatability
Ø1 – Ø3 within 10µm
Ø4 – Ø8 within 15µm
≥ Ø10 within 20µm

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
●		○	●		●			●		●	○	●				



Order Number	D	l1	l2	L	d2 h6	R	Availability
AIT 0400 057 0600 030	4	11		57	6	0.3	○
AIT 0400 057 0600 050				57	6	0.5	○
AIT 0500 057 0600 030	5	13		57	6	0.3	○
AIT 0500 057 0600 050				57	6	0.5	○
AIT 0600 057 0600 030	6			57	6	0.3	○
AIT 0600 057 0600 050				57	6	0.5	○
AIT 0600 057 0600 100			57	6	1	○	
AIT 0800 064 0800 030	8	20		64	8	0.3	○
AIT 0800 064 0800 050				64	8	0.5	○
AIT 0800 064 0800 100				64	8	1	○
AIT 1000 072 1000 030	10	22		72	10	0.3	○
AIT 1000 072 1000 050				72	10	0.5	○
AIT 1000 072 1000 100				72	10	1	○
AIT 1200 083 1200 030	12	26		83	12	0.3	○
AIT 1200 083 1200 050				83	12	0.5	○
AIT 1200 083 1200 100				83	12	1	○
AIT 1200 083 1200 200				83	12	2	○
AIT 1200 083 1200 250				83	12	2.5	○
AIT 1200 083 1200 300			83	12	3	○	
AIT 1400 083 1400 030	14			83	14	0.3	○
AIT 1400 083 1400 050				83	14	0.5	○
AIT 1400 083 1400 100			83	14	1	○	
AIT 1400 083 1400 200			83	14	2	○	
AIT 1400 083 1400 300		83	14	3	○		
AIT 1600 092 1600 030	16	32		92	16	0.3	○
AIT 1600 092 1600 050				92	16	0.5	○
AIT 1600 092 1600 100				92	16	1	○
AIT 1600 092 1600 200				92	16	2	○
AIT 1600 092 1600 250				92	16	2.5	○
AIT 1600 092 1600 300			92	16	3	○	
AIT 1600 092 1600 400			92	16	4	○	
AIT 1800 092 1800 030	18			92	18	0.3	○
AIT 1800 092 1800 050			92	18	0.5	○	
AIT 1800 092 1800 100			92	18	1	○	
AIT 1800 092 1800 200			92	18	2	○	
AIT 1800 092 1800 300			92	18	3	○	

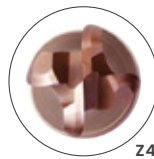
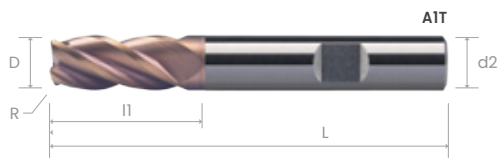
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● Ex Stock	ab Lager	De Stock	Da Magazzino	有存庫
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无存庫

CNC Repeatability
Ø1 - Ø3 within 10µm
Ø4 - Ø8 within 15µm
≥ Ø10 within 20µm

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
●	○	●	●	●	●	○	●	●	○	●	○	●				



Order Number	D	l1	l2	L	d2 h6	R	Availability
AIT 2000 104 2000 030	20	38		104	20	0.3	○
AIT 2000 104 2000 050				104	20	0.5	○
AIT 2000 104 2000 100				104	20	1	○
AIT 2000 104 2000 200				104	20	2	○
AIT 2000 104 2000 250				104	20	2.5	○
AIT 2000 104 2000 300				104	20	3	○
AIT 2000 104 2000 400				104	20	4	○

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

CNC Repeatability
Ø1 - Ø3 within 10µm
Ø4 - Ø8 within 15µm
≥ Ø10 within 20µm

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
●	○	●	●	●	●	○	●	●	○	●	○	●				



Order Number	D	l1	l2	L	d2 h6	R	Availability
J01 0400 057 0600 030	4	11	20	57	6	0.3	○
J01 0400 057 0600 050			20	57	6	0.5	●
J01 0500 057 0600 030	5	13	20	57	6	0.3	●
J01 0500 057 0600 050			20	57	6	0.5	●
J01 0600 057 0600 030	6	13	20	57	6	0.3	●
J01 0600 057 0600 050			20	57	6	0.5	●
J01 0600 057 0600 100	6	13	20	57	6	1	●
J01 0800 064 0800 030			30	64	8	0.3	○
J01 0800 064 0800 050	8	20	30	64	8	0.5	●
J01 0800 064 0800 100			30	64	8	1	●
J01 1000 072 1000 030	10	22	32	72	10	0.3	○
J01 1000 072 1000 050			32	72	10	0.5	●
J01 1000 072 1000 100	10	22	32	72	10	1	●
J01 1200 083 1200 050			37	83	12	0.5	○
J01 1200 083 1200 100	12	26	37	83	12	1	○
J01 1200 083 1200 200			37	83	12	2	○
J01 1200 083 1200 250	12	26	37	83	12	2.5	○
J01 1200 083 1200 300			37	83	12	3	○
J01 1600 092 1600 050	16	32	46	92	16	0.5	○
J01 1600 092 1600 100			46	92	16	1	●
J01 1600 092 1600 200	16	32	46	92	16	2	●
J01 1600 092 1600 300			46	92	16	3	●
J01 1600 092 1600 400	16	32	46	92	16	4	○
J01 2000 104 2000 050			58	104	20	0.5	○
J01 2000 104 2000 100	20	38	58	104	20	1	○
J01 2000 104 2000 200			58	104	20	2	○
J01 2000 104 2000 300	20	38	58	104	20	3	○
J01 2000 104 2000 400			58	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

CNC Repeatability
Ø1 - Ø3 within 10µm
Ø4 - Ø8 within 15µm
≥ Ø10 within 20µm

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
●	○	●	●	●	●	○	●	●	○	●	○	●	○	○	○	○

H98

NiTiCo 30 DP/DH Torus Endmill with Recess and Weldon, 4 Flutes

HPMT



Order Number	D	l1	l2	L	d2 h6	R	Availability
H98 0400 057 0600 030	4	11	20	57	6	0.3	●
H98 0400 057 0600 050			20	57	6	0.5	○
H98 0500 057 0600 030	5	13	20	57	6	0.3	●
H98 0500 057 0600 050			20	57	6	0.5	●
H98 0600 057 0600 030	6	13	20	57	6	0.3	○
H98 0600 057 0600 050			20	57	6	0.5	●
H98 0600 057 0600 100			20	57	6	1	●
H98 0800 064 0800 030	8	20	30	64	8	0.3	○
H98 0800 064 0800 050			30	64	8	0.5	●
H98 0800 064 0800 100			30	64	8	1	○
H98 1000 072 1000 030	10	22	32	72	10	0.3	○
H98 1000 072 1000 050			32	72	10	0.5	●
H98 1000 072 1000 100			32	72	10	1	●
H98 1200 083 1200 050	12	26	37	83	12	0.5	○
H98 1200 083 1200 100			37	83	12	1	○
H98 1200 083 1200 200			37	83	12	2	●
H98 1200 083 1200 250			37	83	12	2.5	○
H98 1200 083 1200 300			37	83	12	3	○
H98 1600 092 1600 050	16	32	46	92	16	0.5	○
H98 1600 092 1600 100			46	92	16	1	●
H98 1600 092 1600 200			46	92	16	2	●
H98 1600 092 1600 300			46	92	16	3	○
H98 1600 092 1600 400			46	92	16	4	○
H98 2000 104 2000 050	20	38	58	104	20	0.5	○
H98 2000 104 2000 100			58	104	20	1	●
H98 2000 104 2000 200			58	104	20	2	○
H98 2000 104 2000 300			58	104	20	3	○
H98 2000 104 2000 400			58	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

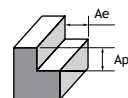
CNC Repeatability
Ø1 - Ø3 within 10µm
Ø4 - Ø8 within 15µm
≥ Ø10 within 20µm

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
●	○	●	●	●	●	○	●	●	○	●	○	●	○	○	○	○



NiTiCo 30 DP/DH Endmill, 4 Flutes – 949, C49, K78, C48, C52, A1R, A1T, J01, H98



Side Milling	K				P				M		S			
Working Material	Grey Cast Iron		Ductile Cast Iron		Carbon Steel		Alloy steel		Stainless Steel		Titanium Alloy		Cobalt Alloy	
Properties	–		–		–		520 < Rm < 1200		High Machinability		–		–	
Ap (mm)	1.25 x D		1.25 x D		1.25 x D		1.25 x D		1.25 x D		1.50 x D		1.00 x D	
Ae (mm)	0.25 x D		0.25 x D		0.25 x D		0.20 x D		0.18 x D		0.15 x D		0.10 x D	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
1	220	0.007	140	0.007	250	0.008	200	0.006	130	0.006	60	0.006	30	0.006
2		0.010		0.010		0.010		0.010		0.012		0.012		0.011
3		0.016		0.016		0.016		0.015		0.018		0.018		0.017
4		0.022		0.024		0.022		0.021		0.025		0.024		0.023
5		0.029		0.031		0.029		0.027		0.031		0.031		0.029
6		0.035		0.039		0.035		0.033		0.038		0.038		0.036
8		0.050		0.054		0.050		0.047		0.052		0.052		0.049
10		0.066		0.070		0.066		0.061		0.067		0.068		0.065
12		0.083		0.087		0.083		0.077		0.082		0.084		0.080
14		0.095		0.099		0.095		0.088		0.093		0.093		0.088
16		0.106		0.108		0.107		0.099		0.103		0.101		0.096
18		0.116		0.118		0.118		0.109		0.112		0.109		0.104
20		0.126		0.128		0.129		0.118		0.121		0.115		0.109

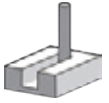
NiTiCo 30 DP/DH Endmill, 4 Flutes – 949, C49, K78, C48, C52, A1R, A1T, J01, H98



Ramp / Helical	K				P				M		S			
Working Material	Grey Cast Iron		Ductile Cast Iron		Carbon Steel		Alloy steel		Stainless Steel		Titanium Alloy		Cobalt Alloy	
Properties	–		–		–		520 < Rm < 1200		High Machinability		–		–	
Ap (mm)	1.00 x D		1.00 x D		1.00 x D		1.00 x D		1.00 x D		1.00 x D		1.00 x D	
Ramping Angle	5°		5°		5°		5°		3°		2°		2°	
Max Ramping Angle	15°		15°		15°		15°		15°		15°		15°	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
3	190	0.012	150	0.120	200	0.015	140	0.014	80	0.014	50	0.009	85	0.024
4		0.017		0.018		0.020		0.019		0.021		0.014		0.030
5		0.021		0.022		0.027		0.024		0.028		0.020		0.037
6		0.027		0.030		0.033		0.031		0.035		0.025		0.051
8		0.038		0.041		0.047		0.045		0.055		0.037		0.065
10		0.050		0.053		0.062		0.058		0.076		0.055		0.081
12		0.063		0.066		0.076		0.074		0.102		0.072		0.103
14		0.071		0.074		0.086		0.084		0.111		0.081		0.122
16		0.078		0.079		0.095		0.092		0.118		0.086		0.140
18		0.084		0.085		0.101		0.099		0.121		0.091		0.160
20		0.090		0.091		0.108		0.106		0.123		0.093		0.200

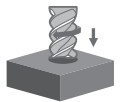


NiTiCo 30 DP/DH Endmill, 4 Flutes – 949, C49, K78, C48, C52, A1R, A1T, J01, H98



Trochoidal Milling	K				P				M		S			
Working Material	Grey Cast Iron		Ductile Cast Iron		Carbon Steel		Alloy steel		Stainless Steel		Titanium Alloy		Cobalt Alloy	
Properties	–		–		–		520 < Rm < 1200		High Machinability		–		–	
Ap (mm)	1.50 x D		1.50 x D		1.50 x D		1.50 x D		1.50 x D		1.50 x D		1.50 x D	
Ae (mm)	0.10 x D		0.10 x D		0.10 x D		0.10 x D		0.10 x D		0.10 x D		0.10 x D	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
3	320	0.025	150	0.025	350	0.026	290	0.024	200	0.027	100	0.024	85	0.024
4		0.034		0.037		0.035		0.033		0.037		0.034		0.030
5		0.043		0.046		0.044		0.043		0.048		0.045		0.037
6		0.053		0.059		0.054		0.053		0.060		0.057		0.051
8		0.073		0.079		0.075		0.073		0.084		0.084		0.065
10		0.095		0.101		0.098		0.096		0.112		0.116		0.081
12		0.118		0.124		0.121		0.120		0.142		0.151		0.103
14		0.133		0.139		0.138		0.136		0.158		0.165		0.122
16		0.147		0.150		0.153		0.149		0.173		0.176		0.140
18		0.160		0.163		0.167		0.162		0.186		0.184		0.160
20		0.172		0.175		0.180		0.174		0.197		0.189		0.200

NiTiCo 30 DP/DH Endmill, 4 Flutes – 949, C49, K78, C48, C52, A1R, A1T, J01, H98



Plunging / Drilling	K				P				M		S			
Working Material	Grey Cast Iron		Ductile Cast Iron		Carbon Steel		Alloy steel		Stainless Steel		Titanium Alloy		Cobalt Alloy	
Properties	–		–		–		520 < Rm < 1200		High Machinability		–		–	
Ap (mm)	1.00 x D		1.00 x D		1.00 x D		1.00 x D		1.00 x D		1.00 x D		1.00 x D	
Ae (mm)	–		–		–		–		–		–		–	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
3	110	0.026	75	0.026	120	0.028	110	0.024	80	0.025	40	0.018	85	0.024
4		0.035		0.038		0.038		0.033		0.035		0.024		0.030
5		0.044		0.047		0.048		0.042		0.044		0.031		0.037
6		0.054		0.060		0.058		0.051		0.054		0.038		0.051
8		0.074		0.079		0.080		0.070		0.074		0.052		0.065
10		0.095		0.100		0.102		0.091		0.095		0.067		0.081
12		0.116		0.122		0.126		0.113		0.118		0.083		0.103
14		0.134		0.140		0.144		0.129		0.136		0.095		0.122
16		0.150		0.153		0.162		0.144		0.154		0.107		0.140
18		0.167		0.170		0.180		0.159		0.172		0.120		0.160
20		0.182		0.185		0.196		0.171		0.189		0.131		0.200

J97

NiTiCo 30 DP/DH Torus Long Endmill, 4 Flutes

HPMT



Order Number	D	l1	l2	L	d2 h6	R	Availability
J97 0400 075 06	4	19		75	6	0.1	○
J97 0500 075 06	5			75	6	0.1	○
J97 0600 075	6	25		75	6	0.1	○
J97 0800 075	8	30		75	8	0.2	●
J97 1000 100	10	40		100	10	0.2	●
J97 1200 100	12	45		100	12	0.3	●
J97 1600 125	16	65		125	16	0.3	○
J97 2000 125	20			125	20	0.3	●

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

CNC Repeatability
Ø1 - Ø3 within 10µm
Ø4 - Ø8 within 15µm
≥ Ø10 within 20µm

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
			●	○	●	●				●	○	●				

J98

NiTiCo 30 DP/DH Torus Long Endmill with Weldon, 4 Flutes

HPMT



Order Number	D	l1	l2	L	d2 h6	R	Availability
J98 0400 075 06	4	19		75	6	0.1	●
J98 0500 075 06	5			75	6	0.1	●
J98 0600 075	6	25		75	6	0.1	●
J98 0800 075	8	30		75	8	0.2	●
J98 1000 100	10	40		100	10	0.2	●
J98 1200 100	12	45		100	12	0.3	○
J98 1600 125	16	65		125	16	0.3	●
J98 2000 125	20			125	20	0.3	●

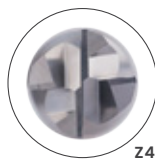
● Ex Stock	ab Lager	De Stock	Da Magazzino	有存库
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无存库

CNC Repeatability
Ø1 - Ø3 within 10µm
Ø4 - Ø8 within 15µm
≥ Ø10 within 20µm

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
●	○	●	●	○	●	○	●	○	●	○	●	○	●	○	●	○

H38 NiTiCo 30 DP/DH Long Endmill with Recess, 4 Flutes



Order Number	D	l1	l2	L	d2 h6	R	Availability
H38 0400 075 06	4	19	32	75	6	0.1	●
H38 0500 075 06	5		32	75	6	0.1	○
H38 0600 075	6	25	32	75	6	0.1	○
H38 0800 075 *	8	30	38	75	8	0.2	○
H38 1000 100	10	40	50	100	10	0.2	○
H38 1200 100 *	12	45	55	100	12	0.3	○
H38 1600 125 *	16	65	75	125	16	0.3	○
H38 2000 125 *	20		75	125	20	0.3	○

*- DIN 6535

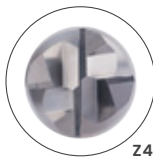
● Ex Stock	ab Lager	De Stock	Da Magazzino	有库存
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无库存

CNC Repeatability
Ø1 - Ø3 within 10µm
Ø4 - Ø8 within 15µm
≥ Ø10 within 20µm

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
			●	○	●	●				●	○	●				

H39 NiTiCo 30 DP/DH Long Endmill with Recess and Weldon, 4 Flutes



Order Number	D	l1	l2	L	d2 h6	R	Availability
H39 0400 075 06	4	19	32	75	6	0.1	○
H39 0500 075 06	5		32	75	6	0.1	○
H39 0600 075	6	25	32	75	6	0.1	○
H39 0800 075 *	8	30	38	75	8	0.2	○
H39 1000 100	10	40	50	100	10	0.2	○
H39 1200 100 *	12	45	55	100	12	0.3	○
H39 1600 125 *	16	65	75	125	16	0.3	○
H39 2000 125 *	20		75	125	20	0.3	○

*- 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

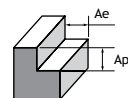
CNC Repeatability
Ø1 - Ø3 within 10µm
Ø4 - Ø8 within 15µm
≥Ø10 within 20µm

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
			●	○	●	●				●	○	●				

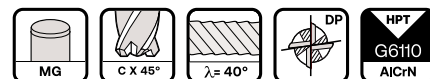


NiTiCo 30 DP/DH Torus Long Endmill, 4 Flutes – J97, J98, H38, H39



Side Milling	K		P				M		S	
Working Material	Grey Cast Iron		Carbon Steel		Alloy steel		Stainless Steel		Titanium Alloy	
Properties	-		-		520 < Rm < 1200		High Machinability		-	
Ap (mm)	1.50 x D		1.50 x D		1.50 x D		1.50 x D		1.50 x D	
Ae (mm)	0.20 x D		0.20 x D		0.15 x D		0.13 x D		0.10 x D	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
4	220	0.020	250	0.021	200	0.018	140	0.020	70	0.026
5		0.026		0.027		0.023		0.026		0.033
6		0.033		0.032		0.029		0.031		0.041
8		0.044		0.044		0.040		0.041		0.056
10		0.057		0.056		0.051		0.053		0.072
12		0.069		0.067		0.065		0.066		0.089
16		0.086		0.084		0.080		0.081		0.113
20		0.102		0.102		0.090		0.093		0.135

C47 NiTiCo 30 DP Roughing Endmill, 4 Flutes



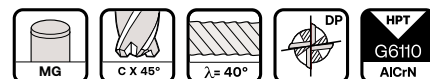
Order Number	D	I1	I2	L	d2 h5	C	Availability
C47 0600 050	6	16		50	6	0.1	●
C47 0600 057				57	6	0.1	●
C47 0800 064	8	20		64	8	0.2	●
C47 1000 070	10	22		70	10	0.2	●
C47 1000 072				72	10	0.2	●
C47 1000 075				75	10	0.2	●
C47 1200 075	12	26		75	12	0.2	●
C47 1200 083				83	12	0.2	●
C47 1400 083	14	32		83	14	0.3	●
C47 1400 090				90	14	0.3	●
C47 1600 090	16	38		90	16	0.3	●
C47 1600 092				92	16	0.3	●
C47 1800 092	18	38		92	18	0.3	●
C47 1800 100				100	18	0.3	●
C47 2000 100	20	38		100	20	0.4	●
C47 2000 104				104	20	0.4	●

● 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
●	○	●	●	●	●	○	●	●	○	●	○	●	○	○	○	○

C64 NiTiCo 30 DP Roughing Endmill with Weldon, 4 Flutes



Order Number	D	I1	I2	L	d2 h5	C	Availability
C64 0600 050	6	16		50	6	0.1	○
C64 0600 057				57	6	0.1	●
C64 0800 064	8	20		64	8	0.2	●
C64 1000 070	10	22		70	10	0.2	●
C64 1000 072				72	10	0.2	●
C64 1000 075				75	10	0.2	○
C64 1200 075	12	26		75	12	0.2	●
C64 1200 083				83	12	0.2	●
C64 1400 083	14	32		83	14	0.3	●
C64 1400 090				90	14	0.3	○
C64 1600 090	16	38		90	16	0.3	●
C64 1600 092				92	16	0.3	○
C64 1800 092	18	38		92	18	0.3	○
C64 1800 100				100	18	0.3	○
C64 2000 100	20	38		100	20	0.4	○
C64 2000 104				104	20	0.4	●

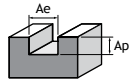
● Ex Stock	ab Lager	De Stock	Da Magazzino	有库存
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无库存

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
			●	○	●	●				●	○	●				

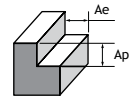


NiTiCo 30 DP Roughing Endmill, 4 Flutes – C47, C64



Slotting	K		P		M		S							
Working Material	Grey Cast Iron		Carbon Steel		Alloy steel		Stainless Steel		Titanium Alloy		Nickel Alloy		Cobalt Alloy	
Properties	-		-		520 < Rm < 1200		High Machinability		-		-		-	
Ap (mm)	1.00 x D		1.00 x D		1.00 x D		1.00 x D		0.50 x D		1.00 x D		1.00 x D	
Ae (mm)	1.00 x D		1.00 x D		1.00 x D		1.00 x D		1.00 x D		0.15 x D		1.00 x D	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
6	190	0.020	220	0.020	175	0.020	130	0.022	65	0.032	100	0.032	90	0.030
8		0.027		0.027		0.027		0.030		0.042		0.042		0.040
10		0.035		0.035		0.035		0.039		0.054		0.054		0.052
12		0.043		0.043		0.042		0.048		0.067		0.067		0.064
14		0.049		0.050		0.048		0.055		0.076		0.076		0.072
16		0.056		0.057		0.054		0.062		0.085		0.085		0.081
18		0.062		0.063		0.060		0.068		0.093		0.093		0.089
20		0.069		0.069		0.066		0.075		0.102		0.102		0.097

NiTiCo 30 DP Roughing Endmill, 4 Flutes – C47, C64



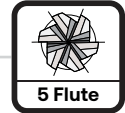
Side Milling	K		P		M		S							
Working Material	Grey Cast Iron		Carbon Steel		Alloy steel		Stainless Steel		Titanium Alloy		Nickel Alloy		Cobalt Alloy	
Properties	-		-		520 < Rm < 1200		High Machinability		-		-		-	
Ap (mm)	1.00 x D		1.00 x D		1.00 x D		1.00 x D		1.00 x D		1.00 x D		1.00 x D	
Ae (mm)	0.25 x D		0.25 x D		0.20 x D		0.18 x D		0.15 x D		0.15 x D		0.10 x D	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
6	275	0.035	310	0.037	255	0.034	175	0.036	95	0.043	135	0.002	120	0.002
8		0.048		0.050		0.046		0.048		0.059		0.003		0.003
10		0.060		0.063		0.059		0.061		0.075		0.005		0.005
12		0.075		0.076		0.072		0.075		0.093		0.007		0.007
14		0.086		0.087		0.084		0.086		0.106		0.010		0.009
16		0.095		0.096		0.093		0.095		0.119		0.012		0.011
18		0.103		0.105		0.102		0.103		0.131		0.015		0.014
20		0.113		0.116		0.111		0.113		0.141		0.017		0.016

J89



5 Flutes Design

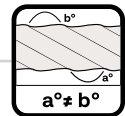
- Significantly increased feed rate (25% higher than a 4-Flute design).



Differential Helix (DH)

Reduces the cutting force:

- Allows high speed machining, increasing productivity.
- Improves surface finishing.



Small Corner Radius

- For less chipping of the cutting edges and longer tool life.



Ideal Cutting Edge

- Provide edge protection to prolong tool life.



J89

NiTiCo 30 DH

J90

NiTiCo 30 DH
with Weldon

J92

NiTiCo 30 DH
Long

J93

NiTiCo 30 DH
Long
with Weldon

J89 NiTiCo 30 DH Endmill, 5 Flutes



Order Number	D	l1	l2	L	d2 h6	R	Availability
J89 0400 057 06	4	12		57	6	0.1	●
J89 0500 057 06	5	13		57	6	0.1	●
J89 0600 057	6			57	6	0.1	●
J89 0800 064	8	20		64	8	0.2	●
J89 1000 072	10	22		72	10	0.2	●
J89 1200 083	12	26		83	12	0.3	●
J89 1600 092	16	32		92	16	0.3	●
J89 2000 104	20	38		104	20	0.3	●

● 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
●			○		●	●		●		●	○	●				

J90

NiTiCo 30 DH Endmill with Weldon, 5 Flutes

HPMT



Order Number	D	l1	l2	L	d2 h6	R	Availability
J90 0400 057 06	4	12		57	6	0.1	○
J90 0500 057 06	5	13		57	6	0.1	●
J90 0600 057	6			57	6	0.1	●
J90 0800 064	8	20		64	8	0.2	●
J90 1000 072	10	22		72	10	0.2	●
J90 1200 083	12	26		83	12	0.3	○
J90 1600 092	16	32		92	16	0.3	○
J90 2000 104	20	38		104	20	0.3	○

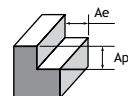
● Ex Stock	ab Lager	De Stock	Da Magazzino	有存库
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无存库

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
●	○	●	●	●	●	○	●	●	○	●	○	●				

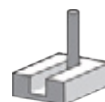


NiTiCo 30 DH Endmill, 5 Flutes – J89, J90



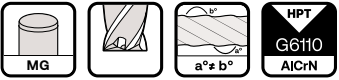
Side Milling	K		P				M		S											
Working Material	Grey Cast Iron		Carbon Steel		Alloy Steel		Stainless Steel		Titanium Alloy		Nickel Alloy		Cobalt Alloy							
Properties	-		-		520 < Rm < 1200		High Machinability		-		-		-							
Ap (mm)	1.00 × D		1.00 × D		1.00 × D		1.00 × D		1.00 × D		1.00 × D		1.00 × D							
Ae (mm)	0.25 × D		0.25 × D		0.20 × D		0.18 × D		0.15 × D		0.10 × D		0.10 × D							
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz						
4		0.017		0.018		0.018		0.018		0.018		0.018		0.018	0.018	0.018	0.018	0.018	0.018	
5		0.022		0.023		0.022		0.023		0.022		0.023		0.022	0.023	0.022	0.023	0.022	0.023	
6		0.027		0.028		0.027		0.028		0.027		0.028		0.027	0.028	0.027	0.028	0.027	0.028	
8		0.036		0.038		0.036		0.038		0.036		0.038		0.036	0.038	0.036	0.038	0.036	0.038	
10		0.049		0.048		0.049		0.048		0.049		0.050		0.049	0.050	0.049	0.050	0.049	0.050	
12		0.059		0.057		0.059		0.057		0.059		0.062		0.059	0.062	0.059	0.062	0.059	0.062	
16		0.077		0.074		0.077		0.074		0.077		0.076		0.077	0.076	0.077	0.076	0.077	0.076	0.077
20		0.086		0.089		0.086		0.089		0.086		0.086		0.086	0.088	0.086	0.088	0.086	0.088	0.086

NiTiCo 30 DH Endmill, 5 Flutes – J89, J90



Trochoidal Milling	K		P			M		S						
Working Material	Grey Cast Iron		Carbon Steel		Alloy Steel		Stainless Steel		Titanium Alloy		Nickel Alloy		Cobalt Alloy	
Properties	-		-		520 < Rm < 1200		High Machinability		-		-		-	
Maximum Slot Width	1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D	
Ap (mm)	1.50 × D		1.50 × D		1.50 × D		1.50 × D		1.50 × D		1.50 × D		1.50 × D	
Ae (mm)	0.15 × D		0.15 × D		0.12 × D		0.10 × D		0.10 × D		0.08 × D		0.08 × D	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
4	300	0.015	330	0.015	280	0.016	200	0.017	110	0.024	70	0.018	60	0.017
5		0.021		0.020		0.022		0.023		0.031		0.023		0.022
6		0.027		0.028		0.030		0.031		0.038		0.029		0.028
8		0.038		0.039		0.043		0.044		0.054		0.042		0.040
10		0.051		0.051		0.058		0.059		0.071		0.057		0.055
12		0.064		0.064		0.078		0.079		0.092		0.076		0.072
16		0.080		0.082		0.095		0.096		0.115		0.089		0.085
20		0.094		0.093		0.108		0.109		0.135		0.096		0.091

J92 NiTiCo 30 DH Long Endmill, 5 Flutes



Order Number	D	l1	l2	L	d2 h6	R	Availability
J92 0600 075	6	25		75	6	0.1	●
J92 0800 075	8			75	8	0.2	●
J92 1000 100	10	38		100	10	0.2	●
J92 1200 100	12	45		100	12	0.3	●
J92 1600 125	16	55		125	16	0.3	●
J92 2000 125	20	65		125	20	0.3	●

● 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
●			○		●	●		●		●	○	●				

J93

NiTiCo 30 DH Long Endmill with Weldon, 5 Flutes



Order Number	D	l1	l2	L	d2 h6	R	Availability
J93 0600 075	6	25		75	6	0.1	●
J93 0800 075	8			75	8	0.2	●
J93 1000 100	10	38		100	10	0.2	●
J93 1200 100	12	45		100	12	0.3	●
J93 1600 125	16	55		125	16	0.3	○
J93 2000 125	20	65		125	20	0.3	●

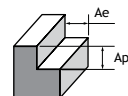
● Ex Stock	ab Lager	De Stock	Da Magazzino	有库存
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无库存

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
●	●	●	○	●	●	●	●	●	●	●	○	●				

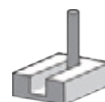


NiTiCo 30 DH Long Endmill, 5 Flutes – J92, J93



Side Milling	K		P		M		S							
Working Material	Grey Cast Iron		Carbon Steel		Alloy Steel		Stainless Steel		Titanium Alloy		Nickel Alloy		Cobalt Alloy	
Properties	-		-		520 < Rm < 1200		High Machinability		-		-		-	
Ap (mm)	1.50 × D		1.50 × D		1.50 × D		1.50 × D		1.00 × D		1.00 × D		1.00 × D	
Ae (mm)	0.15 × D		0.15 × D		0.12 × D		0.10 × D		0.15 × D		0.10 × D		0.10 × D	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
4	230	0.014	260	0.015	210	0.016	140	0.017	75	0.023	50	0.020	40	0.019
5		0.019		0.019		0.020		0.021		0.029		0.026		0.024
6		0.024		0.023		0.025		0.027		0.036		0.033		0.031
8		0.031		0.032		0.035		0.037		0.049		0.046		0.043
10		0.041		0.041		0.046		0.048		0.063		0.060		0.057
12		0.053		0.050		0.057		0.060		0.078		0.075		0.071
16		0.066		0.062		0.071		0.074		0.099		0.093		0.088
20		0.078		0.073		0.080		0.085		0.119		0.108		0.103

NiTiCo 30 DH Long Endmill, 5 Flutes – J92, J93



Trochoidal Milling	K		P				M		S					
Working Material	Grey Cast Iron		Carbon Steel		Alloy Steel		Stainless Steel		Titanium Alloy		Nickel Alloy		Cobalt Alloy	
Properties	-		-		520 < Rm < 1200		High Machinability		-		-		-	
Maximum Slot Width	1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D	
Ap (mm)	2.00 × D		2.00 × D		2.00 × D		2.00 × D		1.50 × D		1.50 × D		1.50 × D	
Ae (mm)	0.12 × D		0.12 × D		0.10 × D		0.08 × D		0.10 × D		0.08 × D		0.08 × D	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
4	270	0.014	300	0.014	260	0.014	170	0.016	95	0.021	60	0.015	50	0.014
5		0.018		0.018		0.020		0.022		0.027		0.021		0.020
6		0.023		0.025		0.027		0.029		0.035		0.027		0.026
8		0.034		0.035		0.040		0.042		0.049		0.039		0.037
10		0.047		0.046		0.054		0.056		0.065		0.053		0.050
12		0.061		0.059		0.070		0.071		0.083		0.068		0.065
16		0.068		0.068		0.089		0.090		0.106		0.082		0.078
20		0.080		0.078		0.101		0.103		0.126		0.090		0.085

K50

5 Flutes Design

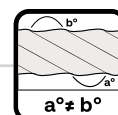
- Significantly increased feed rate (25% higher than a 4-Flute design).



Differential Helix (DH)

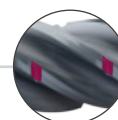
Reduces the cutting force:

- Allows high speed machining, increasing productivity.
- Improves surface finishing.



Optimized Geometry with Chipbreakers

- Efficiently shears work materials and shortens chips for improved chips removal.



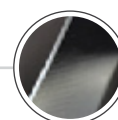
Small Corner Radius

- For less chipping of the cutting edges and longer tool life.



Ideal Cutting Edge

- Provide edge protection to prolong tool life.



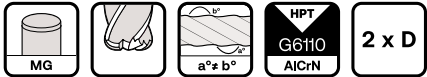
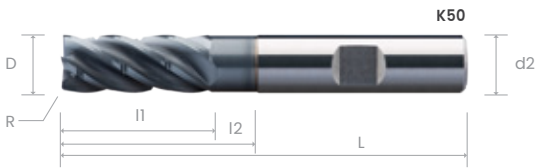
K50

NiTiCo 30 DH
with Chip Breaker,
Recess and Weldon

K51

NiTiCo 30 DH Long
with Chip Breaker,
Recess and Weldon

K50 NiTiCo 30 DH Endmill with Chip Breaker, Recess and Weldon, 5 Flutes



Order Number	D	I1	I2	L	d2 h6	R	Availability
K50 0400 057 06	4	10	15	57	6	0.1	●
K50 0600 057 *	6	15	20	57	6	0.1	●
K50 0800 064	8	20	25	64	8	0.15	●
K50 1000 072 *	10	25	30	72	10	0.2	●
K50 1200 083 *	12	30	38	83	12	0.2	●
K50 1600 092 *	16	39	44	92	16	0.3	●
K50 2000 104 *	20	48	54	104	20	0.3	●

* - DIN 6535

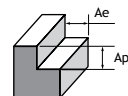
● Ex Stock	ab Lager	De Stock	Da Magazzino	有存库
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无存库

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
			●	○	●	●		●		●	○	●				

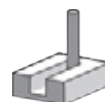


NiTiCo 30 DH Endmill with Chip Breaker, Recess and Weldon, 5 Flutes – K50



Side Milling	K		P		M		S							
Working Material	Grey Cast Iron		Carbon Steel		Alloy Steel		Stainless Steel		Titanium Alloy		Nickel Alloy		Cobalt Alloy	
Properties	-		-		520 < Rm < 1200		High Machinability		-		-		-	
Ap (mm)	1.00 × D		1.00 × D		1.00 × D		1.00 × D		1.00 × D		1.00 × D		1.00 × D	
Ae (mm)	0.25 × D		0.25 × D		0.20 × D		0.18 × D		0.15 × D		0.15 × D		0.15 × D	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
4		0.017		0.017		0.018		0.017		0.022		0.022		0.021
5		0.021		0.022		0.024		0.022		0.028		0.028		0.027
6		0.026		0.027		0.029		0.027		0.034		0.034		0.032
8		0.036		0.037		0.040		0.037		0.047		0.047		0.045
10		0.047		0.047		0.052		0.047		0.060		0.060		0.057
12		0.057		0.057		0.065		0.057		0.074		0.074		0.070
16		0.074		0.073		0.082		0.072		0.093		0.093		0.088
20		0.085		0.089		0.097		0.085		0.111		0.111		0.105

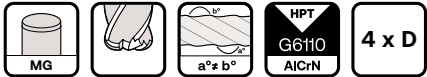
NiTiCo 30 DH Endmill with Chip Breaker, Recess and Weldon, 5 Flutes – K50



Trochoidal Milling	K		P		M		S							
Working Material	Grey Cast Iron		Carbon Steel		Alloy Steel		Stainless Steel		Titanium Alloy		Nickel Alloy		Cobalt Alloy	
Proprietă	-		-		520 < Rm < 1200		High Machinability		-		-		-	
Maximum Slot Width	1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D	
Ap (mm)	1.50 × D		1.50 × D		1.50 × D		1.50 × D		1.50 × D		1.50 × D		1.50 × D	
Ae (mm)	0.15 × D		0.15 × D		0.12 × D		0.10 × D		0.10 × D		0.10 × D		0.10 × D	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
4	315	0.018	345	0.018	290	0.020	170	0.019	120	0.028	60	0.028	47	0.027
5		0.024		0.024		0.028		0.026		0.036		0.036		0.034
6		0.031		0.032		0.037		0.035		0.045		0.045		0.043
8		0.044		0.044		0.052		0.048		0.063		0.063		0.060
10		0.059		0.059		0.071		0.064		0.082		0.082		0.078
12		0.076		0.075		0.094		0.084		0.108		0.108		0.103
16		0.094		0.094		0.116		0.104		0.133		0.133		0.126
20		0.109		0.107		0.131		0.117		0.157		0.157		0.149

K51

NiTiCo 30 DH Long Endmill with Chip Breaker,
Recess and Weldon, 5 Flutes



Order Number	D	l1	l2	L	d2 h6	R	Availability
K51 0600 075	6	26	32	75	6	0.1	●
K51 0800 075 *	8	32	38	75	8	0.2	●
K51 1000 100	10	42	52	100	10	0.2	●
K51 1200 100 *	12		54	100	12	0.2	●
K51 1600 125	16	60	68	125	16	0.3	●
K51 2000 125 *	20	67	75	125	20	0.3	●

*- DIN 6535

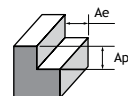
● Ex Stock	ab Lager	De Stock	Da Magazzino	有库存
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无库存

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
●			○		●	●		●		●	○	●				

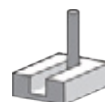


NiTiCo 30 DH Long Endmill with Chip Breaker, Recess & Weldon, 5 Flutes – K51



Side Milling	K		P		M		S														
Working Material	Grey Cast Iron		Carbon Steel		Alloy Steel		Stainless Steel		Titanium Alloy		Nickel Alloy		Cobalt Alloy								
Properties	-		-		520 < Rm < 1200		High Machinability		-		-		-								
Ap (mm)	1.50 × D		1.50 × D		1.50 × D		1.50 × D		1.50 × D		1.50 × D		1.50 × D								
Ae (mm)	0.15 × D		0.15 × D		0.12 × D		0.10 × D		0.10 × D		0.10 × D		0.10 × D								
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz							
4															0.014	0.015	0.017	0.017	0.019	0.019	0.018
5															0.019	0.019	0.022	0.020	0.024	0.024	0.023
6															0.023	0.024	0.027	0.025	0.030	0.030	0.029
8															0.031	0.032	0.037	0.034	0.043	0.043	0.041
10															0.041	0.041	0.048	0.043	0.055	0.055	0.052
12															0.053	0.052	0.060	0.054	0.070	0.070	0.067
16															0.067	0.066	0.077	0.069	0.089	0.089	0.085
20															0.079	0.078	0.090	0.080	0.106	0.106	0.101

NiTiCo 30 DH Long Endmill with Chip Breaker, Recess & Weldon, 5 Flutes – K51



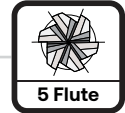
Trochoidal Milling	K		P				M		S					
Working Material	Grey Cast Iron		Carbon Steel		Alloy Steel		Stainless Steel		Titanium Alloy		Nickel Alloy		Cobalt Alloy	
Proprieta	-		-		520 < Rm < 1200		High Machinability		-		-		-	
Maximum Slot Width	1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D	
Ap (mm)	2.00 × D		2.00 × D		2.00 × D		2.00 × D		2.00 × D		2.00 × D		2.00 × D	
Ae (mm)	0.12 × D		0.12 × D		0.10 × D		0.08 × D		0.08 × D		0.08 × D		0.08 × D	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
4	285	0.013	315	0.014	270	0.014	150	0.014	105	0.018	53	0.018	39	0.017
5		0.018		0.019		0.021		0.019		0.024		0.024		0.023
6		0.024		0.025		0.028		0.026		0.030		0.030		0.029
8		0.034		0.035		0.040		0.036		0.042		0.042		0.040
10		0.046		0.046		0.055		0.049		0.056		0.056		0.053
12		0.060		0.060		0.071		0.063		0.074		0.074		0.070
16		0.070		0.071		0.089		0.077		0.091		0.091		0.086
20		0.080		0.080		0.100		0.088		0.107		0.107		0.102

K67



5 Flutes Design

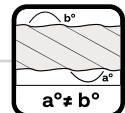
- Significantly increased feed rate (25% higher than a 4-Flute design).



Differential Helix (DH)

Reduces the cutting force:

- Allows high speed machining, increasing productivity.
- Improves surface finishing.



Optimized Geometry with Chipbreakers

- Efficiently shears work materials and shortens chips for improved chips removal.



Small Corner Radius

- For less chipping of the cutting edges and longer tool life.



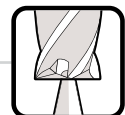
Ideal Cutting Edge

- Provide edge protection to prolong tool life.



Oil Hole for High Performance Milling

- Improves welding resistance.
- Enables a wide range of machining processes.
- Especially beneficial for difficult to cut materials, offering stable machining.



K65

NiTiCo 30 DH with
Internal Oil Hole,
Chip Breaker,
Recess & Weldon

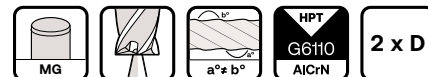
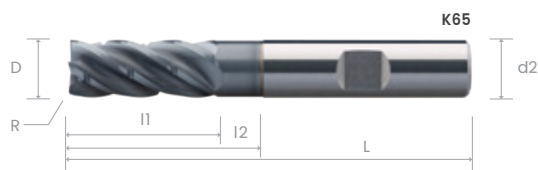
K67

NiTiCo 30 DH Long with
Internal Oil Hole,
Chip Breaker,
Recess & Weldon

K65

NiTiCo 30 DH Endmill with Internal Oil Hole, Chip Breaker, Recess & Weldon, 5 Flutes

HPMT



Order Number	D	I1	I2	L	d2 h6	R	Availability
K65 0400 057 06	4	10	15	57	6	0.1	●
K65 0600 057 *	6	15	20	57	6	0.1	●
K65 0800 064	8	20	25	64	8	0.15	●
K65 1000 072 *	10	25	30	72	10	0.2	●
K65 1200 083 *	12	30	38	83	12	0.2	●
K65 1600 092 *	16	39	44	92	16	0.3	●
K65 2000 104 *	20	48	54	104	20	0.3	●

* - DIN 6535

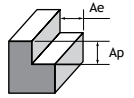
● Ex Stock	ab Lager	De Stock	Da Magazzino	有库存
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无库存

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
●	●	●	●	○	●	●	●	●	●	●	○	●				

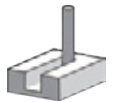


NiTiCo 30 DH Endmill with Internal Oil Hole, Chip Breaker, Recess & Weldon, 5 Flutes – K65



Side Milling	K		P				M		S					
Working Material	Grey Cast Iron		Carbon Steel		Alloy Steel		Stainless Steel		Titanium Alloy		Nickel Alloy		Cobalt Alloy	
Properties	-		-		520 < Rm < 1200		High Machinability		-		-		-	
Ap (mm)	1.00 × D		1.00 × D		1.00 × D		1.00 × D		1.00 × D		1.00 × D		1.00 × D	
Ae (mm)	0.25 × D		0.25 × D		0.20 × D		0.18 × D		0.15 × D		0.15 × D		0.15 × D	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
4	280	0.016	310	0.017	250	0.019	180	0.021	100	0.025	50	0.025	40	0.023
5		0.021		0.022		0.025		0.027		0.032		0.032		0.030
6		0.025		0.027		0.031		0.033		0.039		0.039		0.037
8		0.035		0.036		0.043		0.045		0.054		0.054		0.051
10		0.045		0.046		0.055		0.057		0.069		0.069		0.065
12		0.056		0.056		0.069		0.071		0.087		0.087		0.082
16		0.071		0.072		0.087		0.089		0.108		0.108		0.103
20		0.084		0.088		0.107		0.109		0.128		0.128		0.122

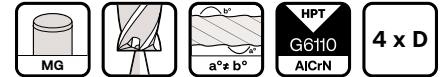
NiTiCo 30 DH Endmill with Internal Oil Hole, Chip Breaker, Recess & Weldon, 5 Flutes – K65



Trochoidal Milling	K		P			M		S						
Working Material	Grey Cast Iron		Carbon Steel		Alloy Steel		Stainless Steel		Titanium Alloy		Nickel Alloy		Cobalt Alloy	
Properties	-		-		520 < Rm < 1200		High Machinability		-		-		-	
Maximum Slot Width	1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D	
Ap (mm)	1.50 × D		1.50 × D		1.50 × D		1.50 × D		1.50 × D		1.50 × D		1.50 × D	
Ae (mm)	0.15 × D		0.15 × D		0.12 × D		0.10 × D		0.10 × D		0.10 × D		0.10 × D	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
4	330	0.015	360	0.016	300	0.017	220	0.019	130	0.025	65	0.025	52	0.023
5		0.020		0.021		0.023		0.025		0.032		0.032		0.030
6		0.026		0.027		0.031		0.033		0.040		0.040		0.038
8		0.037		0.037		0.044		0.046		0.055		0.055		0.052
10		0.049		0.049		0.059		0.061		0.072		0.072		0.069
12		0.063		0.064		0.078		0.080		0.096		0.096		0.091
16		0.078		0.079		0.097		0.099		0.117		0.117		0.112
20		0.089		0.089		0.110		0.112		0.138		0.138		0.131

K67

NiTiCo 30 DH Long Endmill with Internal Oil Hole, Chip Breaker, Recess & Weldon, 5 Flutes



Order Number		D	I1	I2	L	d2 h6	R	Availability
K67 0600 075	*	6	26	32	75	6	0.1	●
K67 0800 075		8	32	38	75	8	0.15	●
K67 1000 100	*	10	42	52	100	10	0.2	●
K67 1200 100		12		54	100	12	0.2	●
K67 1600 125	*	16	60	68	125	16	0.3	●
K67 2000 125		20	67	75	125	20	0.3	●

*- DIN 6535

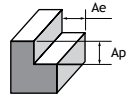
● Ex Stock	ab Lager	De Stock	Da Magazzino	有库存
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无库存

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
●	●	●	○	●	●	●	●	●	●	●	○	●				

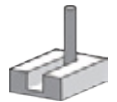


NiTiCo 30 DH Long Endmill with Internal Oil Hole, Chip Breaker, Recess & Weldon 5 Flutes – K67



Side Milling	K		P				M		S					
Working Material	Grey Cast Iron		Carbon Steel		Alloy Steel		Stainless Steel		Titanium Alloy		Nickel Alloy		Cobalt Alloy	
Properties	-		-		520 < Rm < 1200		High Machinability		-		-		-	
Ap (mm)	1.50 × D		1.50 × D		1.50 × D		1.50 × D		1.50 × D		1.50 × D		1.50 × D	
Ae (mm)	0.15 × D		0.15 × D		0.12 × D		0.10 × D		0.10 × D		0.10 × D		0.10 × D	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
4	250	0.014	280	0.014	230	0.018	160	0.020	85	0.020	45	0.020	35	0.019
5		0.019		0.019		0.023		0.025		0.027		0.027		0.026
6		0.023		0.024		0.029		0.031		0.035		0.035		0.033
8		0.031		0.032		0.039		0.041		0.050		0.050		0.047
10		0.041		0.041		0.050		0.052		0.066		0.066		0.062
12		0.053		0.054		0.063		0.065		0.084		0.084		0.080
16		0.068		0.069		0.082		0.084		0.107		0.107		0.101
20		0.080		0.083		0.099		0.101		0.126		0.126		0.120

NiTiCo 30 DH Long Endmill with Internal Oil Hole, Chip Breaker, Recess & Weldon 5 Flutes – K67



Trochoidal Milling	K		P				M		S					
Working Material	Grey Cast Iron		Carbon Steel		Alloy Steel		Stainless Steel		Titanium Alloy		Nickel Alloy		Cobalt Alloy	
Properties	-		-		520 < Rm < 1200		High Machinability		-		-		-	
Maximum Slot Width	1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D	
Ap (mm)	2.00 × D		2.00 × D		2.00 × D		2.00 × D		2.00 × D		2.00 × D		2.00 × D	
Ae (mm)	0.12 × D		0.12 × D		0.10 × D		0.08 × D		0.08 × D		0.08 × D		0.08 × D	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
4	300	0.013	330	0.014	280	0.014	200	0.016	115	0.021	61	0.021	47	0.020
5		0.018		0.019		0.021		0.023		0.028		0.028		0.026
6		0.024		0.025		0.028		0.030		0.035		0.035		0.034
8		0.034		0.035		0.040		0.042		0.049		0.049		0.046
10		0.045		0.046		0.055		0.057		0.066		0.066		0.062
12		0.059		0.060		0.072		0.074		0.089		0.089		0.084
16		0.072		0.074		0.088		0.090		0.107		0.107		0.101
20		0.081		0.082		0.099		0.101		0.123		0.123		0.117



Order Number	D	l1	l2	L	d1	d2 h6	Availability
G87 0020 050 0400	0.2	0.3	-	50	-	4	○
G87 0020 050 0400 005			0.5	50	0.17	4	○
G87 0020 050 0400 010			1	50	0.17	4	●
G87 0020 050 0400 015			1.5	50	0.17	4	○
G87 0030 050 0400	0.3	0.4	-	50	-	4	○
G87 0030 050 0400 010			1	50	0.27	4	●
G87 0030 050 0400 020			2	50	0.27	4	●
G87 0030 050 0400 030			3	50	0.27	4	●
G87 0040 050 0400	0.4	0.6	-	50	-	4	○
G87 0040 050 0400 020			2	50	0.37	4	●
G87 0040 050 0400 030			3	50	0.37	4	○
G87 0040 050 0400 040			4	50	0.37	4	●
G87 0040 050 0400 050			5	50	0.37	4	○
G87 0050 050 0400	0.5	0.7	-	50	-	4	○
G87 0050 050 0400 020			2	50	0.45	4	●
G87 0050 050 0400 040			4	50	0.45	4	●
G87 0050 050 0400 060			6	50	0.45	4	●
G87 0050 050 0400 080			8	50	0.45	4	●
G87 0060 050 0400	0.6	0.9	-	50	-	4	○
G87 0060 050 0400 020			2	50	0.55	4	●
G87 0060 050 0400 040			4	50	0.55	4	●
G87 0060 050 0400 060			6	50	0.55	4	●
G87 0060 050 0400 080			8	50	0.55	4	○
G87 0060 050 0400 100			10	50	0.55	4	○
G87 0070 050 0400	0.7	1	-	50	-	4	○
G87 0070 050 0400 020			2	50	0.65	4	○
G87 0070 050 0400 040			4	50	0.65	4	○
G87 0070 050 0400 060			6	50	0.65	4	○
G87 0070 050 0400 080			8	50	0.65	4	○
G87 0070 050 0400 100			10	50	0.65	4	○
G87 0080 050 0400	0.8	1.2	-	50	-	4	○
G87 0080 050 0400 040			4	50	0.75	4	●
G87 0080 050 0400 060			6	50	0.75	4	○
G87 0080 050 0400 080			8	50	0.75	4	●
G87 0080 050 0400 100			10	50	0.75	4	●
G87 0080 050 0400 120 *			12	50	0.75	4	○

* - DIN 6535

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● 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
●	○	●	●					●	○	●						

G87

NiTiCo 30 Miniature Endmill with Long Neck, 2 Flutes

HPMT



Order Number	D	l1	l2	L	d1	d2 h6	Availability
G87 0100 050 0400	1	1.5	-	50	-	4	○
G87 0100 050 0400 060			6.0	50	0.9	4	●
G87 0100 050 0400 080			8.0	50	0.9	4	●
G87 0100 050 0400 100			10	50	0.9	4	●
G87 0100 050 0400 120			12	50	0.9	4	○
G87 0100 050 0400 140			14	50	0.9	4	○
G87 0100 050 0400 160 *			16	50	0.9	4	○
G87 0120 050 0400	1.2	1.8	-	50	-	4	○
G87 0120 050 0400 060			6.0	50	1.1	4	●
G87 0120 050 0400 080			8.0	50	1.1	4	●
G87 0120 050 0400 100			10	50	1.1	4	●
G87 0120 050 0400 120			12	50	1.1	4	●
G87 0140 050 0400	1.4	2.1	-	50	-	4	○
G87 0140 050 0400 060			6.0	50	1.3	4	○
G87 0140 050 0400 080			8.0	50	1.3	4	○
G87 0140 050 0400 100			10	50	1.3	4	○
G87 0140 050 0400 120			12	50	1.3	4	○
G87 0140 050 0400 140			14	50	1.3	4	○
G87 0140 050 0400 160 *			16	50	1.3	4	○
G87 0150 050 0400	1.5	2.3	-	50	-	4	○
G87 0150 050 0400 060			6.0	50	1.4	4	●
G87 0150 050 0400 080			8.0	50	1.4	4	●
G87 0150 050 0400 100			10	50	1.4	4	●
G87 0150 050 0400 120			12	50	1.4	4	●
G87 0150 050 0400 140			14	50	1.4	4	○
G87 0150 050 0400 160 *			16	50	1.4	4	●
G87 0150 060 0400			-	60	-	4	○
G87 0150 060 0400 180			18	60	1.4	4	○
G87 0150 060 0400 200			20	60	1.4	4	●

*- DIN 6535

cont'd ►

● 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
●	○	●	●	●	●	○	●	●	○	●	○	●	○	○	○	○

G87

NiTiCo 30 Miniature Endmill with Long Neck, 2 Flutes

HPMT



Order Number	D	l1	l2	L	d1	d2 h6	Availability
G87 0160 050 0400	1.6	2.4	-	50	-	4	○
G87 0160 050 0400 060			6.0	50	1.5	4	○
G87 0160 050 0400 080			8.0	50	1.5	4	○
G87 0160 050 0400 100			10	50	1.5	4	○
G87 0160 050 0400 120			12	50	1.5	4	○
G87 0160 050 0400 140			14	50	1.5	4	○
G87 0160 050 0400 160 *			16	50	1.5	4	○
G87 0160 060 0400			-	60	-	4	○
G87 0160 060 0400 180			18	60	1.5	4	○
G87 0160 060 0400 200			20	60	1.5	4	○
G87 0180 050 0400	1.8	2.7	-	50	-	4	○
G87 0180 050 0400 060			6	50	1.7	4	○
G87 0180 050 0400 080			8	50	1.7	4	○
G87 0180 050 0400 100			10	50	1.7	4	○
G87 0180 050 0400 120			12	50	1.7	4	○
G87 0180 050 0400 140			14	50	1.7	4	○
G87 0180 050 0400 160 *			16	50	1.7	4	○
G87 0180 060 0400			-	60	-	4	○
G87 0180 060 0400 180			18	60	1.7	4	○
G87 0180 060 0400 200			20	60	1.7	4	○
G87 0200 050 0400	2	3	-	50	-	4	○
G87 0200 050 0400 060			6	50	1.9	4	●
G87 0200 050 0400 080			8	50	1.9	4	●
G87 0200 050 0400 100			10	50	1.9	4	●
G87 0200 050 0400 120			12	50	1.9	4	●
G87 0200 050 0400 140			14	50	1.9	4	●
G87 0200 050 0400 160			16	50	1.9	4	●
G87 0200 060 0400			-	60	-	4	○
G87 0200 060 0400 180			18	60	1.9	4	○
G87 0200 060 0400 200			20	60	1.9	4	●
G87 0200 075 0400			-	75	-	4	○
G87 0200 075 0400 250			25	75	1.9	4	●
G87 0200 075 0400 300			30	75	1.9	4	●

*- DIN 6535

cont'd ▶

● 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
●	○	●	●					●	○	●						

G87

NiTiCo 30 Miniature Endmill with Long Neck, 2 Flutes

HPMT



Order Number	D	l1	l2	L	d1	d2 h6	Availability
G87 0250 050 0400	2.5	3.7	-	50	-	4	○
G87 0250 050 0400 080			8	50	2.4	4	●
G87 0250 050 0400 100			10	50	2.4	4	●
G87 0250 050 0400 120			12	50	2.4	4	○
G87 0250 050 0400 140			14	50	2.4	4	●
G87 0250 050 0400 160			16	50	2.4	4	○
G87 0250 060 0400			-	60	-	4	○
G87 0250 060 0400 180			18	60	2.4	4	●
G87 0250 060 0400 200			20	60	2.4	4	●
G87 0250 060 0400 250			25	60	2.4	4	○
G87 0250 075 0400			-	75	-	4	○
G87 0250 075 0400 300			30	75	2.4	4	○
G87 0300 050 0600	3	4.5	-	50	2.8	6	○
G87 0300 050 0600 080 *			8	50	2.8	6	●
G87 0300 050 0600 100			10	50	2.8	6	●
G87 0300 050 0600 120			12	50	2.8	6	●
G87 0300 050 0600 140			14	50	2.8	6	○
G87 0300 060 0600			-	60	-	6	○
G87 0300 060 0600 160			16	60	2.8	6	●
G87 0300 060 0600 180 *			18	60	2.8	6	○
G87 0300 060 0600 200			20	60	2.8	6	●
G87 0300 075 0600			-	75	-	6	○
G87 0300 075 0600 250			25	75	2.8	6	●
G87 0400 060 0600	4	4.5	-	60	-	6	○
G87 0400 060 0600 100			10	60	3.7	6	○
G87 0400 060 0600 150			15	60	3.7	6	○
G87 0400 060 0600 200			20	60	3.7	6	●
G87 0400 075 0600			-	75	-	6	○
G87 0400 075 0600 250			25	75	3.7	6	○
G87 0400 075 0600 300			30	75	3.7	6	●
G87 0400 075 0600 400			40	75	3.7	6	○

*- DIN 6535

● 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
●	○	●	●					●	○	●						

H56 NiTiCo 30 Miniature Torus Endmill with Long Neck, 2 Flutes



Order Number	D	l1	l2	L	d1	d2 h6	R	Availability
H56 0020 050 0400	0.2	0.3	-	50	-	4	0.05	○
H56 0020 050 0400 005			0.5	50	0.17	4	0.05	○
H56 0020 050 0400 010			1	50	0.17	4	0.05	○
H56 0020 050 0400 015			1.5	50	0.17	4	0.05	○
H56 0030 050 0400	0.3	0.4	-	50	-	4	0.05	○
H56 0030 050 0400 010			1	50	0.27	4	0.05	○
H56 0030 050 0400 020			2	50	0.27	4	0.05	○
H56 0030 050 0400 030			3	50	0.27	4	0.05	○
H56 0040 050 0400	0.4	0.6	-	50	-	4	0.05	○
H56 0040 050 0400 020			2	50	0.37	4	0.05	○
H56 0040 050 0400 030			3	50	0.37	4	0.05	○
H56 0040 050 0400 040			4	50	0.37	4	0.05	○
H56 0040 050 0400 050			5	50	0.37	4	0.05	○
H56 0050 050 0400	0.5	0.7	-	50	-	4	0.05	○
H56 0050 050 0400 020			2	50	0.45	4	0.05	○
H56 0050 050 0400 040			4	50	0.45	4	0.05	●
H56 0050 050 0400 060			6	50	0.45	4	0.05	●
H56 0050 050 0400 080			8	50	0.45	4	0.05	○
H56 0060 050 0400	0.6	0.9	-	50	-	4	0.05	○
H56 0060 050 0400 020			2	50	0.55	4	0.05	●
H56 0060 050 0400 040			4	50	0.55	4	0.05	○
H56 0060 050 0400 060			6	50	0.55	4	0.05	●
H56 0060 050 0400 080			8	50	0.55	4	0.05	○
H56 0060 050 0400 100			10	50	0.55	4	0.05	○
H56 0070 050 0400	0.7	1	-	50	-	4	0.10	○
H56 0070 050 0400 020			2	50	0.65	4	0.10	○
H56 0070 050 0400 040			4	50	0.65	4	0.10	○
H56 0070 050 0400 060			6	50	0.65	4	0.10	○
H56 0070 050 0400 080			8	50	0.65	4	0.10	○
H56 0070 050 0400 100			10	50	0.65	4	0.10	○
H56 0080 050 0400	0.8	1.2	-	50	-	4	0.10	○
H56 0080 050 0400 040			4	50	0.75	4	0.10	●
H56 0080 050 0400 060			6	50	0.75	4	0.10	●
H56 0080 050 0400 080			8	50	0.75	4	0.10	●
H56 0080 050 0400 100			10	50	0.75	4	0.10	○
H56 0080 050 0400 120			12	50	0.75	4	0.10	○

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● 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
●	○	●	●	●	●	●	●	●	●	●	○	●				

H56

NiTiCo 30 Miniature Torus Ballnose Endmill with Long Neck, 2 Flutes

HPMT



Order Number	D	II	I2	L	d1	d2 h6	R	Availability
H56 0090 050 0400	0.9	1.4	-	50	-	4	0.10	○
H56 0090 050 0400 060			6	50	0.85	4	0.10	○
H56 0090 050 0400 080			8.0	50	0.85	4	0.10	○
H56 0090 050 0400 100			10	50	0.85	4	0.10	○
H56 0090 050 0400 150 *			15	50	0.85	4	0.10	○
H56 0100 050 0400	1	1.5	-	50	-	4	0.10	○
H56 0100 050 0400 060			6.0	50	0.9	4	0.10	●
H56 0100 050 0400 080			8.0	50	0.9	4	0.10	●
H56 0100 050 0400 100			10	50	0.9	4	0.10	●
H56 0100 050 0400 120			12	50	0.9	4	0.10	●
H56 0100 050 0400 140	1.2	1.8	14	50	0.9	4	0.10	○
H56 0100 050 0400 160 *			16	50	0.9	4	0.10	●
H56 0120 050 0400			-	50	-	4	0.10	○
H56 0120 050 0400 060			6	50	1.1	4	0.10	●
H56 0120 050 0400 080			8	50	1.1	4	0.10	○
H56 0120 050 0400 100	1.4	2.1	10	50	1.1	4	0.10	○
H56 0120 050 0400 120			12	50	1.1	4	0.10	●
H56 0140 050 0400			-	50	-	4	0.10	○
H56 0140 050 0400 060			6	50	1.3	4	0.10	○
H56 0140 050 0400 080			8	50	1.3	4	0.10	○
H56 0140 050 0400 100	1.5	2.3	10	50	1.3	4	0.10	○
H56 0140 050 0400 120			12	50	1.3	4	0.10	○
H56 0140 050 0400 140			14	50	1.3	4	0.10	○
H56 0140 050 0400 160 *			16	50	1.3	4	0.10	○
H56 0150 050 0400			-	50	-	4	0.20	○
H56 0150 050 0400 060	1.5	2.3	6	50	1.4	4	0.20	●
H56 0150 050 0400 080			8	50	1.4	4	0.20	○
H56 0150 050 0400 100			10	50	1.4	4	0.20	●
H56 0150 050 0400 120			12	50	1.4	4	0.20	●
H56 0150 050 0400 140			14	50	1.4	4	0.20	○
H56 0150 050 0400 160 *	1.5	2.3	16	50	1.4	4	0.20	●
H56 0150 060 0400			-	60	-	4	0.20	○
H56 0150 060 0400 180			18	60	1.4	4	0.20	○
H56 0150 060 0400 200			20	60	1.4	4	0.20	●

*- DIN 6535

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● 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
●	○	●	●	●	●	○	●	●	○	●	○	●				

H56

NiTiCo 30 Miniature Torus Ballnose Endmill with Long Neck, 2 Flutes

HPMT



Order Number	D	l1	l2	L	d1	d2 h6	R	Availability
H56 0160 050 0400	1.6	2.4	-	50	-	4	0.20	○
H56 0160 050 0400 060			6	50	1.5	4	0.20	○
H56 0160 050 0400 080			8	50	1.5	4	0.20	○
H56 0160 050 0400 100			10	50	1.5	4	0.20	○
H56 0160 050 0400 120			12	50	1.5	4	0.20	○
H56 0160 050 0400 140			14	50	1.5	4	0.20	○
H56 0160 050 0400 160 *			16	50	1.5	4	0.20	○
H56 0160 060 0400			-	60	-	4	0.20	○
H56 0160 060 0400 180			18	60	1.5	4	0.20	○
H56 0160 060 0400 200			20	60	1.5	4	0.20	○
H56 0180 050 0400	1.8	2.7	-	50	-	4	0.20	○
H56 0180 050 0400 060			6	50	1.7	4	0.20	○
H56 0180 050 0400 080			8	50	1.7	4	0.20	○
H56 0180 050 0400 100			10	50	1.7	4	0.20	○
H56 0180 050 0400 120			12	50	1.7	4	0.20	○
H56 0180 050 0400 140			14	50	1.7	4	0.20	○
H56 0180 050 0400 160 *			16	50	1.7	4	0.20	○
H56 0180 060 0400			-	60	-	4	0.20	○
H56 0180 060 0400 180			18	60	1.7	4	0.20	○
H56 0180 060 0400 200			20	60	1.7	4	0.20	○
H56 0200 050 0400	2	3	-	50	-	4	0.20	○
H56 0200 050 0400 060			6	50	1.9	4	0.20	●
H56 0200 050 0400 080			8	50	1.9	4	0.20	○
H56 0200 050 0400 100			10	50	1.9	4	0.20	●
H56 0200 050 0400 120			12	50	1.9	4	0.20	●
H56 0200 050 0400 140			14	50	1.9	4	0.20	○
H56 0200 050 0400 160			16	50	1.9	4	0.20	●
H56 0200 060 0400			-	60	-	4	0.20	○
H56 0200 060 0400 180			18	60	1.9	4	0.20	○
H56 0200 060 0400 200			20	60	1.9	4	0.20	●
H56 0200 075 0400			-	75	-	4	0.20	○
H56 0200 075 0400 250			25	75	1.9	4	0.20	●
H56 0200 075 0400 300			30	75	1.9	4	0.20	○

*- DIN 6535

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● 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
●	○	●	●	●	●	○	●	●	○	●	○	●				

H56

NiTiCo 30 Miniature Torus Ballnose Endmill with Long Neck, 2 Flutes

HPMT



Order Number	D	l1	l2	L	d1	d2 h6	R	Availability
H56 0250 050 0400	2.5	3.7	-	50	-	4	0.30	○
H56 0250 050 0400 080			8	50	2.4	4	0.30	●
H56 0250 050 0400 100			10	50	2.4	4	0.30	○
H56 0250 050 0400 120			12	50	2.4	4	0.30	●
H56 0250 050 0400 140			14	50	2.4	4	0.30	○
H56 0250 050 0400 160			16	50	2.4	4	0.30	●
H56 0250 060 0400			-	60	-	4	0.30	○
H56 0250 060 0400 180			18	60	2.4	4	0.30	○
H56 0250 060 0400 200			20	60	2.4	4	0.30	●
H56 0250 060 0400 250			25	60	2.4	4	0.30	●
H56 0250 075 0400			-	75	-	4	0.30	○
H56 0250 075 0400 300			30	75	2.4	4	0.30	○
H56 0300 050 0600	3	4.5	-	50	-	6	0.30	○
H56 0300 050 0600 080 *			8	50	2.8	6	0.30	●
H56 0300 050 0600 100			10	50	2.8	6	0.30	●
H56 0300 050 0600 120			12	50	2.8	6	0.30	●
H56 0300 050 0600 140			14	50	2.8	6	0.30	○
H56 0300 060 0600			-	60	-	6	0.30	○
H56 0300 060 0600 160			16	60	2.8	6	0.30	○
H56 0300 060 0600 180 *			18	60	2.8	6	0.30	○
H56 0300 060 0600 200			20	60	2.8	6	0.30	●
H56 0300 075 0600			-	75	-	6	0.30	○
H56 0300 075 0600 250			25	75	2.8	6	0.30	○
H56 0400 060 0600	4	4.5	-	60	-	6	0.40	○
H56 0400 060 0600 100			10	60	3.7	6	0.40	○
H56 0400 060 0600 150			15	60	3.7	6	0.40	○
H56 0400 060 0600 200			20	60	3.7	6	0.40	●
H56 0400 075 0600			-	75	-	6	0.40	○
H56 0400 075 0600 250			25	75	3.7	6	0.40	○
H56 0400 075 0600 300			30	75	3.7	6	0.40	○
H56 0400 075 0600 400			40	75	3.7	6	0.40	○

*- DIN 6535

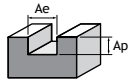
● Ex Stock	ab Lager	De Stock	Da Magazzino	有库存
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无库存

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
●	○	●	●	●	●	●	●	●	●	●	○	●				



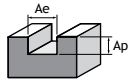
NiTiCo 30 Miniature Endmills with Long Neck, 2 Flutes - G87, H56



Slotting		K			P			M			S		
Working Material		Grey Cast Iron			Carbon Steel			Alloy steel			Stainless Steel		
Properties		-			-			520 < Rm < 1200			High Machinability		
D	Effective Length	Ap	Vc	Vf	Ap	Vc	Vf	Ap	Vc	Vf	Ap	Vc	Vf
0.2	1.0	0.013	27	580	0.014	28	640	0.014	26	540	0.013	25	570
0.3	1.0	0.020	36	580	0.021	38	640	0.021	35	540	0.019	34	580
	2.0	0.011	32	420	0.012	34	470	0.012	31	400	0.011	31	420
	3.0	0.008	32	420	0.008	34	470	0.008	31	400	0.007	31	420
0.4	2.0	0.027	38	640	0.028	40	710	0.028	37	600	0.025	36	640
	3.0	0.015	34	520	0.016	36	580	0.016	33	490	0.014	33	520
	4.0	0.010	34	520	0.010	36	580	0.010	33	490	0.009	33	520
0.5	5.0	0.010	31	410	0.010	32	450	0.010	30	380	0.009	29	410
	2.0	0.033	48	640	0.035	50	710	0.035	46	600	0.032	45	640
	4.0	0.019	43	520	0.020	45	580	0.020	42	490	0.018	41	530
0.6	6.0	0.012	38	410	0.013	40	450	0.013	37	380	0.012	36	410
	8.0	0.008	38	350	0.008	40	390	0.008	37	330	0.007	36	350
	2.0	0.040	57	910	0.042	60	1010	0.042	56	850	0.038	54	910
0.7	4.0	0.023	52	750	0.024	54	830	0.024	50	700	0.022	49	750
	6.0	0.014	52	750	0.015	54	830	0.015	50	700	0.014	49	750
	8.0	0.014	46	580	0.015	48	650	0.015	44	550	0.014	43	580
0.8	10.0	0.009	46	580	0.009	48	650	0.009	44	550	0.008	43	580
	2.0	0.067	67	910	0.070	70	1010	0.070	65	850	0.063	63	910
	4.0	0.047	60	750	0.049	63	830	0.049	58	700	0.044	57	750
0.9	6.0	0.017	60	750	0.018	63	830	0.018	58	700	0.016	57	750
	8.0	0.017	53	580	0.018	56	650	0.018	52	550	0.016	51	580
	10.0	0.017	53	580	0.018	56	650	0.018	52	550	0.016	51	580
1.0	4.0	0.076	76	910	0.080	80	1010	0.080	74	850	0.072	72	910
	6.0	0.053	76	750	0.056	80	830	0.056	74	700	0.050	71	750
	8.0	0.030	69	750	0.032	72	830	0.032	67	700	0.029	65	750
1.2	10.0	0.019	61	580	0.020	64	650	0.020	59	550	0.018	58	580
	12.0	0.011	61	580	0.012	64	650	0.012	59	550	0.011	58	580
	6.0	0.034	77	890	0.036	81	990	0.036	75	840	0.032	73	900
1.4	8.0	0.022	77	820	0.023	81	910	0.023	75	770	0.021	73	820
	10.0	0.022	69	580	0.023	72	650	0.023	67	550	0.021	65	580
	15.0	0.017	67	450	0.018	71	500	0.018	65	420	0.015	64	450
1.5	6.0	0.038	77	950	0.040	81	1050	0.040	75	890	0.036	73	1000
	8.0	0.038	77	860	0.040	81	950	0.040	75	800	0.036	73	850
	10.0	0.024	75	680	0.025	79	750	0.025	72	630	0.023	72	690
1.6	12.0	0.024	69	790	0.025	72	870	0.025	67	740	0.023	65	780
	14.0	0.024	69	790	0.025	72	870	0.025	67	740	0.023	65	780
	16.0	0.014	69	540	0.015	72	600	0.015	67	510	0.014	65	580
1.8	6.0	0.080	92	990	0.084	97	1100	0.084	89	930	0.076	87	1060
	8.0	0.046	83	900	0.048	87	1000	0.048	80	840	0.043	78	900
	10.0	0.029	83	900	0.030	87	1000	0.030	80	840	0.027	78	900
2.0	12.0	0.029	83	790	0.030	87	870	0.030	80	740	0.027	78	790
	6.0	0.095	94	1040	0.100	99	1150	0.100	91	970	0.090	89	1100
	8.0	0.057	92	950	0.060	97	1050	0.060	89	890	0.054	87	960
2.2	10.0	0.048	87	950	0.050	91	1050	0.050	84	890	0.040	82	950
	12.0	0.033	84	790	0.035	89	870	0.035	82	740	0.032	80	790
	14.0	0.033	90	790	0.035	95	870	0.035	87	740	0.033	85	780
2.4	16.0	0.026	79	590	0.027	84	650	0.027	77	550	0.026	75	590
	6.0	0.105	100	1050	0.110	106	1160	0.110	97	980	0.099	95	1120
	8.0	0.076	90	990	0.080	95	1100	0.080	87	930	0.072	85	1020
2.6	10.0	0.057	90	950	0.060	95	1050	0.060	87	890	0.054	85	950
	12.0	0.057	90	790	0.060	95	870	0.060	87	740	0.054	85	790
	14.0	0.036	90	790	0.038	95	870	0.038	87	740	0.034	85	780
2.8	16.0	0.036	80	610	0.038	84	680	0.038	78	580	0.034	76	610
	18.0	0.036	80	610	0.038	84	680	0.038	78	580	0.034	76	610
	20.0	0.036	80	610	0.038	84	680	0.038	78	580	0.034	76	610



NiTiCo 30 Miniature Endmills with Long Neck, 2 Flutes - G87, H56



Slotting		K			P			M			S		
Working Material		Grey Cast Iron			Carbon Steel			Alloy steel			Stainless Steel		
Properties		-			-			520 < Rm < 1200			High Machinability		
D	Effective Length	Ap	Vc	Vf	Ap	Vc	Vf	Ap	Vc	Vf	Ap	Vc	Vf
1.6	6.0	0.105	99	1060	0.110	105	1180	0.110	96	1000	0.099	94	1130
	8.0	0.105	99	1040	0.110	105	1150	0.110	96	970	0.099	94	1070
	10.0	0.081	87	970	0.085	91	1080	0.085	84	910	0.075	82	970
	12.0	0.076	88	810	0.080	93	900	0.080	86	760	0.060	84	850
	14.0	0.057	92	830	0.060	97	920	0.060	89	780	0.050	87	820
	16.0	0.048	81	630	0.050	85	700	0.050	79	590	0.045	78	680
	18.0	0.043	81	630	0.045	85	700	0.045	78	590	0.045	78	680
	20.0	0.043	80	630	0.045	85	700	0.045	78	590	0.040	78	680
1.8	6.0	0.124	112	1070	0.130	118	1190	0.130	108	1010	0.117	106	1180
	8.0	0.124	112	1040	0.130	118	1150	0.130	108	970	0.117	106	1080
	10.0	0.114	99	970	0.120	105	1080	0.120	96	910	0.118	94	970
	12.0	0.076	94	810	0.080	99	900	0.080	91	760	0.075	89	850
	14.0	0.043	91	790	0.045	96	880	0.045	88	740	0.040	89	800
	16.0	0.060	88	690	0.063	93	770	0.063	85	650	0.060	80	750
	18.0	0.052	85	680	0.055	90	750	0.055	83	630	0.050	80	750
	20.0	0.046	83	620	0.048	88	690	0.048	81	580	0.043	79	740
2	6.0	0.190	100	1010	0.200	106	1120	0.200	97	950	0.180	95	1190
	8.0	0.133	100	1060	0.140	106	1180	0.140	97	990	0.126	95	1100
	10.0	0.133	100	1060	0.140	106	1180	0.140	97	990	0.126	95	1050
	12.0	0.095	96	870	0.100	101	960	0.100	93	810	0.090	86	860
	14.0	0.076	96	870	0.080	101	960	0.080	93	810	0.072	86	860
	16.0	0.076	90	830	0.080	95	920	0.080	87	770	0.072	86	860
	18.0	0.048	90	830	0.050	95	920	0.050	87	770	0.045	86	860
	20.0	0.048	90	780	0.050	95	870	0.050	87	740	0.045	86	790
2.5	6.0	0.048	80	600	0.050	84	670	0.050	78	570	0.045	76	610
	8.0	0.029	80	600	0.030	84	670	0.030	78	570	0.027	76	610
	10.0	0.171	107	1220	0.180	113	1350	0.180	104	1140	0.162	102	1150
	12.0	0.138	121	1170	0.145	127	1300	0.145	117	1100	0.140	115	1170
	14.0	0.171	107	1130	0.180	113	1250	0.180	104	1060	0.162	102	1120
	16.0	0.090	110	1040	0.095	116	1150	0.095	107	970	0.080	105	870
	18.0	0.095	97	970	0.100	102	1070	0.100	94	910	0.090	92	970
	20.0	0.095	97	880	0.100	102	980	0.100	94	830	0.090	92	920
3	6.0	0.095	97	840	0.100	102	930	0.100	94	790	0.090	92	840
	8.0	0.062	90	680	0.065	94	750	0.065	87	630	0.058	86	760
	10.0	0.057	86	650	0.060	90	730	0.060	83	610	0.054	81	650
	12.0	0.285	115	1120	0.300	121	1240	0.300	111	1050	0.270	109	1190
	14.0	0.147	143	1350	0.155	151	1500	0.155	139	1270	0.150	136	1350
	16.0	0.200	115	1000	0.210	121	1110	0.210	111	940	0.189	109	1000
	18.0	0.095	125	880	0.100	132	980	0.100	121	830	0.095	100	900
	20.0	0.143	103	880	0.150	109	970	0.150	100	820	0.135	98	870
4	6.0	0.128	103	840	0.135	109	930	0.135	100	790	0.120	98	850
	8.0	0.114	103	820	0.120	109	910	0.120	100	770	0.108	98	820
	10.0	0.076	103	820	0.080	109	910	0.080	100	770	0.072	98	820
	12.0	0.152	188	1700	0.160	197	1880	0.160	181	1590	0.155	178	1520
	14.0	0.152	155	1530	0.160	163	1700	0.160	150	1440	0.155	151	1400
	16.0	0.266	101	1530	0.280	106	1690	0.280	98	1430	0.252	96	1370
	18.0	0.152	101	1380	0.160	106	1530	0.160	98	1290	0.144	96	1230
	20.0	0.152	101	1370	0.160	106	1520	0.160	98	1290	0.144	96	1230

G88

NiTiCo 30 Miniature Ballnose Endmill with Long Neck, 2 Flutes

HPMT



Order Number	D	R	II	I2	L	d1	d2 h6	Availability
G88 0020 050 0400	0.2	0.1	0.2	-	50	-	4	○
G88 0020 050 0400 005				0.5	50	0.17	4	○
G88 0020 050 0400 010				1	50	0.17	4	○
G88 0020 050 0400 015				1.5	50	0.17	4	●
G88 0030 050 0400	0.3	0.15	0.3	-	50	-	4	○
G88 0030 050 0400 010				1	50	0.27	4	○
G88 0030 050 0400 020				2	50	0.27	4	●
G88 0030 050 0400 030				3	50	0.27	4	○
G88 0040 050 0400	0.4	0.2	0.4	-	50	-	4	○
G88 0040 050 0400 010				1	50	0.37	4	○
G88 0040 050 0400 020				2	50	0.37	4	●
G88 0040 050 0400 030				3	50	0.37	4	●
G88 0040 050 0400 040				4	50	0.37	4	○
G88 0040 050 0400 050				5	50	0.37	4	○
G88 0050 050 0400	0.5	0.25		-	50	-	4	○
G88 0050 050 0400 020				2	50	0.45	4	●
G88 0050 050 0400 030				3	50	0.45	4	●
G88 0050 050 0400 040				4	50	0.45	4	●
G88 0050 050 0400 050			5	50	0.45	4	○	
G88 0050 050 0400 060			6	50	0.45	4	●	
G88 0060 050 0400	0.6	0.3	0.5	8	50	0.45	4	●
G88 0060 050 0400 020				-	50	-	4	○
G88 0060 050 0400 030				2	50	0.55	4	○
G88 0060 050 0400 040				3	50	0.55	4	●
G88 0060 050 0400 050				4	50	0.55	4	●
G88 0060 050 0400 060				5	50	0.55	4	○
G88 0060 050 0400 080				6	50	0.55	4	●
G88 0080 050 0400	0.8	0.4	0.6	8	50	0.55	4	○
G88 0080 050 0400 020				-	50	-	4	○
G88 0080 050 0400 040				2	50	0.75	4	○
G88 0080 050 0400 050				4	50	0.75	4	●
G88 0080 050 0400 060				5	50	0.75	4	○
G88 0080 050 0400 070				6	50	0.75	4	●
G88 0080 050 0400 080				7	50	0.75	4	○
G88 0080 050 0400 100				8	50	0.75	4	○
				10	50	0.75	4	○

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● 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

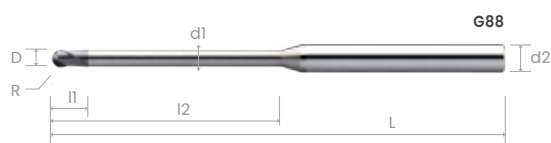
N01	N02	N03	K01	K02	P01	P02	P03	M01	M02	S01	S02	S03	H01	H02	O01	O02
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G88

NiTiCo 30 Miniature Ballnose Endmill with Long Neck, 2 Flutes

HPMT



Order Number	D	R	l1	l2	L	d1	d2 h6	Availability
G88 0100 050 0400	1	0.5	0.8	-	50	-	4	○
G88 0100 050 0400 030				3	50	0.9	4	●
G88 0100 050 0400 040				4	50	0.9	4	●
G88 0100 050 0400 050				5	50	0.9	4	●
G88 0100 050 0400 060				6	50	0.9	4	●
G88 0100 050 0400 070				7	50	0.9	4	○
G88 0100 050 0400 080				8	50	0.9	4	●
G88 0100 050 0400 090				9	50	0.9	4	○
G88 0100 050 0400 100				10	50	0.9	4	●
G88 0100 050 0400 120				12	50	0.9	4	●
G88 0100 050 0400 140				14	50	0.9	4	○
G88 0100 060 0400				-	60	-	4	○
G88 0100 060 0400 200				20	60	0.9	4	○
G88 0120 050 0400	1.2	0.6	1	-	50	1.1	4	●
G88 0120 050 0400 060				6	50	1.1	4	○
G88 0120 050 0400 080				8	50	1.1	4	○
G88 0120 050 0400 100				10	50	1.1	4	○
G88 0120 050 0400 120				12	50	1.1	4	○
G88 0140 050 0400	1.4	0.7	1.1	-	50	-	4	○
G88 0140 050 0400 080				8	50	1.3	4	○
G88 0140 050 0400 120				12	50	1.3	4	○
G88 0140 050 0400 160 *				16	50	1.3	4	○
G88 0150 050 0400	1.5	0.75	1.2	-	50	-	4	○
G88 0150 050 0400 080				8	50	1.4	4	○
G88 0150 050 0400 120				12	50	1.4	4	●
G88 0150 050 0400 160 *				16	50	1.4	4	●
G88 0150 060 0400				-	60	-	4	●
G88 0150 060 0400 180				18	60	1.4	4	○
G88 0160 050 0400	1.6	0.9	1.4	-	50	-	4	●
G88 0160 050 0400 080				8	50	1.5	4	○
G88 0160 050 0400 120				12	50	1.5	4	○
G88 0160 050 0400 160 *				16	50	1.5	4	○
G88 0160 060 0400				-	60	-	4	○
G88 0160 060 0400 200				20	60	1.5	4	○

*- DIN 6535

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

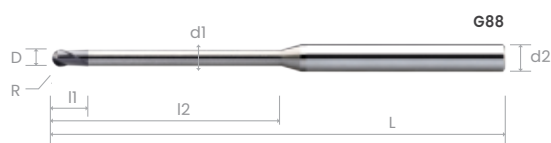
Material Group | Materialgruppe | Groupe Matière | Gruppo Materiali | 材质主类

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

G88

NiTiCo 30 Miniature Ballnose Endmill with Long Neck, 2 Flutes

HPMT



Order Number	D	R	l1	l2	L	d1	d2 h6	Availability
G88 0200 050 0400	2	1	1.6	-	50	-	4	○
G88 0200 050 0400 040				4	50	1.9	4	○
G88 0200 050 0400 060				6	50	1.9	4	○
G88 0200 050 0400 080				8	50	1.9	4	●
G88 0200 050 0400 100				10	50	1.9	4	●
G88 0200 050 0400 120				12	50	1.9	4	●
G88 0200 050 0400 140				14	50	1.9	4	○
G88 0200 050 0400 160				16	50	1.9	4	●
G88 0200 060 0400				-	60	-	4	○
G88 0200 060 0400 180				18	60	1.9	4	○
G88 0200 060 0400 200				20	60	1.9	4	●
G88 0200 060 0400 220				22	60	1.9	4	○
G88 0200 075 0400				-	75	-	4	○
G88 0200 075 0400 250				25	75	1.9	4	○
G88 0200 075 0400 300				30	75	1.9	4	○
G88 0300 050 0600	3	1.5	2.4	-	50	-	6	○
G88 0300 050 0600 080 *				8	50	2.8	6	○
G88 0300 050 0600 100				10	50	2.8	6	●
G88 0300 060 0600				-	60	-	6	●
G88 0300 060 0600 160				16	60	2.8	6	○
G88 0300 060 0600 200				20	60	2.8	6	●
G88 0300 075 0600				-	75	-	6	●
G88 0300 075 0600 250				25	75	2.8	6	○
G88 0300 075 0600 300				30	75	2.8	6	●
G88 0300 075 0600 350				35	75	2.8	6	●
G88 0400 050 0600	4	2	3.2	-	50	-	6	●
G88 0400 050 0600 100				10	50	3.7	6	○
G88 0400 060 0600				-	60	-	6	●
G88 0400 060 0600 160				16	60	3.7	6	○
G88 0400 060 0600 200				20	60	3.7	6	○
G88 0400 075 0600				-	75	-	6	○
G88 0400 075 0600 250				25	75	3.7	6	○
G88 0400 075 0600 300				30	75	3.7	6	●
G88 0400 075 0600 350				35	75	3.7	6	●
G88 0400 100 0600				-	100	-	6	○
G88 0400 100 0600 400				40	100	3.7	6	○
G88 0400 100 0600 450				45	100	3.7	6	○
G88 0400 100 0600 500				50	100	3.7	6	●

* - DIN 6535

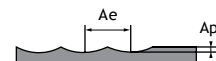
● Ex Stock	ab Lager	De Stock	Da Magazzino	有存庫
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无存庫

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
●	○	●	●					●	○	●						



NiTiCo 30 Miniature Ballnose with Long Neck, 2 Flutes - G88

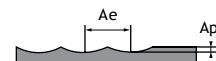


Profiling		K			P			M			S		
Working Material		Grey Cast Iron			Carbon Steel			Alloy steel			Stainless Steel		
Properties		-			-			520 < Rm < 1200			High Machinability		
D	Effective Length	Ap	Vc	Vf	Ap	Vc	Vf	Ap	Vc	Vf	Ap	Vc	Vf
0.2	1.0	0.013	30	320	0.014	31	350	0.014	29	300	0.013	31	350
	2.0	0.008	30	280	0.008	31	320	0.008	29	270	0.007	31	310
0.3	1.0	0.020	45	450	0.021	47	500	0.021	43	420	0.019	47	500
	2.0	0.011	45	410	0.012	47	450	0.012	43	380	0.011	47	440
	3.0	0.008	44	410	0.008	46	450	0.008	42	380	0.007	46	440
0.4	1.0	0.038	60	760	0.040	63	840	0.040	58	710	0.036	63	840
	2.0	0.027	60	540	0.028	63	600	0.028	58	510	0.025	63	600
	3.0	0.015	60	420	0.016	63	470	0.016	58	400	0.014	59	450
	4.0	0.010	56	420	0.010	59	470	0.010	54	400	0.009	57	410
	5.0	0.015	56	410	0.016	59	450	0.016	54	380	0.014	53	390
0.5	2.0	0.033	75	1080	0.035	79	1200	0.035	72	1020	0.032	79	1120
	3.0	0.029	70	760	0.030	74	840	0.030	68	710	0.027	68	760
	4.0	0.019	70	580	0.020	74	650	0.020	68	550	0.018	66	580
	5.0	0.017	64	580	0.018	68	650	0.018	62	550	0.016	51	580
	6.0	0.017	58	490	0.018	61	540	0.018	56	460	0.012	55	490
0.6	2.0	0.060	90	2030	0.063	94	2250	0.063	87	1900	0.057	92	2250
	3.0	0.039	84	1620	0.041	88	1800	0.041	81	1520	0.037	81	1800
	4.0	0.025	77	1540	0.026	81	1710	0.026	75	1450	0.023	79	1710
	5.0	0.019	77	1140	0.020	81	1260	0.020	75	1070	0.018	73	1140
	6.0	0.014	67	810	0.015	71	900	0.015	65	760	0.014	64	890
0.8	2.0	0.114	119	2440	0.120	126	2700	0.120	116	2290	0.108	122	2700
	4.0	0.074	103	2440	0.078	109	2700	0.078	100	2290	0.070	103	2700
	5.0	0.056	99	2190	0.059	105	2430	0.059	96	2060	0.053	94	2430
	6.0	0.040	93	1790	0.042	98	1980	0.042	90	1680	0.038	88	1870
	7.0	0.033	87	1380	0.035	91	1530	0.035	84	1300	0.025	82	1450
	8.0	0.019	83	1220	0.020	87	1350	0.020	80	1140	0.018	78	1210
	10.0	0.019	80	880	0.020	84	980	0.020	78	830	0.018	78	880
1	3.0	0.190	129	3380	0.200	136	3750	0.200	125	3170	0.180	102	3500
	4.0	0.133	126	3380	0.140	132	3750	0.140	122	3170	0.126	102	3650
	5.0	0.086	116	2960	0.090	122	3280	0.090	112	2770	0.081	110	3640
	6.0	0.057	101	1930	0.060	106	2140	0.060	98	1810	0.054	97	2950
	7.0	0.057	97	1580	0.060	102	1750	0.060	94	1480	0.054	95	1570
	8.0	0.057	96	1580	0.060	101	1750	0.060	93	1480	0.054	94	1570
	9.0	0.043	96	1580	0.045	101	1750	0.045	93	1480	0.041	94	1570
	10.0	0.036	96	1580	0.038	101	1750	0.038	93	1480	0.034	90	1570
	12.0	0.024	86	1100	0.025	90	1220	0.025	83	1040	0.023	81	1100
	14.0	0.019	86	1100	0.020	90	1220	0.020	83	1040	0.018	81	1100
1.2	6.0	0.105	124	2390	0.110	130	2650	0.110	120	2240	0.099	117	2500
	8.0	0.057	115	1930	0.060	121	2140	0.060	111	1810	0.054	107	2100
	10.0	0.050	117	1540	0.053	124	1710	0.053	114	1450	0.048	111	1460
	12.0	0.043	111	1460	0.045	117	1620	0.045	108	1370	0.041	107	1460
1.4	8.0	0.105	137	2130	0.110	144	2360	0.110	133	2000	0.099	130	2120
	12.0	0.050	126	1470	0.053	133	1630	0.053	122	1380	0.048	120	1470
	16.0	0.033	117	1030	0.035	124	1140	0.035	114	970	0.032	111	1030
1.5	8.0	0.086	143	2370	0.090	151	2630	0.090	139	2220	0.081	136	2100
	12.0	0.086	135	1620	0.090	143	1800	0.090	131	1520	0.081	128	1620
	16.0	0.036	126	1130	0.038	132	1260	0.038	122	1060	0.034	119	1130
	18.0	0.036	102	1130	0.038	107	1260	0.038	98	1060	0.034	96	1130

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NiTiCo 30 Miniature Ballnose with Long Neck, 2 Flutes – G88



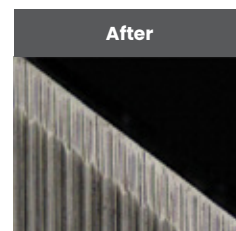
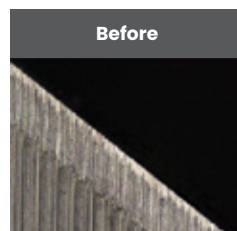
Profiling		K			P						M			S					
Working Material		Grey Cast Iron			Carbon Steel			Alloy steel			Stainless Steel			Titanium Alloy			Cobalt Alloy		
Properties		–			–			520 < Rm < 1200			High Machinability			–			–		
D	Effective Length	Ap	Vc	Vf	Ap	Vc	Vf	Ap	Vc	Vf	Ap	Vc	Vf	Ap	Vc	Vf	Ap	Vc	Vf
1.6	8.0	0.209	153	2760	0.220	161	3060	0.220	148	2590	0.198	145	2750	0.198	127	1330	0.198	115	1080
	12.0	0.093	156	2610	0.098	165	2890	0.098	152	2450	0.088	148	2600	0.088	130	1260	0.088	117	1020
	16.0	0.057	117	1600	0.060	124	1770	0.060	114	1500	0.054	111	1590	0.054	98	770	0.054	88	620
	20.0	0.038	103	1120	0.040	109	1240	0.040	100	1050	0.036	98	1110	0.036	86	540	0.036	77	440
1.8	8.0	0.247	169	2930	0.260	178	3250	0.260	164	2750	0.234	163	2920	0.234	143	1410	0.234	129	1140
	12.0	0.100	151	1830	0.105	159	2020	0.105	146	1710	0.095	143	1820	0.095	126	880	0.095	113	710
	16.0	0.065	120	1820	0.068	127	2020	0.068	117	1710	0.061	114	1820	0.061	100	880	0.061	90	710
	20.0	0.043	112	1280	0.045	118	1410	0.045	108	1200	0.041	106	1270	0.041	93	620	0.041	84	500
2	4.0	0.380	185	4260	0.400	195	4730	0.400	179	4000	0.360	178	4250	0.360	157	2060	0.360	141	1670
	6.0	0.380	188	3840	0.400	198	4250	0.400	182	3600	0.360	178	3830	0.360	157	1850	0.360	141	1500
	8.0	0.266	188	3840	0.280	198	4250	0.280	182	3600	0.252	178	3830	0.252	157	1850	0.252	141	1500
	10.0	0.200	176	3180	0.210	185	3530	0.210	170	2990	0.189	166	3180	0.189	146	1540	0.189	132	1240
	12.0	0.114	158	2870	0.120	166	3180	0.120	153	2690	0.108	150	2860	0.108	132	1380	0.108	119	1120
	14.0	0.114	158	2480	0.120	166	2750	0.120	153	2330	0.108	150	2480	0.108	132	1200	0.108	119	970
	16.0	0.114	134	1600	0.120	141	1770	0.120	130	1500	0.108	127	1590	0.108	111	770	0.108	100	620
	18.0	0.086	134	1470	0.090	141	1630	0.090	130	1380	0.081	126	1470	0.081	111	710	0.081	100	580
	20.0	0.071	124	1470	0.075	131	1630	0.075	120	1380	0.068	118	1470	0.068	103	710	0.068	93	580
	22.0	0.048	107	1100	0.050	112	1210	0.050	103	1030	0.045	101	1090	0.045	89	530	0.045	80	430
	25.0	0.048	112	1030	0.050	118	1140	0.050	108	970	0.045	106	1030	0.045	93	500	0.045	84	400
	30.0	0.029	103	1030	0.030	109	1140	0.030	100	970	0.027	98	1030	0.027	86	500	0.027	77	400
3	8.0	0.570	215	4870	0.600	226	5400	0.600	208	4570	0.540	204	4860	0.540	179	2350	0.540	161	1910
	10.0	0.399	215	4870	0.420	226	5400	0.420	208	4570	0.378	204	4860	0.378	179	2350	0.378	161	1910
	16.0	0.299	201	3280	0.315	211	3630	0.315	194	3070	0.284	190	3270	0.284	167	1580	0.284	151	1280
	20.0	0.171	168	2280	0.180	176	2530	0.180	162	2140	0.162	159	2280	0.162	140	1100	0.162	126	890
	25.0	0.114	150	2280	0.120	158	2530	0.120	146	2140	0.108	143	2280	0.108	125	1100	0.108	113	890
	30.0	0.114	150	2110	0.120	158	2330	0.120	146	1980	0.108	143	2100	0.108	125	1020	0.108	113	820
4	35.0	0.076	115	1470	0.080	121	1630	0.080	111	1380	0.072	109	1470	0.072	96	710	0.072	86	580
	10.0	0.570	206	4670	0.600	217	5180	0.600	199	4380	0.540	195	4660	0.540	172	2250	0.540	155	1830
	16.0	0.399	206	4670	0.420	217	5180	0.420	199	4380	0.378	195	4660	0.378	172	2250	0.378	155	1830
	20.0	0.399	178	3240	0.420	188	3590	0.420	173	3040	0.378	169	3230	0.378	149	1560	0.378	134	1270
	25.0	0.228	161	2620	0.240	169	2910	0.240	156	2460	0.216	152	2620	0.216	134	1270	0.216	121	1030
	30.0	0.152	148	2020	0.160	156	2240	0.160	144	1890	0.144	141	2010	0.144	124	970	0.144	111	790
	35.0	0.095	148	2020	0.100	156	2240	0.100	144	1890	0.090	141	2010	0.090	124	970	0.090	111	790
	40.0	0.095	148	2020	0.100	156	2240	0.100	144	1890	0.090	141	2010	0.090	124	970	0.090	111	790
	45.0	0.095	110	1410	0.100	116	1560	0.100	106	1320	0.090	104	1410	0.090	92	680	0.090	82	550
	50.0	0.095	110	1410	0.100	116	1560	0.100	106	1320	0.090	104	1410	0.090	92	680	0.090	82	550

M02



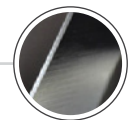
Supreme Edge Technology

- Uniform cutting edges ensure consistent machining.
- Smooth edge surface enhances coating adhesion and chip flow for superior surface finishing.
- Reduced friction and abrasion resistance contribute to longer tool life.



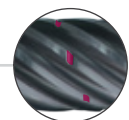
Ideal Cutting Edge

- Provides edge protection to prolong tool life.



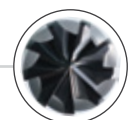
Optimized Geometry with Chip Breaker

- Efficiently shears work materials and shortens chips for improved chip removal.



High Flute Count

- Allows faster feed rates with a stable chip load per tooth, reducing cycle time and increasing material removal.
- More flutes increase tool rigidity, reducing vibration and deflection for consistent, reliable machining.
- Wear is shared across more cutting edges, lowering stress per edge and extending tool life.
- Reduced step-over and tighter scallop heights deliver a smoother, high-quality surface with minimal post-processing.



M01

NiTiCo 30
DP Multiflute Torus
with Recess
(without chip breaker)

M02

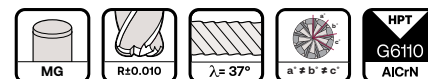
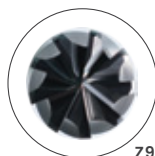
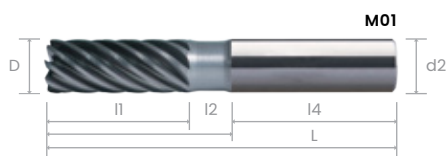
NiTiCo 30 Long
DP Multiflute Torus
with Recess
(with chip breaker)

M03

NiTiCo 30
Long Reach
DP Multiflute Torus
with Recess



M01 NiTiCo 30 DP Multiflute Torus with Recess, 9 Flutes



Order Number	D1	l1	l2	l4	L	d1	l1xØ	R	d2 h6	Availability
M01 0800 064 0800 050	8	22	28	36	64	7.8	2.75	0.5	8	○
M01 0800 064 0800 080			28	36	64	7.8	2.75	0.8	8	○
M01 0800 064 0800 100			28	36	64	7.8	2.75	1	8	●
M01 0800 064 0800 200			28	36	64	7.8	2.75	2	8	●
M01 1000 072 1000 050	10	27	32	40	72	9.8	2.70	0.5	10	●
M01 1000 072 1000 100			32	40	72	9.8	2.70	1	10	●
M01 1000 072 1000 200			32	40	72	9.8	2.70	2	10	●
M01 1200 083 1200 050	12	30	35	46	83	11.7	2.50	0.5	12	●
M01 1200 083 1200 100			35	46	83	11.7	2.50	1	12	●
M01 1200 083 1200 200			35	46	83	11.7	2.50	2	12	○
M01 1200 083 1200 300			35	46	83	11.7	2.50	3	12	○
M01 1600 100 1600 050	16	40	49	49	100	15.7	2.50	0.5	16	●
M01 1600 100 1600 100			49	49	100	15.7	2.50	1	16	●
M01 1600 100 1600 200			49	49	100	15.7	2.50	2	16	●
M01 1600 100 1600 300			49	49	100	15.7	2.50	3	16	○
M01 1600 100 1600 400	16	40	49	49	100	15.7	2.50	4	16	○
M01 2000 125 2000 100			72	51	125	19.7	2.50	1	20	●
M01 2000 125 2000 200			72	51	125	19.7	2.50	2	20	●
M01 2000 125 2000 300			72	51	125	19.7	2.50	3	20	○
M01 2000 125 2000 400			72	51	125	19.7	2.50	4	20	○
M01 2500 150 2500 100	25	63	91	57	150	24.7	2.52	1	25	○
M01 2500 150 2500 200			91	57	150	24.7	2.52	2	25	○
M01 2500 150 2500 300			91	57	150	24.7	2.52	3	25	○
M01 2500 150 2500 400			91	57	150	24.7	2.52	4	25	○
M01 2500 150 2500 500			91	57	150	24.7	2.52	5	25	○

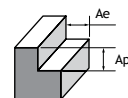
● Ex Stock	ab Lager	De Stock	Da Magazzino	有库存
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无库存

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
●	○	●	●	○	●	○	●	○	●	○	●	○	●	○	●	○

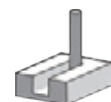


NiTiCo 30 DP Multiflute Torus with Recess, 9 Flutes – M01



Side Milling	P						M				K				S			
Working Material	Carbon Steel		Alloy Steel		Prehardened Steel		Stainless Steel		Stainless Steel		Grey Cast Iron		Ductile Cast Iron		Titanium Alloy		Nickel Alloy	
Properties	–		520 < Rm < 1200		35 ≤ HRC < 45		High Machinability		Low Machinability		–		–		–		–	
Ap (mm)	2.00 × D		2.00 × D		2.00 × D		2.00 × D		2.00 × D		2.00 × D		2.00 × D		2.00 × D		1.00 × D	
Ae (mm)	0.05 × D		0.05 × D		0.04 × D		0.05 × D		0.04 × D		0.05 × D		0.05 × D		0.04 × D		0.03 × D	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
8	300	0.072	250	0.068	190	0.065	140	0.055	100	0.046	280	0.084	180	0.077	70	0.043	40	0.041
10		0.090		0.084		0.081		0.073		0.062		0.105		0.096		0.058		0.054
12		0.104		0.097		0.094		0.092		0.078		0.132		0.120		0.076		0.067
16		0.126		0.118		0.114		0.112		0.095		0.173		0.158		0.090		0.080
20		0.219		0.204		0.198		0.128		0.115		0.216		0.197		0.108		0.091
25		0.256		0.238		0.231		0.151		0.135		0.252		0.231		0.126		0.108

NiTiCo 30 DP Multiflute Torus with Recess, 9 Flutes – M01

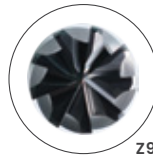


Trochoidal Milling	P						M				K				S			
Working Material	Carbon Steel		Alloy Steel		Prehardened Steel		Stainless Steel		Stainless Steel		Grey Cast Iron		Ductile Cast Iron		Titanium Alloy		Nickel Alloy	
Properties	–		520 < Rm < 1200		35 ≤ HRC < 45		High Machinability		Low Machinability		–		–		–		–	
Min. Slot Width	1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D	
Ap (mm)	2.00 × D		2.00 × D		2.00 × D		2.00 × D		2.00 × D		2.00 × D		2.00 × D		2.00 × D		1.00 × D	
Ae (mm)	0.05 × D		0.05 × D		0.04 × D		0.05 × D		0.04 × D		0.05 × D		0.05 × D		0.04 × D		0.03 × D	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
8	320	0.080	270	0.075	210	0.072	160	0.062	120	0.052	300	0.094	200	0.086	120	0.048	45	0.046
10		0.100		0.093		0.090		0.082		0.069		0.117		0.107		0.065		0.061
12		0.115		0.107		0.104		0.103		0.087		0.147		0.134		0.085		0.075
16		0.140		0.131		0.126		0.125		0.106		0.193		0.176		0.100		0.089
20		0.243		0.226		0.219		0.143		0.128		0.240		0.219		0.120		0.102
25		0.285		0.265		0.257		0.168		0.150		0.281		0.257		0.141		0.120

M02

NiTiCo 30 Long DP Multiflute Torus with Chip Breaker and Recess, 9 Flutes

HPMT



Order Number	D1	l1	l2	l4	L	d1	l1xØ	R	d2 h6	Availability
M02 0800 075 0800 050	8	32	38	37	75	7.8	4.00	0.5	8	○
M02 0800 075 0800 100			38	37	75	7.8	4.00	1	8	●
M02 1000 100 1000 050 042	10	42	52	48	100	9.8	4.20	0.5	10	●
M02 1000 100 1000 100 042			52	48	100	9.8	4.20	1	10	●
M02 1200 100 1200 050	12	48	53	45	100	11.7	4.00	0.5	12	●
M02 1200 100 1200 100			53	45	100	11.7	4.00	1	12	●
M02 1200 100 1200 200			53	45	100	11.7	4.00	2	12	●
M02 1200 100 1200 300			53	45	100	11.7	4.00	3	12	○
M02 1200 100 1200 400			53	45	100	11.7	4.00	4	12	○
M02 1600 125 1600 050	16	64	74	49	125	15.7	4.00	0.5	16	○
M02 1600 125 1600 100			74	49	125	15.7	4.00	1	16	●
M02 1600 125 1600 200			74	49	125	15.7	4.00	2	16	●
M02 1600 125 1600 300			74	49	125	15.7	4.00	3	16	○
M02 1600 125 1600 400			74	49	125	15.7	4.00	4	16	○
M02 2000 150 2000 100 080	20	80	97	51	150	19.7	4.00	1	20	●
M02 2000 150 2000 200			97	51	150	19.7	4.00	2	20	●
M02 2000 150 2000 300			97	51	150	19.7	4.00	3	20	○
M02 2000 150 2000 400			97	51	150	19.7	4.00	4	20	○
M02 2500 175 2500 100	25	100	116	57	175	24.7	4.00	1	25	○
M02 2500 175 2500 200			116	57	175	24.7	4.00	2	25	○
M02 2500 175 2500 300			116	57	175	24.7	4.00	3	25	○
M02 2500 175 2500 400			116	57	175	24.7	4.00	4	25	○
M02 2500 175 2500 500			116	57	175	24.7	4.00	5	25	○

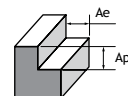
● Ex Stock	ab Lager	De Stock	Da Magazzino	有库存
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无库存

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
●	○	●	●	○	●	○	●	○	●	○	●	○	●	○	●	○

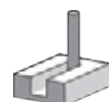


NiTiCo 30 Long DP Multiflute Torus with Chip Breaker and Recess, 9 Flutes – M02



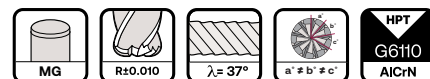
Side Milling	P						M				K				S			
Working Material	Carbon Steel		Alloy Steel		Prehardened Steel		Stainless Steel		Stainless Steel		Grey Cast Iron		Ductile Cast Iron		Titanium Alloy		Nickel Alloy	
Properties	-		520 < Rm < 1200		35 ≤ HRC < 45		High Machinability		Low Machinability		-		-		-		-	
Ap (mm)	3.00 × D		3.00 × D		3.00 × D		3.00 × D		3.00 × D		3.00 × D		3.00 × D		3.00 × D		1.00 × D	
Ae (mm)	0.05 × D		0.05 × D		0.04 × D		0.05 × D		0.04 × D		0.05 × D		0.05 × D		0.04 × D		0.03 × D	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
8	280	0.069	230	0.065	160	0.062	120	0.053	90	0.044	260	0.080	160	0.074	65	0.041	35	0.039
10		0.086		0.080		0.077		0.070		0.059		0.100		0.092		0.056		0.052
12		0.099		0.093		0.090		0.088		0.075		0.126		0.114		0.073		0.064
16		0.120		0.113		0.109		0.107		0.091		0.165		0.151		0.086		0.076
20		0.209		0.194		0.189		0.122		0.110		0.206		0.188		0.103		0.087
25		0.244		0.227		0.220		0.144		0.129		0.240		0.220		0.120		0.103

NiTiCo 30 Long DP Multiflute Torus with Chip Breaker and Recess, 9 Flutes – M02



Trochoidal Milling	P						M				K				S			
Working Material	Carbon Steel		Alloy Steel		Prehardened Steel		Stainless Steel		Stainless Steel		Grey Cast Iron		Ductile Cast Iron		Titanium Alloy		Nickel Alloy	
Properties	-		520 < Rm < 1200		35 ≤ HRC < 45		High Machinability		Low Machinability		-		-		-		-	
Min. Slot Width	1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D	
Ap (mm)	3.00 × D		3.00 × D		3.00 × D		3.00 × D		3.00 × D		3.00 × D		3.00 × D		3.00 × D		1.00 × D	
Ae (mm)	0.05 × D		0.05 × D		0.04 × D		0.05 × D		0.04 × D		0.05 × D		0.05 × D		0.04 × D		0.03 × D	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
8	300	0.076	250	0.072	180	0.069	140	0.059	110	0.050	280	0.090	180	0.082	90	0.046	40	0.044
10		0.095		0.089		0.086		0.078		0.066		0.112		0.102		0.062		0.058
12		0.110		0.102		0.099		0.098		0.083		0.140		0.128		0.081		0.072
16		0.133		0.125		0.120		0.119		0.101		0.184		0.168		0.095		0.085
20		0.231		0.215		0.209		0.136		0.122		0.228		0.209		0.114		0.097
25		0.271		0.252		0.245		0.160		0.143		0.267		0.245		0.134		0.114

M02 NiTiCo 30 Extra-Long DP Multiflute Torus with Chip Breaker and Recess, 9 Flutes



Order Number	D1	I1	I2	I4	L	d1	I1xØ	R	d2 h6	Availability
M02 0800 100 0800 050 040	8	40	64	36	100	7.8	5.00	0.5	8	○
M02 0800 100 0800 100 040			64	36	100	7.8	5.00	1	8	○
M02 0800 100 0800 050 048		48	64	36	100	7.8	6.00	0.5	8	○
M02 0800 100 0800 100 048			64	36	100	7.8	6.00	1	8	○
M02 1000 100 1000 050 050	10	50	58	42	100	9.8	5.00	0.5	10	○
M02 1000 100 1000 100 050			58	42	100	9.8	5.00	1	10	○
M02 1000 125 1000 050		60	83	42	125	9.8	6.00	0.5	10	○
M02 1000 125 1000 100			83	42	125	9.8	6.00	1	10	○
M02 1200 125 1200 050 060	12		76	47	125	11.7	5.00	0.5	12	○
M02 1200 125 1200 100 060			76	47	125	11.7	5.00	1	12	○
M02 1200 125 1200 050 072		72	78	45	125	11.7	6.00	0.5	12	○
M02 1200 125 1200 100 072			78	45	125	11.7	6.00	1	12	○
M02 1600 150 1600 050 080	16	80	98	50	150	15.7	5.00	0.5	16	○
M02 1600 150 1600 100 080			98	50	150	15.7	5.00	1	16	○
M02 1600 150 1600 050 096		96	-	54	150	-	6.00	0.5	16	○
M02 1600 150 1600 100 096			-	54	150	-	6.00	1	16	○
M02 2000 150 2000 050	20	98	-	52	150	-	4.90	0.5	20	○
M02 2000 150 2000 100 098			-	52	150	-	4.90	1	20	○
M02 2000 175 2000 050		120	-	55	175	-	6.00	0.5	20	○
M02 2000 175 2000 100			-	55	175	-	6.00	1	20	○
M02 2500 183 2500 050	25	123	-	60	183	-	4.92	0.5	25	○
M02 2500 183 2500 100			-	60	183	-	4.92	1	25	○
M02 2500 210 2500 050		150	-	60	210	-	6.00	0.5	25	○
M02 2500 210 2500 100			-	60	210	-	6.00	1	25	○

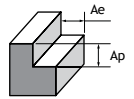
● Ex Stock	ab Lager	De Stock	Da Magazzino	有库存
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无库存

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
●	○	●	●	○	●	○	●	○	●	○	●	○	●	○	●	○

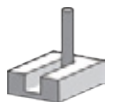


NiTiCo 30 Extra-Long DP Multiflute Torus with Chip Breaker and Recess, 9 Flutes – M02



Side Milling	P						M				K				S			
Working Material	Carbon Steel		Alloy Steel		Prehardened Steel		Stainless Steel		Stainless Steel		Grey Cast Iron		Ductile Cast Iron		Titanium Alloy		Nickel Alloy	
Properties	–		520 < Rm < 1200		35 ≤ HRC < 45		High Machinability		Low Machinability		–		–		–		–	
Ap (mm)	3.00 × D		3.00 × D		3.00 × D		3.00 × D		3.00 × D		3.00 × D		3.00 × D		3.00 × D		1.00 × D	
Ae (mm)	0.05 × D		0.05 × D		0.04 × D		0.05 × D		0.04 × D		0.05 × D		0.05 × D		0.04 × D		0.03 × D	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
8	180	0.066	140	0.062	100	0.059	80	0.051	60	0.042	150	0.076	80	0.071	40	0.039	30	0.038
10		0.082		0.076		0.074		0.067		0.057		0.095		0.088		0.054		0.050
12		0.095		0.089		0.086		0.084		0.072		0.120		0.109		0.070		0.061
16		0.114		0.108		0.104		0.102		0.087		0.157		0.144		0.082		0.073
20		0.199		0.185		0.180		0.116		0.105		0.196		0.179		0.098		0.083
25		0.232		0.216		0.209		0.137		0.123		0.228		0.209		0.114		0.098

NiTiCo 30 Extra-Long DP Multiflute Torus with Chip Breaker and Recess, 9 Flutes – M02

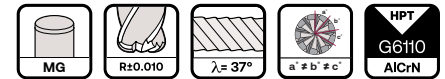
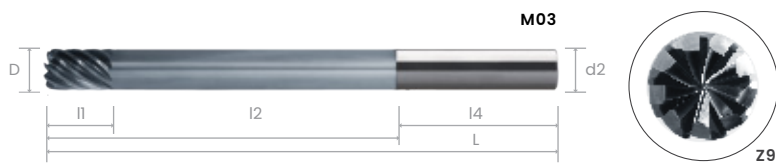


Trochoidal Milling	P						M				K				S			
Working Material	Carbon Steel		Alloy Steel		Prehardened Steel		Stainless Steel		Stainless Steel		Grey Cast Iron		Ductile Cast Iron		Titanium Alloy		Nickel Alloy	
Properties	–		520 < Rm < 1200		35 ≤ HRC < 45		High Machinability		Low Machinability		–		–		–		–	
Min. Slot Width	1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D		1.25 × D	
Ap (mm)	3.00 × D		3.00 × D		3.00 × D		3.00 × D		3.00 × D		3.00 × D		3.00 × D		3.00 × D		1.00 × D	
Ae (mm)	0.05 × D		0.05 × D		0.04 × D		0.05 × D		0.04 × D		0.05 × D		0.05 × D		0.04 × D		0.03 × D	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
8	200	0.073	160	0.069	120	0.066	100	0.057	80	0.048	170	0.086	100	0.078	50	0.044	35	0.042
10		0.091		0.085		0.082		0.075		0.063		0.107		0.097		0.059		0.056
12		0.105		0.097		0.095		0.094		0.079		0.133		0.122		0.077		0.069
16		0.127		0.119		0.114		0.114		0.096		0.175		0.160		0.091		0.081
20		0.220		0.205		0.199		0.130		0.116		0.217		0.199		0.109		0.093
25		0.258		0.240		0.233		0.152		0.136		0.254		0.233		0.128		0.109

M03

NiTiCo 30 Long Reach DP Multiflute Torus with Recess, 9 Flutes

HPMT

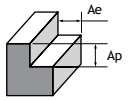


Order Number	D1	l1	l2	l4	L	d1	l1xØ	R	d2 h6	Availability
M03 1000 125 1000 050	10	15	83	42	125	9.8	1.50	0.5	10	○
M03 1000 125 1000 100			83	42	125	9.8	1.50	1	10	○
M03 1200 150 1200 050	12	18	101	47	150	11.7	1.50	0.5	12	○
M03 1200 150 1200 100			101	47	150	11.7	1.50	1	12	○
M03 1600 150 1600 050	16	24	98	50	150	15.7	1.50	0.5	16	○
M03 1600 150 1600 100			98	50	150	15.7	1.50	1	16	○
M03 2000 175 2000 050	20	30	121	52	175	19.7	1.50	0.5	20	○
M03 2000 175 2000 100			121	52	175	19.7	1.50	1	20	○
M03 2500 210 2500 050	25	37.5	150	58	210	24.7	1.50	0.5	25	○
M03 2500 210 2500 100			150	58	210	24.7	1.50	1	25	○

● 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
●	○	●	●	○	●	○	●	○	●	○	●	○	●	○	●	○



NiTiCo 30 Long Reach DP Multiflute Torus with Recess, 9 Flutes – M03

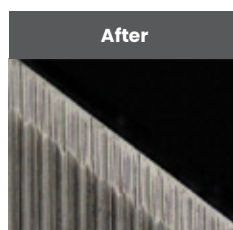
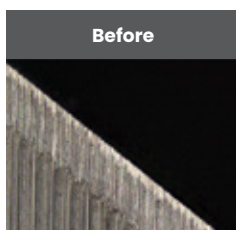
Side Milling	P						M				K				S			
Working Material	Carbon Steel		Alloy Steel		Prehardened Steel		Stainless Steel		Stainless Steel		Grey Cast Iron		Ductile Cast Iron		Titanium Alloy		Nickel Alloy	
Properties	-		520 < Rm < 1200		35 ≤ HRC < 45		High Machinability		Low Machinability		-		-		-		-	
Ap (mm)	1.00 × D		1.00 × D		1.00 × D		1.00 × D		1.00 × D		1.00 × D		1.00 × D		2.00 × D		1.00 × D	
Ae (mm)	0.05 × D		0.05 × D		0.04 × D		0.05 × D		0.04 × D		0.05 × D		0.05 × D		0.04 × D		0.03 × D	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
8	170	0.062	140	0.058	120	0.055	80	0.047	60	0.039	150	0.072	80	0.066	40	0.036	30	0.035
10		0.077		0.072		0.069		0.063		0.053		0.090		0.082		0.050		0.046
12		0.089		0.083		0.081		0.079		0.067		0.113		0.102		0.065		0.057
16		0.108		0.101		0.098		0.096		0.081		0.148		0.135		0.077		0.068
20		0.188		0.174		0.170		0.109		0.099		0.185		0.169		0.092		0.078
25		0.219		0.204		0.198		0.129		0.116		0.216		0.198		0.108		0.092

M14



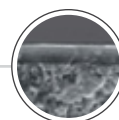
Supreme Edge Technology

- Uniform cutting edges ensure consistent machining.
- Smooth edge surface enhances coating adhesion and chip flow for superior surface finishing.
- Reduced friction and abrasion resistance contribute to longer tool life.



Superior Coating

- Enhances heat resistance to prolong tool life.



High Feed Profile

- Enables high-feed machining with thin-chip formation for higher MRR and improved chip evacuation.

Axial Cutting Force Design:

- Directs most cutting forces along the spindle axis, minimizing tool deflection.
- Enhances stability during high-feed machining, even in long overhang setups.

Central Coolant Hole:

- Enhances chip evacuation and thermal control, especially effective in deep cavity or blind hole applications.



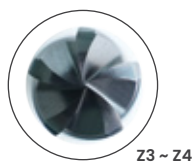
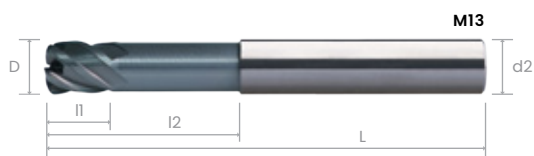
M13

NiTiCo 30
High Feed
with Recess

M14

NiTiCo 30
High Feed
Oil Hole
with Recess

M13 NiTiCo 30 High Feed Endmill with Recess, 3 – 4 Flutes



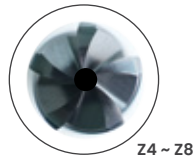
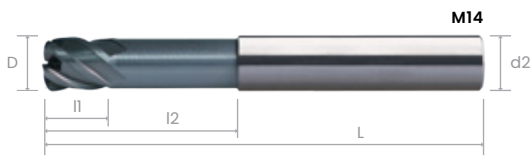
Order Number	Length	D	l1	l2	d1	L	d2 h6	R (theo)	Z	Availability
M13 0100 050 04	Standard	1	1	3	0.9	50	4	0.145	3	○
M13 0150 050 04		1.5	1.5	4.5	1.35	50	4	0.215	3	○
M13 0200 050 04		2	2	6	1.8	50	4	0.291	3	○
M13 0250 050 04		2.5	2.5	7.5	2.25	50	4	0.352	3	○
M13 0300 050 04		3	3	9	2.7	50	4	0.436	4	○
M13 0100 050 04 16	Extra-Long	1	1	16	0.9	50	4	0.145	3	●

● 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
●	○	●	●	○	●	●	○	●	○	●	○	●				

M14 NiTiCo 30 High Feed Oil Hole Endmill with Recess , 4 – 8 Flutes



Order Number	Length	D	l1	l2	d1	L	d2 h6	R (theo)	Z	Availability
M14 0400 050 04	Standard	4	4	12	3.6	50	4	0.673	4	○
M14 0600 060 06		6	6	24	5.4	60	6	0.755	5	●
M14 0800 064 08		8	8	28	7.2	64	8	1.379	5	●
M14 1000 070 10		10	10	30	9	70	10	1.998	6	●
M14 1200 075 12		12	12	30	11	75	12	2.103	6	●
M14 1600 090 16		16	16	44	14.5	90	16	2.747	6	○
M14 2000 100 20		20	20	50	18.5	100	20	3.440	7	○
M14 2500 100 25		25	25	44	23	100	25	4.191	8	○
M14 0600 075 06	Long	6	6	36	5.4	75	6	0.755	5	○
M14 0800 079 08		8	8	40	7.2	79	8	1.379	5	○
M14 1000 100 10		10	10	85	9	100	10	1.998	6	●
M14 1200 100 12		12	12	55	11	100	12	2.103	6	●
M14 1600 125 16		16	16	77	14.5	125	16	2.747	6	○
M14 2000 150 20		20	20	100	18.5	150	20	3.440	7	○
M14 2500 150 25		25	25	94	23	150	25	4.191	8	○
M14 0600 082 06	Extra-Long	6	6	46	5.4	82	6	0.755	5	○
M14 0800 100 08		8	8	56	7.2	92	8	1.379	5	○
M14 1000 125 10		10	10	85	9	125	10	1.998	6	●
M14 1200 125 12		12	12	80	11	125	12	2.103	6	●
M14 1600 150 16		16	16	102	14.5	150	16	2.747	6	●
M14 2000 200 20		20	20	140	18.5	200	20	3.440	7	○
M14 2500 200 25		25	25	144	23	200	25	4.191	8	○

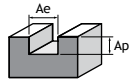
● Ex Stock	ab Lager	De Stock	Da Magazzino	有库存
○ Upon Request	auf Anfrage	à la demande	Su ordinazione	无库存

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
●	○	●	●	○	●	○	●	○	●	○	●	○	●	○	●	○

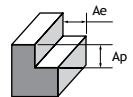


NiTiCo 30 High Feed Endmill, 3/8 Flutes - M13, M14



Slotting	P						M				K				S			
Working Material	Carbon Steel		Alloy Steel		Prehardened Steel		Stainless Steel		Stainless Steel		Grey Cast Iron		Ductile Cast Iron		Titanium Alloy		Nickel Alloy	
Properties	-		520 < Rm < 1200		35 ≤ HRC < 45		High Machinability		Low Machinability		-		-		-		-	
Ap (mm)	0.06 × D		0.06 × D		0.04 × D		0.05 × D		0.04 × D		0.06 × D		0.04 × D		0.03 × D		0.03 × D	
Ae (mm)	1.00 × D		1.00 × D		1.00 × D		1.00 × D		1.00 × D		1.00 × D		1.00 × D		1.00 × D		1.00 × D	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
1	220	0.032	150	0.030	140	0.028	120	0.016	70	0.013	180	0.032	120	0.030	100	0.013	40	0.011
1.5		0.048		0.045		0.043		0.025		0.021		0.046		0.044		0.021		0.017
2		0.065		0.061		0.058		0.040		0.034		0.063		0.060		0.034		0.028
2.5		0.084		0.079		0.075		0.051		0.043		0.080		0.077		0.043		0.036
3		0.104		0.098		0.093		0.066		0.056		0.099		0.096		0.056		0.047
4		0.138		0.131		0.124		0.089		0.076		0.132		0.128		0.076		0.064
6		0.208		0.197		0.187		0.144		0.122		0.199		0.192		0.122		0.104
8		0.273		0.259		0.245		0.200		0.169		0.262		0.254		0.168		0.144
10		0.330		0.310		0.290		0.260		0.220		0.310		0.300		0.180		0.180
12		0.420		0.390		0.370		0.310		0.260		0.400		0.390		0.200		0.220
16	220	0.510	150	0.480	140	0.460	120	0.390	70	0.330	180	0.490	120	0.470	100	0.220	40	0.280
20		0.610		0.580		0.550		0.470		0.400		0.580		0.570		0.240		0.340
25		0.750		0.710		0.670		0.570		0.480		0.710		0.690		0.270		0.410

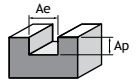
NiTiCo 30 High Feed Endmill, 3/8 Flutes - M13, M14



Side Milling	P						M				K				S			
Working Material	Carbon Steel		Alloy Steel		Prehardened Steel		Stainless Steel		Stainless Steel		Grey Cast Iron		Ductile Cast Iron		Titanium Alloy		Nickel Alloy	
Properties	-		520 < Rm < 1200		35 ≤ HRC < 45		High Machinability		Low Machinability		-		-		-		-	
Ap (mm)	0.06 × D		0.06 × D		0.04 × D		0.05 × D		0.04 × D		0.06 × D		0.04 × D		0.03 × D		0.03 × D	
Ae (mm)	0.45 × D		0.45 × D		0.45 × D		0.45 × D		0.45 × D		0.45 × D		0.45 × D		0.40 × D		0.40 × D	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
1	220	0.041	150	0.038	140	0.036	120	0.020	70	0.017	180	0.040	120	0.038	100	0.017	40	0.014
1.5		0.061		0.057		0.054		0.032		0.027		0.058		0.056		0.027		0.022
2		0.082		0.077		0.073		0.051		0.043		0.079		0.076		0.043		0.036
2.5		0.105		0.099		0.094		0.064		0.054		0.100		0.097		0.054		0.045
3		0.130		0.123		0.117		0.083		0.070		0.124		0.120		0.070		0.059
4		0.173		0.164		0.155		0.112		0.095		0.165		0.160		0.095		0.080
6		0.260		0.247		0.234		0.181		0.153		0.249		0.241		0.153		0.130
8		0.342		0.324		0.307		0.250		0.212		0.328		0.318		0.210		0.180
10		0.416		0.395		0.374		0.327		0.277		0.398		0.386		0.230		0.235
12		0.526		0.499		0.473		0.393		0.334		0.504		0.489		0.250		0.283
16	220	0.644	150	0.611	140	0.579	120	0.496	70	0.421	180	0.616	120	0.598	100	0.280	40	0.357
20		0.767		0.728		0.690		0.594		0.504		0.735		0.713		0.310		0.428
25		0.938		0.891		0.844		0.721		0.612		0.899		0.872		0.340		0.520

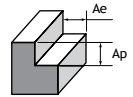


NiTiCo 30 Long High Feed Endmill, 3/8 Flutes - M13, M14



Slotting	P						M				K				S			
Working Material	Carbon Steel		Alloy Steel		Prehardened Steel		Stainless Steel		Stainless Steel		Grey Cast Iron		Ductile Cast Iron		Titanium Alloy		Nickel Alloy	
Properties	-		520 < Rm < 1200		35 ≤ HRC < 45		High Machinability		Low Machinability		-		-		-		-	
Ap (mm)	0.04 × D		0.04 × D		0.03 × D		0.04 × D		0.03 × D		0.04 × D		0.03 × D		0.02 × D		0.02 × D	
Ae (mm)	1.00 × D		1.00 × D		1.00 × D		1.00 × D		1.00 × D		1.00 × D		1.00 × D		1.00 × D		1.00 × D	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
10	160	0.265	110	0.252	100	0.238	80	0.208	50	0.176	130	0.254	90	0.246	70	0.147	30	0.150
12		0.336		0.319		0.302		0.251		0.212		0.322		0.312		0.160		0.180
16		0.412		0.391		0.370		0.316		0.268		0.394		0.382		0.179		0.228
20		0.490		0.465		0.440		0.380		0.322		0.470		0.456		0.198		0.273
25		0.600		0.569		0.540		0.460		0.391		0.574		0.557		0.217		0.332

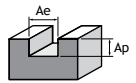
NiTiCo 30 Long High Feed Endmill, 3/8 Flutes - M13, M14



Side Milling	P						M				K				S			
Working Material	Carbon Steel		Alloy Steel		Prehardened Steel		Stainless Steel		Stainless Steel		Grey Cast Iron		Ductile Cast Iron		Titanium Alloy		Nickel Alloy	
Properties	-		520 < Rm < 1200		35 ≤ HRC < 45		High Machinability		Low Machinability		-		-		-		-	
Ap (mm)	0.04 × D		0.04 × D		0.03 × D		0.04 × D		0.03 × D		0.04 × D		0.03 × D		0.02 × D		0.02 × D	
Ae (mm)	0.45 × D		0.45 × D		0.45 × D		0.45 × D		0.45 × D		0.45 × D		0.45 × D		0.40 × D		0.40 × D	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
10	160	0.332	110	0.315	100	0.298	80	0.261	50	0.221	130	0.318	90	0.308	70	0.184	30	0.188
12		0.420		0.399		0.378		0.314		0.266		0.403		0.391		0.200		0.226
16		0.515		0.489		0.463		0.396		0.336		0.493		0.478		0.224		0.285
20		0.613		0.582		0.551		0.475		0.403		0.588		0.570		0.248		0.342
25		0.750		0.712		0.675		0.576		0.489		0.718		0.697		0.272		0.416

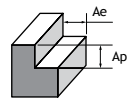


NiTiCo 30 Extra-Long High Feed Endmill, 3/8 Flutes – M13, M14

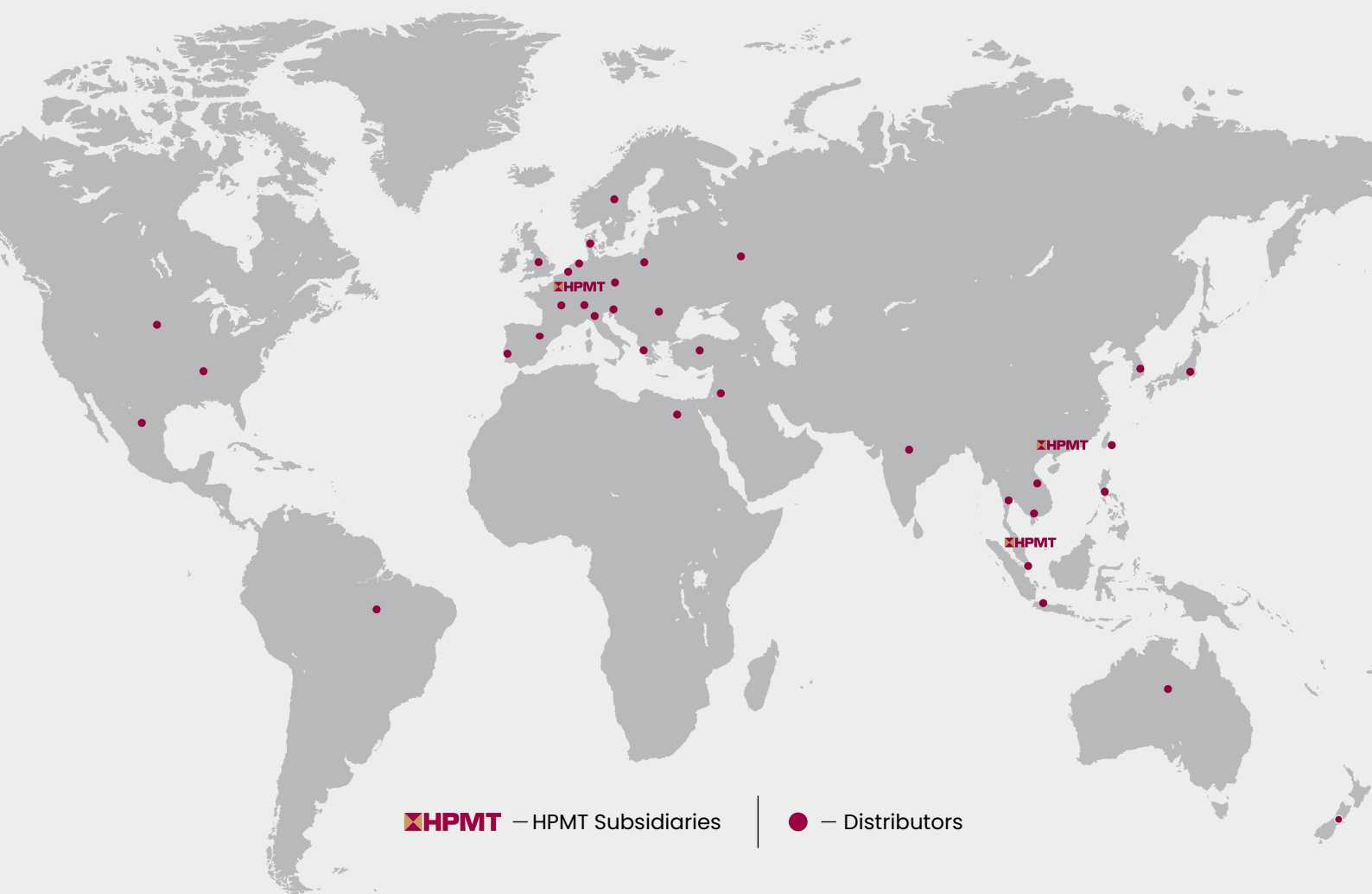


Slotting	P						M				K				S			
Working Material	Carbon Steel		Alloy Steel		Prehardened Steel		Stainless Steel		Stainless Steel		Grey Cast Iron		Ductile Cast Iron		Titanium Alloy		Nickel Alloy	
Properties	-		520 < Rm < 1200		35 ≤ HRC < 45		High Machinability		Low Machinability		-		-		-		-	
Ap (mm)	0.03 × D		0.03 × D		0.02 × D		0.03 × D		0.02 × D		0.03 × D		0.02 × D		0.01 × D		0.01 × D	
Ae (mm)	1.00 × D		1.00 × D		1.00 × D		1.00 × D		1.00 × D		1.00 × D		1.00 × D		1.00 × D		1.00 × D	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
10	120	0.166	80	0.157	75	0.149	60	0.130	40	0.110	90	0.159	60	0.154	50	0.092	25	0.093
12		0.210		0.199		0.188		0.156		0.133		0.201		0.195		0.100		0.112
16		0.257		0.244		0.231		0.198		0.168		0.246		0.239		0.112		0.142
20		0.306		0.291		0.276		0.237		0.201		0.293		0.284		0.124		0.171
25		0.375		0.356		0.337		0.288		0.244		0.359		0.348		0.136		0.208

NiTiCo 30 Extra-Long High Feed Endmill, 3/8 Flutes – M13, M14



Side Milling	P						M				K				S			
Working Material	Carbon Steel		Alloy Steel		Prehardened Steel		Stainless Steel		Stainless Steel		Grey Cast Iron		Ductile Cast Iron		Titanium Alloy		Nickel Alloy	
Properties	-		520 < Rm < 1200		35 ≤ HRC < 45		High Machinability		Low Machinability		-		-		-		-	
Ap (mm)	0.03 × D		0.03 × D		0.02 × D		0.03 × D		0.02 × D		0.03 × D		0.02 × D		0.01 × D		0.01 × D	
Ae (mm)	0.45 × D		0.45 × D		0.45 × D		0.45 × D		0.45 × D		0.45 × D		0.45 × D		0.40 × D		0.40 × D	
D	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
10	120	0.208	80	0.197	75	0.187	60	0.163	40	0.138	90	0.199	60	0.193	50	0.115	25	0.117
12		0.263		0.249		0.236		0.196		0.167		0.252		0.244		0.125		0.141
16		0.322		0.305		0.289		0.248		0.210		0.308		0.299		0.140		0.178
20		0.383		0.364		0.345		0.297		0.252		0.367		0.356		0.155		0.214
25		0.469		0.445		0.422		0.360		0.306		0.449		0.436		0.170		0.260



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