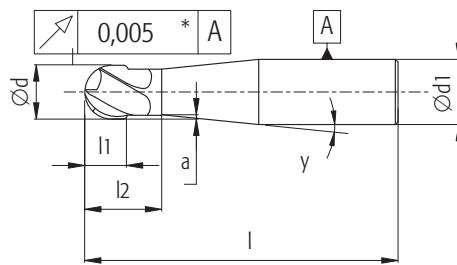




Solid Carbide End Mills

2 Flute

Centre cutting high performance ball nose 2 flute for 45-70 HRC



P3-P4

H1-H4

Ød (mm)	EDP No	r (mm)	Ød1 (mm)	L (mm)	L1 (mm)	L2 (mm)	a (mm)	z	y (°)
1	FBK0504478	0.5	6	64	2	4	0.05	2	7
1	FBK0504479	0.5	6	78	2	4	0.05	2	4
1.5	FBK0504480	0.8	6	64	2	4	0.05	2	6
1.5	FBK0504481	0.8	6	78	2	4	0.05	2	4
2	FBK0504482	1.0	6	64	3	5	0.05	2	6
2	FBK0505816	1.0	6	64	3	8	0.05	2	9
2	FBK0505817	1.0	6	78	3	8	0.05	2	4
2	FBK0504483	1.0	6	78	3	15	0.05	2	5
3	FBK0504484	1.5	6	64	4	7	0.05	2	5
3	FBK0504485	1.5	6	78	4	15	0.05	2	4
3	FBK0504486	1.5	6	100	4	7	0.05	2	2
4	FBK0504487	2.0	6	64	5	8	0.1	2	4
4	FBK0504488	2.0	6	78	5	15	0.1	2	3
4	FBK0504489	2.0	6	100	5	8	0.1	2	1
5	FBK0504490	2.5	6	64	5	10	0.15	2	2
5	FBK0504491	2.5	6	78	5	20	0.15	2	2
6	FBK0504492	3.0	6	64	6	25	0.2	2	-
6	FBK0504493	3.0	6	78	6	35	0.2	2	-

Tensile strength: N/mm<sup>2</sup> | Hardness: HRC

P0	P1	P2	P3	P4	P5	P6	M1	M2	M3	K1	K2	K3
<530	<530	<530	600-850	850-1400	600-900	900-1350	<600	600-800	<800	125-500	<600	>600
-	-	<25	<35	35-48	<35	35-48	-	<25	<30	<32	<28	<43

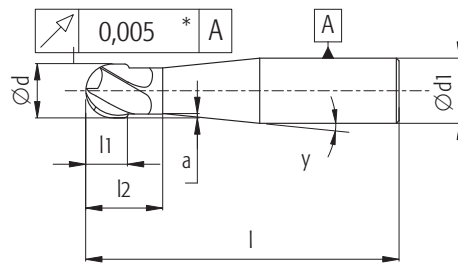
N1	N2	N3	N4	N5	N6	N7	S1-Fe Based	S2-Co Based	S3-Ni Based	S4-Ti Based	H1	H2	H3	H4
Wrought Al	Si<12.2%	Si>12.2%	Cu, Zn Alloy	Ny, Pt, Ru, Re, Fg	C, Gr, CFRP, Comp	NMC	500-1200	1000-1500	600-1700	900-1600	-	-	-	-
-	-	-	-	-	-	-	25-48	25-48	<48	33-48	44-48	48-55	56-60	61-70



## Solid Carbide End Mills

# 4 Flute

## Centre cutting high performance ball nose 4 flute for 45-70 HRC



**P3-P4**

**H1-H4**

Ød (mm)	EDP No	r (mm)	Ød1 (mm)	L (mm)	L1 (mm)	L2 (mm)	a (mm)	z	γ (°)
6	FBK0504511	3	6	64	6	25	0.2	4	-
6	FBK0504512	3	6	78	6	35	0.2	4	-
6	FBK0504513	3	8	100	6	25	0.2	4	2
8	FBK0504514	4	8	64	8	25	0.3	4	-
8	FBK0504515	4	8	78	8	35	0.3	4	-
8	FBK0504516	4	8	100	8	50	0.3	4	-
8	FBK0504517	4	10	120	8	30	0.3	4	2
10	FBK0504518	5	10	78	10	35	0.3	4	-
10	FBK0504519	5	10	100	10	55	0.3	4	-
10	FBK0504520	5	12	120	10	30	0.3	4	2
12	FBK0504521	6	12	78	12	35	0.3	4	-
12	FBK0504522	6	12	100	12	55	0.3	4	-
12	FBK0504523	6	16	120	12	40	0.3	4	5
16	FBK0504524	8	16	100	20	50	0.3	4	-
16	FBK0504525	8	16	150	20	100	0.3	4	-

Tensile strength: N/mm<sup>2</sup> | Hardness: HRC

P0	P1	P2	P3	P4	P5	P6	M1	M2	M3	K1	K2	K3
<530	<530	<530	600-850	850-1400	600-900	900-1350	<600	600-800	<800	125-500	<600	>600
-	-	<25	<35	35-48	<35	35-48	-	<25	<30	<32	<28	<43

N1	N2	N3	N4	N5	N6	N7	S1-Fe Based	S2-Co Based	S3-Ni Based	S4-Ti Based	H1	H2	H3	H4
Wrought Al	Si<12.2%	Si>12.2%	Cu, Zn Alloy	Ny, Pt, Ru, Re, Fg	C, Gr, CFRP, Comp	NMC	500-1200	1000-1500	600-1700	900-1600	-	-	-	-
-	-	-	-	-	-	-	25-48	25-48	<48	33-48	44-48	48-55	56-60	61-70



Solid Carbide End Mills

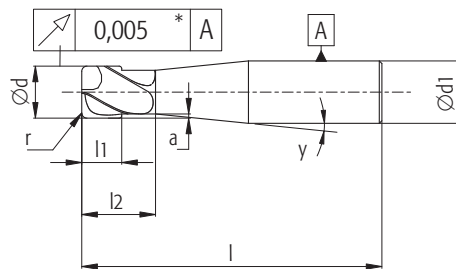
**2 Flute**

**Centre cutting high performance  
torus 2 flute for 45-70 HRc**



**P3-P4**

**H1-H4**



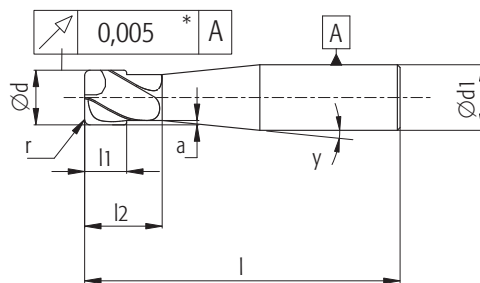
Ød (mm)	EDP No	r (mm)	Ød1 (mm)	L (mm)	L1 (mm)	L2 (mm)	a (mm)	z	γ (°)
1.5	FBK0504534	0.3	6	64	2	5	0.05	2	7
1.5	FBK0504535	0.3	6	64	2	10	0.05	2	9
2	FBK0504536	0.5	6	64	3	5	0.05	2	6
2	FBK0505818	0.5	6	64	3	8	0.05	2	7
2	FBK0504537	0.5	6	64	3	10	0.05	2	8
2	FBK0504538	0.5	6	78	3	15	0.05	2	5
2	FBK0505819	0.5	6	78	3	8	0.05	2	4
3	FBK0504539	0.5	6	64	4	7	0.05	2	5
3	FBK0504540	0.5	6	78	4	15	0.05	2	4
4	FBK0504541	0.5	6	64	5	8	0.1	2	4
4	FBK0504542	1.0	6	64	5	8	0.1	2	4
4	FBK0504543	0.5	6	78	5	15	0.1	2	3
4	FBK0504544	1.0	6	78	5	15	0.1	2	3
5	FBK0504545	0.5	6	64	5	10	0.15	2	3
5	FBK0504546	1.0	6	64	5	10	0.15	2	3
5	FBK0504547	0.5	6	78	5	20	0.15	2	3
5	FBK0504548	1.0	6	78	5	20	0.15	2	2
6	FBK0504549	0.5	6	64	6	25	0.2	2	-
6	FBK0504550	1.0	6	64	6	25	0.2	2	-
6	FBK0504551	1.5	6	64	6	25	0.2	2	-
6	FBK0504552	0.5	6	78	6	35	0.2	2	-
6	FBK0504553	1.0	6	78	6	35	0.2	2	-
6	FBK0504554	1.5	6	78	6	35	0.2	2	-
6	FBK0504555	0.5	8	100	6	25	0.2	2	2
6	FBK0504556	1.0	8	100	6	25	0.2	2	2



## Solid Carbide End Mills

# 4 Flute

## Centre cutting high performance torus 4 flute for 45-70 HRC



**P3-P4**

**H1-H4**

Ød (mm)	EDP No	r (mm)	Ød1 (mm)	L (mm)	L1 (mm)	L2 (mm)	a (mm)	z	γ (°)
3	FBK0505820	0.5	6	64	4	7	0.05	4	5
3	FBK0505821	0.5	6	78	4	15	0.05	4	4
4	FBK0505822	0.5	6	64	5	8	0.1	4	4
4	FBK0505823	1.0	6	64	5	8	0.1	4	4
4	FBK0505824	0.5	6	78	5	15	0.1	4	3
4	FBK0505825	1.0	6	78	5	15	0.1	4	3
5	FBK0505826	0.5	6	64	5	10	0.15	4	2
5	FBK0505827	1.0	6	64	5	10	0.15	4	2
5	FBK0505828	0.5	6	78	5	20	0.15	4	2
5	FBK0505829	1.0	6	78	5	20	0.15	4	2
6	FBK0504581	0.5	6	64	6	25	0.2	4	-
6	FBK0504582	1.0	6	64	6	25	0.2	4	-
6	FBK0504583	1.5	6	64	6	25	0.2	4	-
6	FBK0504584	0.5	6	78	6	35	0.2	4	-
6	FBK0504585	1.5	6	78	6	35	0.2	4	-
6	FBK0504586	0.5	8	100	6	25	0.2	4	2
6	FBK0504587	1.5	8	100	6	25	0.2	4	2
8	FBK0504588	0.5	8	64	8	25	0.3	4	-
8	FBK0504589	1.0	8	64	8	25	0.3	4	-
8	FBK0504590	2.0	8	64	8	25	0.3	4	-

Tensile strength: N/mm<sup>2</sup> | Hardness: HRC

P0	P1	P2	P3	P4	P5	P6	M1	M2	M3	K1	K2	K3
<530	<530	<530	600-850	850-1400	600-900	900-1350	<600	600-800	<800	125-500	<600	>600
-	-	<25	<35	35-48	<35	35-48	-	<25	<30	<32	<28	<43

N1	N2	N3	N4	N5	N6	N7	S1-Fe Based	S2-Co Based	S3-Ni Based	S4-Ti Based	H1	H2	H3	H4
Wrought Al	Si<12.2%	Si>12.2%	Cu, Zn Alloy	Ny, Pt, Ru, Re, Fg	C, Gr, CFRP, Comp	NMC	500-1200	1000-1500	600-1700	900-1600	-	-	-	-
-	-	-	-	-	-	-	25-48	25-48	<48	33-48	44-48	48-55	56-60	61-70



## Solid Carbide End Mills

# Multi Flute

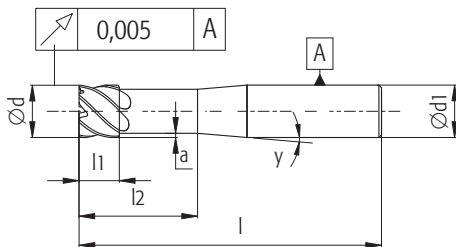
## Centre cutting high performance multi flute finisher for 45-70 HRC



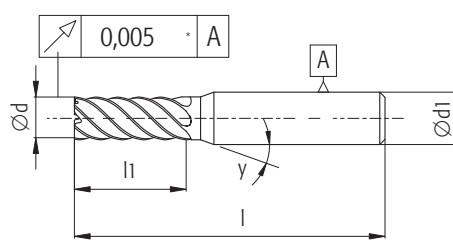
P1-P3

H1-H4

Short



Standard



\* For endmills L 100 mm.

Ød (mm)	EDP No	r (mm)	Ød1 (mm)	L (mm)	L1 (mm)	L2 (mm)	a (mm)	z	γ (°)
<b>Short</b>									
3	FBK0504610	-	6	64	3	10	0.05	6	15
4	FBK0504611	-	6	64	4	10	0.1	6	15
5	FBK0504612	-	6	64	5	15	0.15	6	15
6	FBK0504613	-	6	64	6	20	0.2	6	-
8	FBK0504614	-	8	64	8	20	0.3	6	-
10	FBK0504615	-	10	70	10	25	0.3	6	-
12	FBK0504616	-	12	78	12	25	0.3	6	-
16	FBK0504617	-	16	89	16	35	0.3	6	-
20	FBK0504618	-	20	102	20	40	0.3	8	-
<b>Standard</b>									
3	FBK0504619	-	6	64	10	-	-	6	15
4	FBK0504620	-	6	64	10	-	-	6	15
5	FBK0504621	-	6	64	15	-	-	6	15
6	FBK0504622	-	6	64	20	-	-	6	15
8	FBK0504623	-	8	64	20	-	-	6	-
10	FBK0504624	-	10	70	25	-	-	6	-
12	FBK0504625	-	12	78	25	-	-	6	-
16	FBK0504626	-	16	89	30	-	-	6	-
20	FBK0504627	-	20	102	40	-	-	8	-

Tensile strength: N/mm<sup>2</sup> | Hardness: HRC

P0	P1	P2	P3	P4	P5	P6	M1	M2	M3	K1	K2	K3
<530	<530	<530	600-850	850-1400	600-900	900-1350	<600	600-800	<800	125-500	<600	>600
-	-	<25	<35	35-48	<35	35-48	-	<25	<30	<32	<28	<43

N1	N2	N3	N4	N5	N6	N7	S1-Fe Based	S2-Co Based	S3-Ni Based	S4-Ti Based	H1	H2	H3	H4
Wrought Al	Si<12.2%	Si>12.2%	Cu, Zn Alloy	Ny, Pt, Ru, Re, Fg C, Gr, CFRP, Comp	NMC	NMC	500-1200	1000-1500	600-1700	900-1600	-	-	-	-
-	-	-	-	-	-	-	25-48	25-48	<48	33-48	44-48	48-55	56-60	61-70



## Solid Carbide End Mills

# Multi Flute

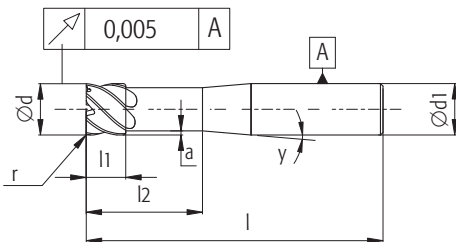
## Centre cutting high performance multi flute finisher with corner radius for 45-70 HRc



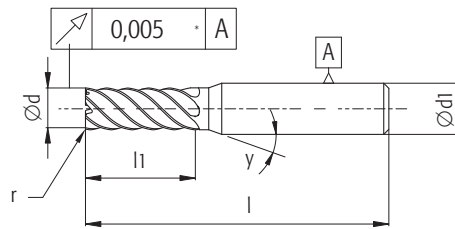
P1-P3

H1-H4

Short



Standard



\* For endmills L I 100 mm.

Ød (mm)	EDP No	r (mm)	Ød1 (mm)	L (mm)	L1 (mm)	L2 (mm)	a (mm)	z	γ (°)
<b>Short</b>									
3	FBK0504632	0.3	6	64	3	10	0.05	6	15
4	FBK0504633	0.3	6	64	4	10	0.1	6	15
5	FBK0504634	0.3	6	64	5	15	0.15	6	15
5	FBK0504635	0.5	6	64	5	15	0.15	6	15
6	FBK0504636	0.5	6	64	6	20	0.2	6	-
6	FBK0504637	1	6	64	6	20	0.2	6	-
8	FBK0504638	0.5	8	64	8	20	0.3	6	-
8	FBK0504639	1	8	64	8	20	0.3	6	-
10	FBK0504640	0.5	10	70	10	25	0.3	6	-
10	FBK0504641	1	10	70	10	25	0.3	6	-
10	FBK0504642	1.5	10	70	10	25	0.3	6	-
12	FBK0504643	0.5	12	78	12	25	0.3	6	-
12	FBK0504644	1	12	78	12	25	0.3	6	-
12	FBK0504645	2	12	78	12	25	0.3	6	-
16	FBK0504646	1	16	89	16	35	0.3	6	-
16	FBK0504647	2	16	89	16	35	0.3	6	-
20	FBK0504648	1	20	102	20	40	0.3	8	-
20	FBK0504649	2	20	102	20	40	0.3	8	-
<b>Standard</b>									
3	FBK0504650	0.3	6	64	10	-	-	6	15
4	FBK0504651	0.3	6	64	10	-	-	6	15
5	FBK0504652	0.3	6	64	15	-	-	6	15
5	FBK0504653	0.5	6	64	15	-	-	6	15