

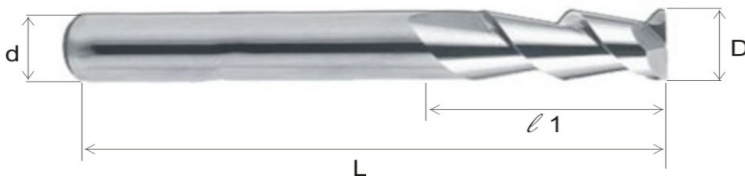


超微粒鎢鋼銑刀

ULTRAFINE TUNGSTEN STEEL MILLING CUTTER



2 Flutes Solid Carbide Endmill of Aluminum Cutting



General Cutting Parameters :

- 1 . Cutting Speed : $V_c = 130m(120m-180m)/min$
- 2 . Cutting Depth : $a_p = 1/3D(1/8D - 1/2D)$
- 3 . Cutting Width : $a_e = 1/2D(1/4D-1D)$
- 4 . Feed per Flute : $f_z = 0.15mm(0.02-0.2)$

Cutting parameters should be suitably modified based on different processing materials and hardness. (Reference page:p28~p32)

Standard Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
2F500K010050D04	1.0	3.0	50	4	2	
2F500K015050D04	1.5	4.5	50	4	2	
2F500K020050D04	2.0	6.0	50	4	2	
2F500K025050D04	2.5	7.5	50	4	2	
2F500K030050D04	3.0	9.0	50	4	2	
2F500K035050D04	3.5	10.5	50	4	2	
2F500K040050D04	4.0	12.0	50	4	2	
2F500K045050D06	4.5	13.5	50	6	2	
2F500K050050D06	5.0	15.0	50	6	2	
2F500K055050D06	5.5	16.5	50	6	2	
2F500K060050D06	6.0	18.0	50	6	2	
2F500K080060D08	8.0	24.0	60	8	2	
2F500K100075D10	10.0	30.0	75	10	2	
2F500K120075D12	12.0	36.0	75	12	2	
2F500K160100D16	16.0	48.0	100	16	2	
2F500K200100D20	20.0	60.0	100	20	2	

Extra Long

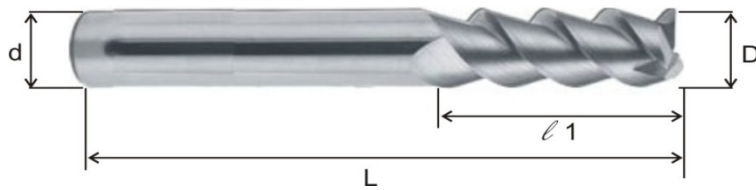
Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
2F500K040075D04	4.0	16.0	75	4	2	
2F500K040075D06	4.0	16.0	75	6	3	
2F500K050075D06	5.0	20.0	75	6	4	
2F500K060075D06	6.0	24.0	75	6	5	
2F500K080075D08	8.0	32.0	75	8	6	
2F500K100100D10	10.0	40.0	100	10	7	
2F500K120100D12	12.0	48.0	100	12	8	
2F500K140100D14	14.0	56.0	100	14	9	

Super Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
2F500K040100D04	4	20	100	4	2	
2F500K040100D06	4	20	100	6	2	
2F500K060100D06	6	30	100	6	2	
2F500K080100D08	8	40	100	8	2	
2F500K100100D10	10	50	100	10	2	
2F500K120100D12	12	60	100	12	2	



3 Flutes Solid Carbide Endmill of Aluminum Cutting



General Cutting Parameters :

- 1 . Cutting Speed : $V_c = 130m(120m-180m)/min$
- 2 . Cutting Depth : $a_p = 1/3D(1/8D - 1/2D)$
- 3 . Cutting Width : $a_e = 1/2D(1/4D-1D)$
- 4 . Feed per Flute : $f_z = 0.15mm(0.02-0.2)$

Cutting parameters should be suitably modified based on different processing materials and hardness. (Reference page:p28~p32)

Standard Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
3F500K010050D04	1.0	3.0	50	4	3	
3F500K015050D04	1.5	4.5	50	4	3	
3F500K020050D04	2.0	6.0	50	4	3	
3F500K025050D04	2.5	7.5	50	4	3	
3F500K030050D04	3.0	9.0	50	4	3	
3F500K035050D04	3.5	10.5	50	4	3	
3F500K040050D04	4.0	12.0	50	4	3	
3F500K045050D06	4.5	13.5	50	4	3	
3F500K050050D06	5.0	15.0	50	4	3	
3F500K055050D06	5.5	16.5	50	4	3	
3F500K060050D06	6.0	18.0	50	4	3	
3F500K080060D08	8.0	24.0	60	8	3	
3F500K10007DD10	10.0	30.0	75	10	3	
3F500K120075D12	12.0	36.0	75	12	3	
3F500K160100D16	16.0	48.0	100	16	3	
3F500K200100D20	20.0	60.0	100	20	3	

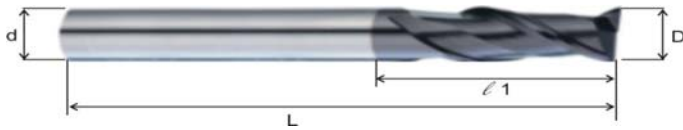
Extra Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
3F500K040075D04	4.0	16.0	75	4	3	
3F500K040075D06	4.0	16.0	75	6	3	
3F500K050075D06	5.0	20.0	75	6	3	
3F500K060075D06	6.0	24.0	75	6	3	
3F500K080075D08	8.0	32.0	75	8	3	
3F500K100100D10	10.0	40.0	100	10	3	
3F500K120100D12	12.0	48.0	100	12	3	
3F500K140100D14	14.0	56.0	100	14	3	

Super Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
3F500K040100D04	4.0	20.0	100	4	3	
3F500K040100D06	4.0	20.0	100	6	3	
3F500K060100D06	6.0	30.0	100	6	3	
3F500K080100D08	8.0	40.0	100	8	4	
3F500K100100D10	10.0	50.0	100	10	5	
3F500K120100D12	12.0	60.0	100	12	6	

2 Flutes Solid Carbide Endmill



General Cutting Parameters :

- 1 . Cutting Speed : $V_c = 130m(120m-180m)/min$
- 2 . Cutting Depth : $a_p = 1/3D(1/8D - 1/2D)$
- 3 . Cutting Width : $a_e = 1/2D(1/4D-1D)$
- 4 . Feed per Flute : $f_z = 0.15mm(0.02-0.2)$

Cutting parameters should be suitably modified based on different processing materials and hardness. (Reference page:p28~p32)

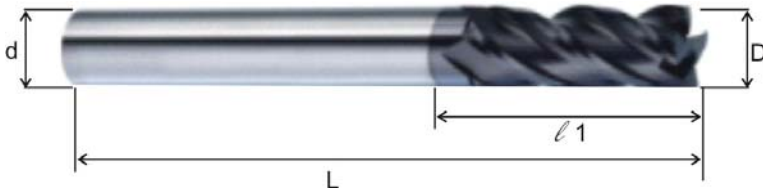
Standard Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
2F500005-050D04	0.5	1.5	50	4	2	AITiN
2F500010-050D04	1.0	3.0	50	4	2	AITiN
2F500015-050D04	1.5	4.5	50	4	2	AITiN
2F500020-050D04	2.0	6.0	50	4	2	AITiN
2F500025-050D04	2.5	7.5	50	4	2	AITiN
2F500030-050D04	3.0	9.0	50	4	2	AITiN
2F500035-050D04	3.5	10.5	50	4	2	AITiN
2F500040-050D04	4.0	12.0	50	4	2	AITiN
2F500005-050D06	0.5	1.5	50	6	2	AITiN
2F500010-050D06	1.0	3.0	50	6	2	AITiN
2F500015-050D06	1.5	4.5	50	6	2	AITiN
2F500020-050D06	2.0	6.0	50	6	2	AITiN
2F500025-050D06	2.5	7.5	50	6	2	AITiN
2F500030-050D06	3.0	9.0	50	6	2	AITiN
2F500035-050D06	3.5	10.5	50	6	2	AITiN
2F500040-050D06	4.0	12.0	50	6	2	AITiN
2F500045-050D06	4.5	13.5	50	6	2	AITiN
2F500050-050D06	5.0	15.0	50	6	2	AITiN
2F500055-050D06	5.5	16.5	50	6	2	AITiN
2F500060-050D06	6.0	18.0	50	6	2	AITiN
2F500070-060D08	7.0	21.0	60	8	2	AITiN
2F500080-060D08	8.0	24.0	60	8	2	AITiN
2F500090-075D10	9.0	27.0	75	10	2	AITiN
2F500100-075D10	10.0	30.0	75	10	2	AITiN
2F500110-075D12	11.0	33.0	75	12	2	AITiN
2F500120-075D12	12.0	36.0	75	12	2	AITiN
2F500140-075D14	14.0	42.0	75	14	2	AITiN
2F500140L100D16	14.0	42.0	100	16	2	AITiN
2F500160-100D16	16.0	48.0	100	16	2	AITiN
2F500180-100D18	18.0	54.0	100	18	2	AITiN
2F500180L100D20	18.0	54.0	100	20	2	AITiN
2F500200-100D20	20.0	60.0	100	20	2	AITiN

1. Suitable for $HRC \leq 50$ tough material (Carbon Steel, Cast Steel, Alloy Steel, Cast Iron, and Die Steel).
2. Profile endmill with sharp cutting edge.
3. Good chip removal ; Durability ; High Precision.
4. Base metal of workpiece : FC, SS400, S45C, SCM, SKS, SKD,



4 Flutes Solid Carbide Endmill



General Cutting Parameters :

- 1 . Cutting Speed : $V_c = 130m(120m-180m)/min$
- 2 . Cutting Depth : $a_p = 1/3D(1/8D - 1/2D)$
- 3 . Cutting Width : $a_e = 1/2D(1/4D-1D)$
- 4 . Feed per Flute : $f_z = 0.15mm(0.02-0.2)$

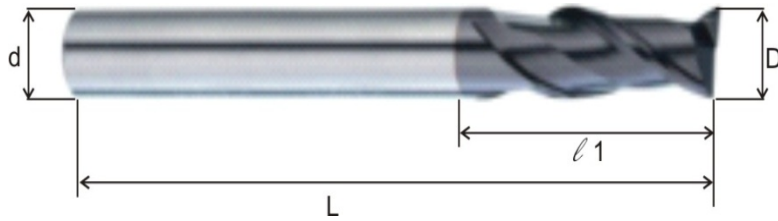
Cutting parameters should be suitably modified based on different processing materials and hardness. (Reference page:p28~p32)

Standard Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
4F500005-050D04	0.5	1.5	50	4	4	AITiN
4F500010-050D04	1.0	3.0	50	4	4	AITiN
4F500015-050D04	1.5	4.5	50	4	4	AITiN
4F500020-050D04	2.0	6.0	50	4	4	AITiN
4F500025-050D04	2.5	7.5	50	4	4	AITiN
4F500030-050D04	3.0	9.0	50	4	4	AITiN
4F500035-050D04	3.5	10.5	50	4	4	AITiN
4F500040-050D04	4.0	12.0	50	4	4	AITiN
4F500005-050D06	0.5	1.5	50	6	4	AITiN
4F500010-050D06	1.0	3.0	50	6	4	AITiN
4F500015-050D06	1.5	4.5	50	6	4	AITiN
4F500020-050D06	2.0	6.0	50	6	4	AITiN
4F500025-050D06	2.5	7.5	50	6	4	AITiN
4F500030-050D06	3.0	9.0	50	6	4	AITiN
4F500035-050D06	3.5	10.5	50	6	4	AITiN
4F500040-050D06	4.0	12.0	50	6	4	AITiN
4F500045-050D06	4.5	13.5	50	6	4	AITiN
4F500050-050D06	5.0	15.0	50	6	4	AITiN
4F500055-050D06	5.5	16.5	50	6	4	AITiN
4F500060-050D06	6.0	18.0	50	6	4	AITiN
4F500070-060D08	7.0	21.0	60	8	4	AITiN
4F500080-060D09	8.0	24.0	60	8	4	AITiN
4F500090-075D10	9.0	27.0	75	10	4	AITiN
4F500100-075D10	10.0	30.0	75	10	4	AITiN
4F500110-075D12	11.0	33.0	75	12	4	AITiN
4F500120-075D12	12.0	36.0	75	12	4	AITiN
4F500140-075D14	14.0	42.0	75	14	4	AITiN
4F500140-100D16	14.0	42.0	100	16	4	AITiN
4F500160-100D16	16.0	48.0	100	16	4	AITiN
4F500180-100D18	18.0	54.0	100	18	4	AITiN
4F500180-100D20	18.0	54.0	100	20	4	AITiN
4F500200-100D20	20.0	60.0	100	20	4	AITiN

1. Suitable for $HRC \leq 50$ tough material (Carbon Steel, Cast Steel, Alloy Steel, Cast Iron, and Die Steel).
2. Profile endmill with sharp cutting edge.
3. Good chip removal ; Durability ; High Precision.
4. Base metal of workpiece : FC, SS400, S45C, SCM, SKS, SKD,

Extra Long 2 Flutes Solid Carbide Endmill



General Cutting Parameters :

- 1 . Cutting Speed : $V_c = 130m(120m-180m)/min$
- 2 . Cutting Depth : $a_p = 1/3D(1/8D - 1/2D)$
- 3 . Cutting Width : $a_e = 1/2D(1/4D-1D)$
- 4 . Feed per Flute : $f_z = 0.15mm(0.02-0.2)$

Cutting parameters should be suitably modified based on different processing materials and hardness. (Reference page:p28~p32)

Standard Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
2F500040-075D04	4	16	75	4	2	AITiN
2F500030-075D06	3	13	75	6	2	AITiN
2F500040-075D06	4	16	75	6	2	AITiN
2F500050-075D06	5	20	75	6	2	AITiN
2F500060-075D06	6	24	75	6	2	AITiN
2F500080-075D08	8	32	75	8	2	AITiN
2F500100-100D10	10	40	100	10	2	AITiN
2F500120-100D12	12	48	100	12	2	AITiN
2F500140-150D16	14	56	150	16	2	AITiN
2F500160-150D16	16	64	150	16	2	AITiN
2F500180-150D20	18	72	150	20	2	AITiN
2F500200-150D20	20	80	150	20	2	AITiN

Extra Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
2F500040-100D04	4	20	100	4	2	AITiN
2F500060-100D06	6	30	100	6	2	AITiN
2F500080-100D08	8	40	100	8	2	AITiN
2F500100-150D10	10	50	150	10	2	AITiN
2F500120-150D12	12	60	150	12	2	AITiN
2F500160-200D16	16	80	200	16	2	AITiN
2F500200-200D20	20	100	200	20	2	AITiN

1. Suitable for $HRC \leq 50$ tough material (Carbon Steel, Cast Steel, Alloy Steel, Cast Iron, and Die Steel).
2. Profile endmill with sharp cutting edge.
3. Good chip removal ; Durability ; High Precision.
4. Base metal of workpiece : FC, SS400, S45C, SCM, SKS, SKD,



Extra Long 4 Flutes Solid Carbide Endmill



General Cutting Parameters :

- 1 . Cutting Speed : $V_c = 130m(120m-180m)/min$
 - 2 . Cutting Depth : $a_p = 1/3D(1/8D - 1/2D)$
 - 3 . Cutting Width : $a_e = 1/2D(1/4D-1D)$
 - 4 . Feed per Flute : $f_z = 0.15mm(0.02-0.2)$
- Cutting parameters should be suitably modified based on different processing materials and hardness. (Reference page:p28~p32)

Standard Long

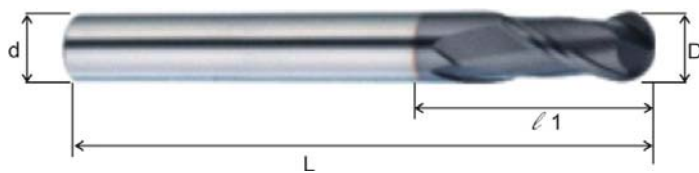
Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
4F50040-075D04	4	16	75	4	4	AITiN
4F50030-075D06	3	13	75	6	4	AITiN
4F50040-075D06	4	16	75	6	4	AITiN
4F50050-075D06	5	20	75	6	4	AITiN
4F50060-075D06	6	24	75	6	4	AITiN
4F50080-075D08	8	32	75	8	4	AITiN
4F50100-100D10	10	40	100	10	4	AITiN
4F50120-100D12	12	48	100	12	4	AITiN
4F50140-150D16	14	56	150	16	4	AITiN
4F50160-150D16	16	64	150	16	4	AITiN
4F50180-150D20	18	72	150	20	4	AITiN
4F50200-150D20	20	80	150	20	4	AITiN

Super Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
4F50040-100D04	4	20	100	4	4	AITiN
4F50060-100D06	6	30	100	6	4	AITiN
4F50080-100D08	8	40	100	8	4	AITiN
4F50100-150D10	10	50	150	10	4	AITiN
4F50120-150D12	12	60	150	12	4	AITiN
4F50160-200D16	16	80	200	16	4	AITiN
4F50200-200D20	20	100	200	20	4	AITiN

1. Suitable for $HRC \leq 50$ tough material (Carbon Steel, Cast Steel, Alloy Steel, Cast Iron, and Die Steel).
2. Profile endmill with sharp cutting edge.
3. Good chip removal ; Durability ; High Precision.
4. Base metal of workpiece : FC, SS400, S45C, SCM, SKS, SKD,

2 Flutes Ball-nose Solid Carbide Endmill



General Cutting Parameters :

- 1 . Cutting Speed : $V_c = 130m(120m-180m)/min$
 - 2 . Cutting Depth : $a_p = 1/3D(1/8D - 1/2D)$
 - 3 . Cutting Width : $a_e = 1/2D(1/4D - 1D)$
 - 4 . Feed per Flute : $f_z = 0.15mm(0.02-0.2)$
- Cutting parameters should be suitably modified based on different processing materials and hardness. (Reference page:p28~p32)

Standard Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
2F500R050050D04	R0.5	2	50	4	2	AITiN
2F500R075050D04	R0.75	3	50	4	2	AITiN
2F500R100050D04	R1.0	4	50	4	2	AITiN
2F500R125050D04	R1.25	5	50	4	2	AITiN
2F500R150050D04	R1.5	6	50	4	2	AITiN
2F500R200050D04	R2.0	8	50	4	2	AITiN
2F500R050050D06	R0.5	2	50	6	2	AITiN
2F500R075050D06	R0.75	3	50	6	2	AITiN
2F500R100050D06	R1.0	4	50	6	2	AITiN
2F500R150050D06	R1.5	6	50	6	2	AITiN
2F500R200050D06	R2.0	10	50	6	2	AITiN
2F500R300050D06	R3.0	12	50	6	2	AITiN
2F500R400060D08	R4.0	16	60	8	2	AITiN
2F500R500075D10	R5.0	20	75	10	2	AITiN
2F500R600075D12	R6.0	24	75	12	2	AITiN
2F500R800100D16	R8.0	30	100	16	2	AITiN
2F500R100100D20	R10.0	32	100	20	2	AITiN

Extra Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
2F500R200075D04	R2.0	8	75	4	2	AITiN
2F500R300075D06	R3.0	12	75	6	2	AITiN
2F500R400075D08	R4.0	16	75	8	2	AITiN
2F500R500100D10	R5.0	20	100	10	2	AITiN
2F500R600100D12	R6.0	24	100	12	2	AITiN

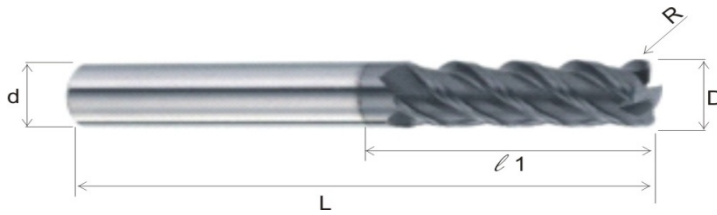
Super Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
2F500R200100D04	R2.0	8	100	4	2	AITiN
2F500R300100D06	R3.0	12	100	6	2	AITiN
2F500R400100D08	R4.0	16	100	8	2	AITiN
2F500R500150D10	R5.0	20	150	10	2	AITiN
2F500R600150D12	R6.0	24	150	12	2	AITiN

1. Suitable for $HRC \leq 50$ tough material (Carbon Steel, Cast Steel, Alloy Steel, Cast Iron, and Die Steel).
2. Profile endmill with sharp cutting edge.
3. Good chip removal ; Durability ; High Pricision.
4. Base metal of workpiece : FC, SS400, S45C, SCM, SKS, SKD,



4 Flutes Carbide Radius End mill



General Cutting Parameters :

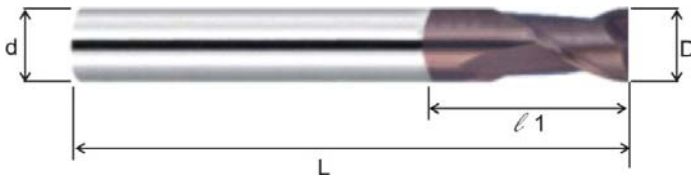
- 1 . Cutting Speed : $V_c = 130m(120m-180m)/min$
 - 2 . Cutting Depth : $a_p = 1/3D(1/8D - 1/2D)$
 - 3 . Cutting Width : $a_e = 1/2D(1/4D-1D)$
 - 4 . Feed per Flute : $f_z = 0.15mm(0.02-0.2)$
- Cutting parameters should be suitably modified based on different processing materials and hardness. (Reference page:p28~p32)

Standard Long

Model No.	Cutting Diameter (D)	(R)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
50B010R02050D04	1	0.2	2	50	4	4	AlTiN
50B015R02050D04	1.5	0.2	3	50	4	4	AlTiN
50B020R02050D04	2	0.2	4	50	4	4	AlTiN
50B025R02050D04	2.5	0.2	5	50	4	4	AlTiN
50B030R05050D04	3	0.5	6	50	4	4	AlTiN
50B040R05050D04	4	0.5	8	50	4	4	AlTiN
50B050R05050D06	5	0.5	12	50	6	4	AlTiN
50B060R05050D06	6	0.5	12	50	6	4	AlTiN
50B080R05060D08	8	0.5	16	60	8	4	AlTiN
50B100R05075D10	10	0.5	20	75	10	4	AlTiN
50B120R05075D12	12	0.5	24	75	12	4	AlTiN
50B040R05075D04	4	0.5	8	75	4	4	AlTiN
50B060R05075D06	6	0.5	12	75	6	4	AlTiN
50B080R05075D08	8	0.5	16	75	8	4	AlTiN
50B040R05100D04	4	0.5	8	100	4	4	AlTiN
50B060R05100D06	6	0.5	12	100	6	4	AlTiN
50B080R05100D08	8	0.5	16	100	8	4	AlTiN
50B100R05100D10	10	0.5	20	100	10	4	AlTiN
50B120R05100D12	12	0.5	24	100	12	4	AlTiN
50B030R10050D04	3	1	6	50	4	4	AlTiN
50B040R10050D04	4	1	8	50	4	4	AlTiN
50B050R10050D06	5	1	12	50	6	4	AlTiN
50B060R10050D06	6	1	12	50	6	4	AlTiN
50B080R10060D08	8	1	16	60	8	4	AlTiN
50B040R10075D04	4	1	8	75	4	4	AlTiN
50B060R10075D06	6	1	12	75	6	4	AlTiN
50B080R10075D08	8	1	16	75	8	4	AlTiN
50B100R10075D10	10	1	20	75	10	4	AlTiN
50B120R10075D12	12	1	24	75	12	4	AlTiN
50B040R10100D04	4	1	8	100	4	4	AlTiN
50B060R10100D06	6	1	12	100	6	4	AlTiN
50B080R10100D08	8	1	16	100	8	4	AlTiN
50B100R10100D10	10	1	20	100	10	4	AlTiN
50B120R10100D12	12	1	24	100	12	4	AlTiN

1. Suitable for $HRC \leq 50$ tough material (Carbon Steel, Cast Steel, Alloy Steel, Cast Iron, and Die Steel).
2. Profile endmill with sharp cutting edge.
3. Good chip removal ; Durability ; High Precision.
4. Base metal of workpiece : FC, SS400, S45C, SCM, SKS, SKD,

2 Flutes Solid Carbide Endmill



General Cutting Parameters :

- 1 . Cutting Speed : $V_c = 130m(120m-180m)/min$
- 2 . Cutting Depth : $a_p = 1/3D(1/8D - 1/2D)$
- 3 . Cutting Width : $a_e = 1/2D(1/4D-1D)$
- 4 . Feed per Flute : $f_z = 0.15mm(0.02-0.2)$

Cutting parameters should be suitably modified based on different processing materials and hardness. (Reference page:p28~p32)

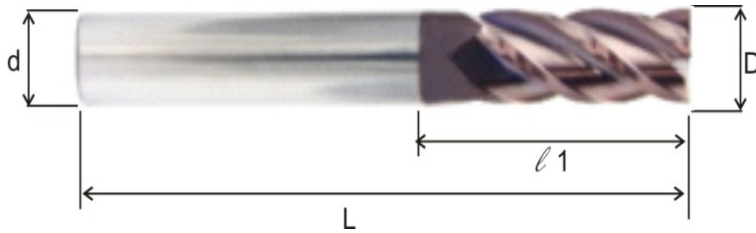
Standard Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
2F550005-050D04	0.5	1.5	50	4	2	AlCrN
2F550010-050D04	1.0	3.0	50	4	2	AlCrN
2F550015-050D04	1.5	4.5	50	4	2	AlCrN
2F550020-050D04	2.0	6.0	50	4	2	AlCrN
2F550025-050D04	2.5	7.5	50	4	2	AlCrN
2F550030-050D04	3.0	9.0	50	4	2	AlCrN
2F550035-050D04	3.5	10.5	50	4	2	AlCrN
2F550040-050D04	4.0	12.0	50	4	2	AlCrN
2F550005-050D06	0.5	1.5	50	6	2	AlCrN
2F550010-050D06	1.0	3.0	50	6	2	AlCrN
2F550015-050D06	1.5	4.5	50	6	2	AlCrN
2F550020-050D06	2.0	6.0	50	6	2	AlCrN
2F550025-050D06	2.5	7.5	50	6	2	AlCrN
2F550030-050D06	3.0	9.0	50	6	2	AlCrN
2F550035-050D06	3.5	10.5	50	6	2	AlCrN
2F550040-050D06	4.0	12.0	50	6	2	AlCrN
2F550045-050D06	4.5	13.5	50	6	2	AlCrN
2F550050-050D06	5.0	15.0	50	6	2	AlCrN
2F550055-050D06	5.5	16.5	50	6	2	AlCrN
2F550060-050D06	6.0	18.0	50	6	2	AlCrN
2F550070-060D08	7.0	21.0	60	8	2	AlCrN
2F550080-060D08	8.0	24.0	60	8	2	AlCrN
2F550090-075D10	9.0	27.0	75	10	2	AlCrN
2F550100-075D10	10.0	30.0	75	10	2	AlCrN
2F550110-075D12	11.0	33.0	75	12	2	AlCrN
2F550120-075D12	12.0	36.0	75	12	2	AlCrN
2F550140-075D14	14.0	42.0	75	14	2	AlCrN
2F550140-100D16	14.0	42.0	100	16	2	AlCrN
2F550160-100D16	16.0	48.0	100	16	2	AlCrN
2F550180-100D18	18.0	54.0	100	18	2	AlCrN
2F550180-100D20	18.0	54.0	100	20	2	AlCrN
2F550200-100D20	20.0	60.0	100	20	2	AlCrN

1. Suitable for $HRC \leq 55$ tough material (Carbon Steel, Cast Steel, Alloy Steel, Cast Iron, and Die Steel).
2. Profile endmill with sharp cutting edge.
3. Good chip removal ; Durability ; High Pricision.
4. Base metal of workpiece : SS400, S45C, SCM, SKS, SKD, SKT, SKD



4 Flutes Solid Carbide Endmill



General Cutting Parameters :

- 1 . Cutting Speed : $V_c = 130m(120m-180m)/min$
- 2 . Cutting Depth : $a_p = 1/3D(1/8D - 1/2D)$
- 3 . Cutting Width : $a_e = 1/2D(1/4D-1D)$
- 4 . Feed per Flute : $f_z = 0.15mm(0.02-0.2)$

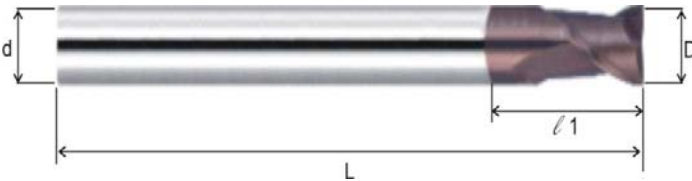
Cutting parameters should be suitably modified based on different processing materials and hardness. (Reference page:p28~p32)

Standard Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
4F550005-050D04	0.5	1.5	50	4	4	AlCrN
4F550010-050D04	1.0	3.0	50	4	4	AlCrN
4F550015-050D04	1.5	4.5	50	4	4	AlCrN
4F550020-050D04	2.0	6.0	50	4	4	AlCrN
4F550025-050D04	2.5	7.5	50	4	4	AlCrN
4F550030-050D04	3.0	9.0	50	4	4	AlCrN
4F550035-050D04	3.5	10.5	50	4	4	AlCrN
4F550040-050D04	4.0	12.0	50	4	4	AlCrN
4F550005-050D06	0.5	1.5	50	6	4	AlCrN
4F550010-050D06	1.0	3.0	50	6	4	AlCrN
4F550015-050D06	1.5	4.5	50	6	4	AlCrN
4F550020-050D06	2.0	6.0	50	6	4	AlCrN
4F550025-050D06	2.5	7.5	50	6	4	AlCrN
4F550030-050D06	3.0	9.0	50	6	4	AlCrN
4F550035-050D06	3.5	10.5	50	6	4	AlCrN
4F550040-050D06	4.0	12.0	50	6	4	AlCrN
4F550045-050D06	4.5	13.5	50	6	4	AlCrN
4F550050-050D06	5.0	15.0	50	6	4	AlCrN
4F550055-050D06	5.5	16.5	50	6	4	AlCrN
4F550060-050D06	6.0	18.0	50	6	4	AlCrN
4F550070-060D08	7.0	21.0	60	8	4	AlCrN
4F550080-060D08	8.0	24.0	60	8	4	AlCrN
4F550090-075D10	9.0	27.0	75	10	4	AlCrN
4F550100-075D10	10.0	30.0	75	10	4	AlCrN
4F550110-075D12	11.0	33.0	75	12	4	AlCrN
4F550120-075D12	12.0	36.0	75	12	4	AlCrN
4F550140-075D14	14.0	42.0	75	14	4	AlCrN
4F550140-100D16	14.0	42.0	100	16	4	AlCrN
4F550160-100D16	16.0	48.0	100	16	4	AlCrN
4F550180-100D18	18.0	54.0	100	18	4	AlCrN
4F550180-100D20	18.0	54.0	100	20	4	AlCrN
4F550200-100D20	20.0	60.0	100	20	4	AlCrN

1. Suitable for $HRC \leq 55$ tough material (Carbon Steel, Cast Steel, Alloy Steel, Cast Iron, and Die Steel).
2. Profile endmill with sharp cutting edge.
3. Good chip removal ; Durability ; High Precision.
4. Base metal of workpiece : SS400, S45C, SCM, SKS, SKD, SKT, SKD

Extra Long 2 Flutes Solid Carbide Endmill



General Cutting Parameters :

- 1 . Cutti ng Speed : $V_c = 130m(120m-180m)/min$
- 2 . Cutting Depth : $a_p = 1/3D(1/8D - 1/2D)$
- 3 . Cutting Width : $a_e = 1/2D(1/4D-1D)$
- 4 . Feed per Flute : $f_z = 0.15mm(0.02-0.2)$

Cutting parameters should be suitably modified based on different processing materials and hardness. (Reference page:p28~p32)

Standard Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
2F550040-075D04	4	16	75	4	2	AlCrN
2F550030-075D06	3	13	75	6	2	AlCrN
2F550040-075D06	4	16	75	6	2	AlCrN
2F550050-075D06	5	20	75	6	2	AlCrN
2F550060-075D06	6	24	75	6	2	AlCrN
2F550080-075D08	8	32	75	8	2	AlCrN
2F550100-100D10	10	40	100	10	2	AlCrN
2F550120-100D12	12	48	100	12	2	AlCrN
2F550140-150D16	14	56	150	16	2	AlCrN
2F550160-150D16	16	64	150	16	2	AlCrN
2F550180-150D20	18	72	150	20	2	AlCrN
2F550200-150D20	20	80	150	20	2	AlCrN

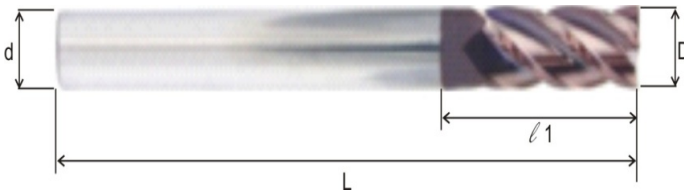
Extra Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
2F550040-100D04	4	20	100	4	2	AlCrN
2F550060-100D06	6	30	100	6	2	AlCrN
2F550080-100D08	8	40	100	8	2	AlCrN
2F550100-150D10	10	50	150	10	2	AlCrN
2F550120-150D12	12	60	150	12	2	AlCrN
2F550160-200D16	16	80	200	16	2	AlCrN
2F550200-200D20	20	100	200	20	2	AlCrN

1. Suitable for $HRC \leq 55$ tough material (Carbon Steel, Cast Steel, Alloy Steel, Cast Iron, and Die Steel).
2. Profile endmill with sharp cutting edge.
3. Good chip removal ; Durability ; High Pricision.
4. Base metal of workpiece : SS400, S45C, SCM, SKS, SKD, SKT, SKD



Extra Long 4 Flutes Solid Carbide Endmill



General Cutting Parameters :

- 1 . Cutting Speed : $V_c = 130m(120m-180m)/min$
- 2 . Cutting Depth : $a_p = 1/3D(1/8D - 1/2D)$
- 3 . Cutting Width : $a_e = 1/2D(1/4D-1D)$
- 4 . Feed per Flute : $f_z = 0.15mm(0.02-0.2)$

Cutting parameters should be suitably modified based on different processing materials and hardness. (Reference page:p28~p32)

Standard Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
4F550040-075D04	4	16	75	4	4	AlCrN
4F550030-075D06	3	13	75	6	4	AlCrN
4F550040-075D06	4	16	75	6	4	AlCrN
4F550050-075D06	5	20	75	6	4	AlCrN
4F550060-075D06	6	24	75	6	4	AlCrN
4F550080-075D08	8	32	75	8	4	AlCrN
4F550100-100D10	10	40	100	10	4	AlCrN
4F550120-100D12	12	48	100	12	4	AlCrN
4F550140-150D16	14	56	150	16	4	AlCrN
4F550160-150D16	16	64	150	16	4	AlCrN
4F550180-150D20	18	72	150	20	4	AlCrN
4F550200-150D20	20	80	150	20	4	AlCrN

Super Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
2F550040-100D04	4	20	100	4	4	AlCrN
2F550060-100D06	6	30	100	6	4	AlCrN
2F550080-100D08	8	40	100	8	4	AlCrN
2F550100-150D10	10	50	150	10	4	AlCrN
2F550120-150D12	12	60	150	12	4	AlCrN
2F550160-200D16	16	80	200	16	4	AlCrN
2F550200-200D20	20	100	200	20	4	AlCrN

1. Suitable for $HRC \leq 55$ tough material (Carbon Steel, Cast Steel, Alloy Steel, Cast Iron, and Die Steel).
2. Profile endmill with sharp cutting edge.
3. Good chip removal ; Durability ; High Precision.
4. Base metal of workpiece : SS400, S45C, SCM, SKS, SKD, SKT, SKD

2 Flutes Ball-nose Solid Carbide Endmill



General Cutting Parameters :

- 1 . Cutting Speed : $V_c = 130m(120m-180m)/min$
 - 2 . Cutting Depth : $a_p = 1/3D(1/8D - 1/2D)$
 - 3 . Cutting Width : $a_e = 1/2D(1/4D-1D)$
 - 4 . Feed per Flute : $f_z = 0.15mm(0.02-0.2)$
- Cutting parameters should be suitably modified based on different processing materials and hardness. (Reference page:p28~p32)

Standard Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
2F550R050050D04	R0.5	2	50	4	2	AlCrN
2F550R075050D04	R0.75	3	50	4	2	AlCrN
2F550R100050D04	R1.0	4	50	4	2	AlCrN
2F550R125050D04	R1.25	5	50	4	2	AlCrN
2F550R150050D04	R1.5	6	50	4	2	AlCrN
2F550R200050D04	R2.0	8	50	4	2	AlCrN
2F550R050050D06	R0.5	2	50	6	2	AlCrN
2F550R075050D06	R0.75	3	50	6	2	AlCrN
2F550R100050D06	R1.0	4	50	6	2	AlCrN
2F550R150050D06	R1.5	6	50	6	2	AlCrN
2F550R200050D06	R2.0	10	50	6	2	AlCrN
2F550R300050D06	R3.0	12	50	6	2	AlCrN
2F550R400060D08	R4.0	16	60	8	2	AlCrN
2F550R500075D10	R5.0	20	75	10	2	AlCrN
2F550R600075D12	R6.0	24	75	12	2	AlCrN
2F550R800100D16	R8.0	30	100	16	2	AlCrN
2F550R100100D20	R10.0	32	100	20	2	AlCrN

Extra Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
2F550R200075D04	R2.0	8	75	4	2	AlCrN
2F550R300075D06	R3.0	12	75	6	2	AlCrN
2F550R400075D08	R4.0	16	75	8	2	AlCrN
2F550R500100D10	R5.0	20	100	10	2	AlCrN
2F550R600100D12	R6.0	24	100	12	2	AlCrN

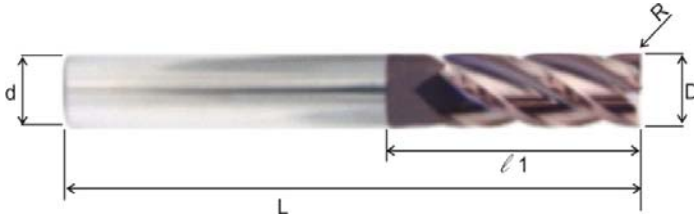
Super Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
2F550R200100D04	R2.0	8	100	4	2	AlCrN
2F550R300100D06	R3.0	12	100	6	2	AlCrN
2F550R400100D08	R4.0	16	100	8	2	AlCrN
2F550R500150D10	R5.0	20	150	10	2	AlCrN
2F550R600150D12	R6.0	24	150	12	2	AlCrN

1. Suitable for $HRC \leq 55$ tough material (Carbon Steel, Cast Steel, Alloy Steel, Cast Iron, and Die Steel).
2. Profile endmill with sharp cutting edge.
3. Good chip removal ; Durability ; High Precision.
4. Base metal of workpiece : SS400, S45C, SCM, SKS, SKD, SKT, SKD



4 Flutes Carbide Radius End mill



General Cutting Parameters :

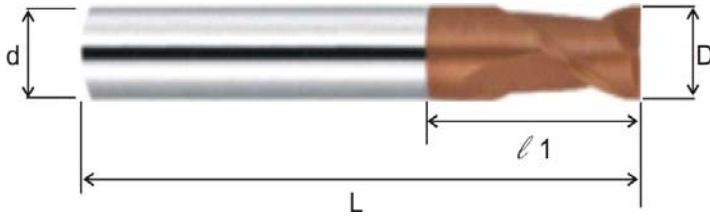
- 1 . Cutting Speed : $V_c = 130m(120m-180m)/min$
 - 2 . Cutting Depth : $a_p = 1/3D(1/8D - 1/2D)$
 - 3 . Cutting Width : $a_e = 1/2D(1/4D-1D)$
 - 4 . Feed per Flute : $f_z = 0.15mm(0.02-0.2)$
- Cutting parameters should be suitably modified based on different processing materials and hardness. (Reference page:p28~p32)

Standard Long

Model No.	Cutting Diameter (D)	(R)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
55B010R02050D04	1	0.2	2	50	4	4	AlCrN
55B015R02050D04	1.5	0.2	3	50	4	4	AlCrN
55B020R02050D04	2	0.2	4	50	4	4	AlCrN
55B025R02050D04	2.5	0.2	5	50	4	4	AlCrN
55B030R05050D04	3	0.5	6	50	4	4	AlCrN
55B040R05050D04	4	0.5	8	50	4	4	AlCrN
55B050R05050D06	5	0.5	12	50	6	4	AlCrN
55B060R05050D06	6	0.5	12	50	6	4	AlCrN
55B080R05060D08	8	0.5	16	60	8	4	AlCrN
55B100R05075D10	10	0.5	20	75	10	4	AlCrN
55B120R05075D12	12	0.5	24	75	12	4	AlCrN
55B040R05075D04	4	0.5	8	75	4	4	AlCrN
55B060R05075D06	6	0.5	12	75	6	4	AlCrN
55B080R05075D08	8	0.5	16	75	8	4	AlCrN
55B040R05100D04	4	0.5	8	100	4	4	AlCrN
55B060R05100D06	6	0.5	12	100	6	4	AlCrN
55B080R05100D08	8	0.5	16	100	8	4	AlCrN
55B100R05100D10	10	0.5	20	100	10	4	AlCrN
55B120R05100D12	12	0.5	24	100	12	4	AlCrN
55B030R10050D04	3	1	6	50	4	4	AlCrN
55B040R10050D04	4	1	8	50	4	4	AlCrN
55B050R10050D06	5	1	12	50	6	4	AlCrN
55B060R10050D06	6	1	12	50	6	4	AlCrN
55B080R10060D08	8	1	16	60	8	4	AlCrN
55B040R10075D04	4	1	8	75	4	4	AlCrN
55B060R10075D06	6	1	12	75	6	4	AlCrN
55B080R10075D08	8	1	16	75	8	4	AlCrN
55B100R10075D10	10	1	20	75	10	4	AlCrN
55B120R10075D12	12	1	24	75	12	4	AlCrN
55B040R10100D04	4	1	8	100	4	4	AlCrN
55B060R10100D06	6	1	12	100	6	4	AlCrN
55B080R10100D08	8	1	16	100	8	4	AlCrN
55B100R10100D10	10	1	20	100	10	4	AlCrN
55B120R10100D12	12	1	24	100	12	4	AlCrN

1. Suitable for $HRC \leq 55$ tough material (Carbon Steel, Cast Steel, Alloy Steel, Cast Iron, and Die Steel).
2. Profile endmill with sharp cutting edge.
3. Good chip removal ; Durability ; High Precision.
4. Base metal of workpiece : SS400, S45C, SCM, SKS, SKD, SKT, SKD

2 Flutes Solid Carbide Endmill



General Cutting Parameters :

- 1 . Cutting Speed : $V_c = 130m(120m-180m)/min$
- 2 . Cutting Depth : $a_p = 1/3D(1/8D - 1/2D)$
- 3 . Cutting Width : $a_e = 1/2D(1/4D-1D)$
- 4 . Feed per Flute : $f_z = 0.15mm(0.02-0.2)$

Cutting parameters should be suitably modified based on different processing materials and hardness. (Reference page:p28~p32)

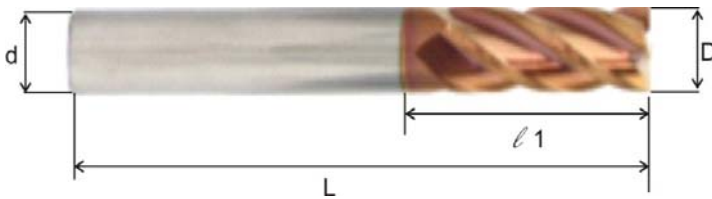
Standard Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
2F600005-050D04	0.5	1.5	50	4	2	TiSiN
2F600010-050D04	1.0	3.0	50	4	2	TiSiN
2F600015-050D04	1.5	4.5	50	4	2	TiSiN
2F600020-050D04	2.0	6.0	50	4	2	TiSiN
2F600025-050D04	2.5	7.5	50	4	2	TiSiN
2F600030-050D04	3.0	9.0	50	4	2	TiSiN
2F600035-050D04	3.5	10.5	50	4	2	TiSiN
2F600040-050D04	4.0	12.0	50	4	2	TiSiN
2F600005-050D06	0.5	1.5	50	6	2	TiSiN
2F600010-050D06	1.0	3.0	50	6	2	TiSiN
2F600015-050D06	1.5	4.5	50	6	2	TiSiN
2F600020-050D06	2.0	6.0	50	6	2	TiSiN
2F600025-050D06	2.5	7.5	50	6	2	TiSiN
2F600030-050D06	3.0	9.0	50	6	2	TiSiN
2F600035-050D06	3.5	10.5	50	6	2	TiSiN
2F600040-050D06	4.0	12.0	50	6	2	TiSiN
2F600045-050D06	4.5	13.5	50	6	2	TiSiN
2F600050-050D06	5.0	15.0	50	6	2	TiSiN
2F600055-050D06	5.5	16.5	50	6	2	TiSiN
2F600060-050D06	6.0	18.0	50	6	2	TiSiN
2F600070-060D08	7.0	21.0	60	8	2	TiSiN
2F600080-060D08	8.0	24.0	60	8	2	TiSiN
2F600090-075D10	9.0	27.0	75	10	2	TiSiN
2F600100-075D10	10.0	30.0	75	10	2	TiSiN
2F600110-075D12	11.0	33.0	75	12	2	TiSiN
2F600120-075D12	12.0	36.0	75	12	2	TiSiN
2F600140-075D14	14.0	42.0	75	14	2	TiSiN
2F600140L100D16	14.0	42.0	100	16	2	TiSiN
2F600160-100D16	16.0	48.0	100	16	2	TiSiN
2F600180-100D18	18.0	54.0	100	18	2	TiSiN
2F600180L100D20	18.0	54.0	100	20	2	TiSiN
2F600200-100D20	20.0	60.0	100	20	2	TiSiN

1. Suitable for $HRC \leq 60$ tough material (Carbon Steel, Cast Steel, Alloy Steel, Cast Iron, and Die Steel ,Hardened Steel)
2. Profile endmill with sharp cutting edge.
3. Good chip removal ; Durability ; High Precision.
4. Base metal of workpiece : SS400, S45C, SCM, SKS, SKD, SKT, SKD, SUS,



4 Flutes Solid Carbide Endmill



General Cutting Parameters :

- 1 . Cutting Speed : $V_c = 130m(120m-180m)/min$
- 2 . Cutting Depth : $a_p = 1/3D(1/8D - 1/2D)$
- 3 . Cutting Width : $a_e = 1/2D(1/4D-1D)$
- 4 . Feed per Flute : $f_z = 0.15mm(0.02-0.2)$

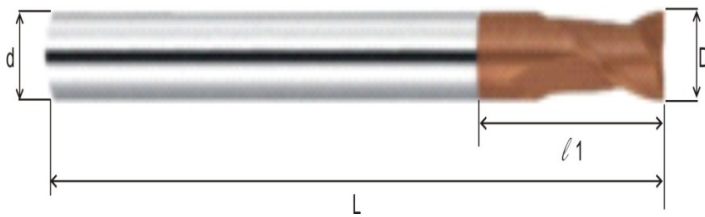
Cutting parameters should be suitably modified based on different processing materials and hardness. (Reference page:p28~p32)

Standard Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
4F600005-050D04	0.5	1.5	50	4	4	TiSiN
4F600010-050D04	1.0	3.0	50	4	4	TiSiN
4F600015-050D04	1.5	4.5	50	4	4	TiSiN
4F600020-050D04	2.0	6.0	50	4	4	TiSiN
4F600025-050D04	2.5	7.5	50	4	4	TiSiN
4F600030-050D04	3.0	9.0	50	4	4	TiSiN
4F600035-050D04	3.5	10.5	50	4	4	TiSiN
4F600040-050D04	4.0	12.0	50	4	4	TiSiN
4F600005-050D06	0.5	1.5	50	6	4	TiSiN
4F600010-050D06	1.0	3.0	50	6	4	TiSiN
4F600015-050D06	1.5	4.5	50	6	4	TiSiN
4F600020-050D06	2.0	6.0	50	6	4	TiSiN
4F600025-050D06	2.5	7.5	50	6	4	TiSiN
4F600030-050D06	3.0	9.0	50	6	4	TiSiN
4F600035-050D06	3.5	10.5	50	6	4	TiSiN
4F600040-050D06	4.0	12.0	50	6	4	TiSiN
4F600045-050D06	4.5	13.5	50	6	4	TiSiN
4F600050-050D06	5.0	15.0	50	6	4	TiSiN
4F600055-050D06	5.5	16.5	50	6	4	TiSiN
4F600060-050D06	6.0	18.0	50	6	4	TiSiN
4F600070-060D08	7.0	21.0	60	8	4	TiSiN
4F600080-060D08	8.0	24.0	60	8	4	TiSiN
4F600090-075D10	9.0	27.0	75	10	4	TiSiN
4F600100-075D10	10.0	30.0	75	10	4	TiSiN
4F600110-075D12	11.0	33.0	75	12	4	TiSiN
4F600120-075D12	12.0	36.0	75	12	4	TiSiN
4F600140-075D14	14.0	42.0	75	14	4	TiSiN
4F600140-100D16	14.0	42.0	100	16	4	TiSiN
4F600160-100D16	16.0	48.0	100	16	4	TiSiN
4F600180-100D18	18.0	54.0	100	18	4	TiSiN
4F600180-100D20	18.0	54.0	100	20	4	TiSiN
4F600200-100D20	20.0	60.0	100	20	4	TiSiN

1. Suitable for $HRC \leq 60$ tough material (Carbon Steel, Cast Steel, Alloy Steel, Cast Iron, and Die Steel ,Hardened Steel)
2. Profile endmill with sharp cutting edge.
3. Good chip removal ; Durability ; High Pricision.
4. Base metal of workpiece : SS400, S45C, SCM, SKS, SKD, SKT, SKD, SUS,

Extra Long 2 Flutes Solid Carbide Endmill



General Cutting Parameters :

- 1 . Cutting Speed : $V_c = 130m(120m-180m)/min$
- 2 . Cutting Depth : $a_p = 1/3D(1/8D - 1/2D)$
- 3 . Cutting Width : $a_e = 1/2D(1/4D-1D)$
- 4 . Feed per Flute : $f_z = 0.15mm(0.02-0.2)$

Cutting parameters should be suitably modified based on different processing materials and hardness. (Reference page:p28~p32)

Standard Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
2F600040-075D04	4	16	75	4	2	TiSiN
2F600030-075D06	3	13	75	6	2	TiSiN
2F600040-075D06	4	16	75	6	2	TiSiN
2F600050-075D06	5	20	75	6	2	TiSiN
2F600060-075D06	6	24	75	6	2	TiSiN
2F600080-075D08	8	32	75	8	2	TiSiN
2F600100-100D10	10	40	100	10	2	TiSiN
2F600120-100D12	12	48	100	12	2	TiSiN
2F600140-150D16	14	56	150	16	2	TiSiN
2F600160-150D16	16	64	150	16	2	TiSiN
2F600180-150D20	18	72	150	20	2	TiSiN
2F600200-150D20	20	80	150	20	2	TiSiN

Extra Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
2F600040-100D04	4	20	100	4	2	TiSiN
2F600060-100D06	6	30	100	6	2	TiSiN
2F600080-100D08	8	40	100	8	2	TiSiN
2F600100-150D10	10	50	150	10	2	TiSiN
2F600120-150D12	12	60	150	12	2	TiSiN
2F600160-200D16	16	80	200	16	2	TiSiN
2F600200-200D20	20	100	200	20	2	TiSiN

1. Suitable for $HRC \leq 60$ tough material (Carbon Steel, Cast Steel, Alloy Steel, Cast Iron, and Die Steel ,Hardened Steel)
2. Profile endmill with sharp cutting edge.
3. Good chip removal ; Durability ; High Pricision.
4. Base metal of workpiece : SS400, S45C, SCM, SKS, SKD, SKT, SKD, SUS,



Extra Long 4 Flutes Solid Carbide Endmill



General Cutting Parameters :

- 1 . Cutting Speed : $V_c = 130m(120m-180m)/min$
- 2 . Cutting Depth : $a_p = 1/3D(1/8D - 1/2D)$
- 3 . Cutting Width : $a_e = 1/2D(1/4D-1D)$
- 4 . Feed per Flute : $f_z = 0.15mm(0.02-0.2)$

Cutting parameters should be suitably modified based on different processing materials and hardness. (Reference page:p28~p32)

Standard Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
4F600040-075D04	4	16	75	4	4	TiSiN
4F600030-075D06	3	13	75	6	4	TiSiN
4F600040-075D06	4	16	75	6	4	TiSiN
4F600050-075D06	5	20	75	6	4	TiSiN
4F600060-075D06	6	24	75	6	4	TiSiN
4F600080-075D08	8	32	75	8	4	TiSiN
4F600100-100D10	10	40	100	10	4	TiSiN
4F600120-100D12	12	48	100	12	4	TiSiN
4F600140-150D16	14	56	150	16	4	TiSiN
4F600160-150D16	16	64	150	16	4	TiSiN
4F600180-150D20	18	72	150	20	4	TiSiN
4F600200-150D20	20	80	150	20	4	TiSiN

Super Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
4F600040-100D04	4	20	100	4	4	TiSiN
4F600060-100D06	6	30	100	6	4	TiSiN
4F600080-100D08	8	40	100	8	4	TiSiN
4F600100-150D10	10	50	150	10	4	TiSiN
4F600120-150D12	12	60	150	12	4	TiSiN
4F600160-200D16	16	80	200	16	4	TiSiN
4F600200-200D20	20	100	200	20	4	TiSiN

1. Suitable for $HRC \leq 60$ tough material (Carbon Steel, Cast Steel, Alloy Steel, Cast Iron, and Die Steel ,Hardened Steel)
2. Profile endmill with sharp cutting edge.
3. Good chip removal ; Durability ; High Precision.
4. Base metal of workpiece : SS400, S45C, SCM, SKS, SKD, SKT, SKD, SUS,

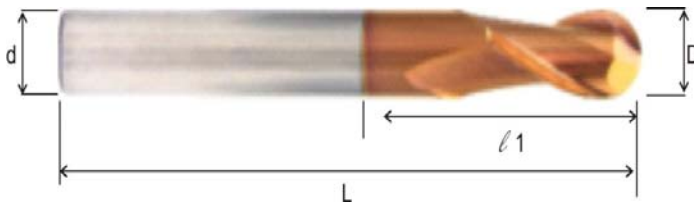


Solid Carbide Endmill

2F 600 Series



2 Flutes Ball-nose Solid Carbide Endmill



General Cutting Parameters :

- 1 . Cutting Speed : $V_c = 130m(120m-180m)/min$
 - 2 . Cutting Depth : $a_p = 1/3D(1/8D - 1/2D)$
 - 3 . Cutting Width : $a_e = 1/2D(1/4D-1D)$
 - 4 . Feed per Flute : $f_z = 0.15mm(0.02-0.2)$
- Cutting parameters should be suitably modified based on different processing materials and hardness. (Reference page:p28~p32)

Standard Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
2F600R050050D04	R0.5	2	50	4	2	TiSiN
2F600R075050D04	R0.75	3	50	4	2	TiSiN
2F600R100050D04	R1.0	4	50	4	2	TiSiN
2F600R125050D04	R1.25	5	50	4	2	TiSiN
2F600R150050D04	R1.5	6	50	4	2	TiSiN
2F600R200050D04	R2.0	8	50	4	2	TiSiN
2F600R050050D06	R0.5	2	50	6	2	TiSiN
2F600R075050D06	R0.75	3	50	6	2	TiSiN
2F600R100050D06	R1.0	4	50	6	2	TiSiN
2F600R150050D06	R1.5	6	50	6	2	TiSiN
2F600R200050D06	R2.0	10	50	6	2	TiSiN
2F600R300050D06	R3.0	12	50	6	2	TiSiN
2F600R400060D08	R4.0	16	60	8	2	TiSiN
2F600R500075D10	R5.0	20	75	10	2	TiSiN
2F600R600075D12	R6.0	24	75	12	2	TiSiN
2F600R800100D16	R8.0	30	100	16	2	TiSiN
2F600R100100D20	R10.0	32	100	20	2	TiSiN

Extra Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
2F600R2-L075D04	R2.0	8	75	4	2	TiSiN
2F600R3-L075D06	R3.0	12	75	6	2	TiSiN
2F600R4-L075D08	R4.0	16	75	8	2	TiSiN
2F600R5-L100D10	R5.0	20	100	10	2	TiSiN
2F600R6-L100D12	R6.0	24	100	12	2	TiSiN

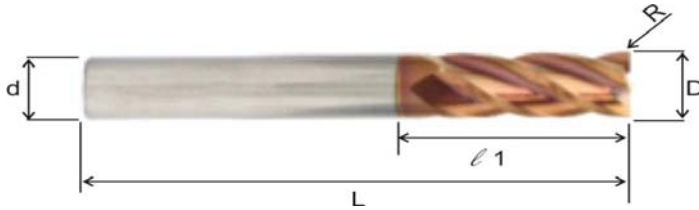
Super Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
2F600R2-L100D04	R2.0	8	100	4	2	TiSiN
2F600R3-L100D06	R3.0	12	100	6	2	TiSiN
2F600R4-L100D08	R4.0	16	100	8	2	TiSiN
2F600R5-L150D10	R5.0	20	150	10	2	TiSiN
2F600R6-L150D12	R6.0	24	150	12	2	TiSiN

1. Suitable for $HRC \leq 60$ tough material (Carbon Steel, Cast Steel, Alloy Steel, Cast Iron, and Die Steel ,Hardened Steel)
2. Profile endmill with sharp cutting edge.
3. Good chip removal ; Durability ; High Pricision.
4. Base metal of workpiece : SS400, S45C, SCM, SKS, SKD, SKT, SKD, SUS,



4 Flutes Carbide Radius End mill



General Cutting Parameters :

- 1 . Cutting Speed : $V_c = 130m(120m-180m)/min$
- 2 . Cutting Depth : $a_p = 1/3D(1/8D - 1/2D)$
- 3 . Cutting Width : $a_e = 1/2D(1/4D-1D)$
- 4 . Feed per Flute : $f_z = 0.15mm(0.02-0.2)$

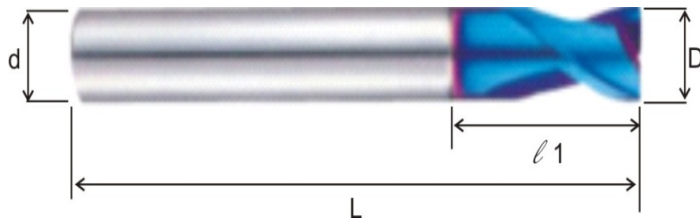
Cutting parameters should be suitably modified based on different processing materials and hardness. (Reference page:p28~p32)

Standard Long

Model No.	Cutting Diameter (D)	(R)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
60B010R02050D04	1	0.2	2	50	4	4	TiSiN
60B015R02050D04	1.5	0.2	3	50	4	4	TiSiN
60B020R02050D04	2	0.2	4	50	4	4	TiSiN
60B025R02050D04	2.5	0.2	5	50	4	4	TiSiN
60B030R02050D04	3	0.5	6	50	4	4	TiSiN
60B040R02050D04	4	0.5	8	50	4	4	TiSiN
60B050R02050D04	5	0.5	12	50	6	4	TiSiN
60B060R02050D04	6	0.5	12	50	6	4	TiSiN
60B080R02050D04	8	0.5	16	60	8	4	TiSiN
60B100R02050D04	10	0.5	20	75	10	4	TiSiN
60B120R02050D04	12	0.5	24	75	12	4	TiSiN
60B040R05075D04	4	0.5	8	75	4	4	TiSiN
60B060R05075D06	6	0.5	12	75	6	4	TiSiN
60B080R05075D08	8	0.5	16	75	8	4	TiSiN
60B040R05100D04	4	0.5	8	100	4	4	TiSiN
60B060R05100D06	6	0.5	12	100	6	4	TiSiN
60B080R05100D08	8	0.5	16	100	8	4	TiSiN
60B100R05100D10	10	0.5	20	100	10	4	TiSiN
60B120R05100D12	12	0.5	24	100	12	4	TiSiN
60B030R10050D04	3	1	6	50	4	4	TiSiN
60B040R10050D04	4	1	8	50	4	4	TiSiN
60B050R10050D06	5	1	12	50	6	4	TiSiN
60B060R10050D06	6	1	12	50	6	4	TiSiN
60B080R10060D08	8	1	16	60	8	4	TiSiN
60B040R10075D04	4	1	8	75	4	4	TiSiN
60B060R10075D06	6	1	12	75	6	4	TiSiN
60B080R10075D08	8	1	16	75	8	4	TiSiN
60B100R10075D10	10	1	20	75	10	4	TiSiN
60B120R10075D12	12	1	24	75	12	4	TiSiN
60B040R10100D04	4	1	8	100	4	4	TiSiN
60B060R10100D06	6	1	12	100	6	4	TiSiN
60B080R10100D08	8	1	16	100	8	4	TiSiN
60B100R10100D10	10	1	20	100	10	4	TiSiN
60B120R10100D12	12	1	24	100	12	4	TiSiN

1. Suitable for $HRC \leq 60$ tough material (Carbon Steel, Cast Steel, Alloy Steel, Cast Iron, and Die Steel ,Hardened Steel)
2. Profile endmill with sharp cutting edge.
3. Good chip removal ; Durability ; High Precision.
4. Base metal of workpiece : SS400, S45C, SCM, SKS, SKD, SKT, SKD, SUS,

2 Flutes Solid Carbide Endmill



General Cutting Parameters :

- 1 . Cutting Speed : $V_c = 130m(120m-180m)/min$
- 2 . Cutting Depth : $a_p = 1/3D(1/8D - 1/2D)$
- 3 . Cutting Width : $a_e = 1/2D(1/4D-1D)$
- 4 . Feed per Flute : $f_z = 0.15mm(0.02-0.2)$

Cutting parameters should be suitably modified based on different processing materials and hardness. (Reference page:p28~p32)

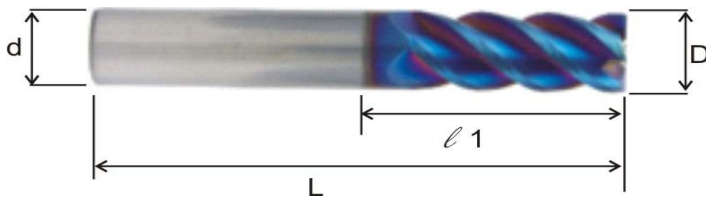
Standard Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
2F650005-050D04	0.5	1.5	50	4	2	AISiTiN
2F650010-050D04	1.0	3.0	50	4	2	AISiTiN
2F650015-050D04	1.5	4.5	50	4	2	AISiTiN
2F650020-050D04	2.0	6.0	50	4	2	AISiTiN
2F650025-050D04	2.5	7.5	50	4	2	AISiTiN
2F650030-050D04	3.0	9.0	50	4	2	AISiTiN
2F650035-050D04	3.5	10.5	50	4	2	AISiTiN
2F650040-050D04	4.0	12.0	50	4	2	AISiTiN
2F650005-050D06	0.5	1.5	50	6	2	AISiTiN
2F650010-050D06	1.0	3.0	50	6	2	AISiTiN
2F650015-050D06	1.5	4.5	50	6	2	AISiTiN
2F650020-050D06	2.0	6.0	50	6	2	AISiTiN
2F650025-050D06	2.5	7.5	50	6	2	AISiTiN
2F650030-050D06	3.0	9.0	50	6	2	AISiTiN
2F650035-050D06	3.5	10.5	50	6	2	AISiTiN
2F650040-050D06	4.0	12.0	50	6	2	AISiTiN
2F650045-050D06	4.5	13.5	50	6	2	AISiTiN
2F650050-050D06	5.0	15.0	50	6	2	AISiTiN
2F650055-050D06	5.5	16.5	50	6	2	AISiTiN
2F650060-050D06	6.0	18.0	50	6	2	AISiTiN
2F650070-060D08	7.0	21.0	60	8	2	AISiTiN
2F650080-060D08	8.0	24.0	60	8	2	AISiTiN
2F650090-075D10	9.0	27.0	75	10	2	AISiTiN
2F650100-075D10	10.0	30.0	75	10	2	AISiTiN
2F650110-075D12	11.0	33.0	75	12	2	AISiTiN
2F650120-075D12	12.0	36.0	75	12	2	AISiTiN
2F650140-075D14	14.0	42.0	75	14	2	AISiTiN
2F650140-100D16	14.0	42.0	100	16	2	AISiTiN
2F650160-100D16	16.0	48.0	100	16	2	AISiTiN
2F650180-100D18	18.0	54.0	100	18	2	AISiTiN
2F650180-100D20	18.0	54.0	100	20	2	AISiTiN
2F650200-100D20	20.0	60.0	100	20	2	AISiTiN

1. Suitable for $HRC \leq 65$ tough material (Carbon Steel, Cast Steel, Alloy Steel, Cast Iron, and Die Steel, Nickel Alloy).
2. Profile endmill with sharp cutting edge.
3. Good chip removal ; Durability ; High Pricision.
4. Base metal of workpiece : SS400, S45C, SCM, SKS, SKD, SKT, SKD, NAK80



4 Flutes Solid Carbide Endmill



General Cutting Parameters :

- 1 . Cutting Speed : $V_c = 130m(120m-180m)/min$
- 2 . Cutting Depth : $a_p = 1/3D(1/8D - 1/2D)$
- 3 . Cutting Width : $a_e = 1/2D(1/4D-1D)$
- 4 . Feed per Flute : $f_z = 0.15mm(0.02-0.2)$

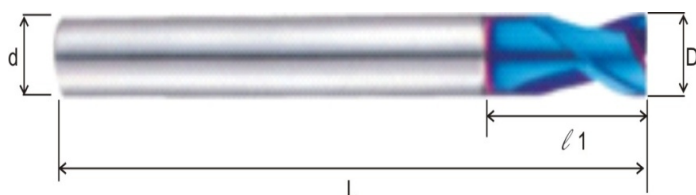
Cutting parameters should be suitably modified based on different processing materials and hardness. (Reference page:p28~p32)

Standard Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
4F650005-050D04	0.5	1.5	50	4	4	AISiTiN
4F650010-050D04	1.0	3.0	50	4	4	AISiTiN
4F650015-050D04	1.5	4.5	50	4	4	AISiTiN
4F650020-050D04	2.0	6.0	50	4	4	AISiTiN
4F650025-050D04	2.5	7.5	50	4	4	AISiTiN
4F650030-050D04	3.0	9.0	50	4	4	AISiTiN
4F650035-050D04	3.5	10.5	50	4	4	AISiTiN
4F650040-050D04	4.0	12.0	50	4	4	AISiTiN
4F650005-050D06	0.5	1.5	50	6	4	AISiTiN
4F650010-050D06	1.0	3.0	50	6	4	AISiTiN
4F650015-050D06	1.5	4.5	50	6	4	AISiTiN
4F650015-050D06	2.0	6.0	50	6	4	AISiTiN
4F650025-050D06	2.5	7.5	50	6	4	AISiTiN
4F650030-050D06	3.0	9.0	50	6	4	AISiTiN
4F650035-050D06	3.5	10.5	50	6	4	AISiTiN
4F650040-050D06	4.0	12.0	50	6	4	AISiTiN
4F650045-050D06	4.5	13.5	50	6	4	AISiTiN
4F650050-050D06	5.0	15.0	50	6	4	AISiTiN
4F650055-050D06	5.5	16.5	50	6	4	AISiTiN
4F650060-050D06	6.0	18.0	50	6	4	AISiTiN
4F650070-060D08	7.0	21.0	60	8	4	AISiTiN
4F650080-060D08	8.0	24.0	60	8	4	AISiTiN
4F650090-075D10	9.0	27.0	75	10	4	AISiTiN
4F650100-075D10	10.0	30.0	75	10	4	AISiTiN
4F650110-075D12	11.0	33.0	75	12	4	AISiTiN
4F650120-075D12	12.0	36.0	75	12	4	AISiTiN
4F650140-075D14	14.0	42.0	75	14	4	AISiTiN
4F650140-100D16	14.0	42.0	100	16	4	AISiTiN
4F650160-100D16	16.0	48.0	100	16	4	AISiTiN
4F650180-100D18	18.0	54.0	100	18	4	AISiTiN
4F650180-100D20	18.0	54.0	100	20	4	AISiTiN
4F650200-100D20	20.0	60.0	100	20	4	AISiTiN

1. Suitable for $HRC \leq 65$ tough material (Carbon Steel, Cast Steel, Alloy Steel, Cast Iron, and Die Steel, Nickel Alloy).
2. Profile endmill with sharp cutting edge.
3. Good chip removal ; Durability ; High Pricision.
4. Base metal of workpiece : SS400, S45C, SCM, SKS, SKD, SKT, SKD, NAK80

Extra Long 2 Flutes Solid Carbide Endmill



General Cutting Parameters :

- Cutting Speed : $V_c = 130m(120m-180m)/min$
- Cutting Depth : $a_p = 1/3D(1/8D - 1/2D)$
- Cutting Width : $a_e = 1/2D(1/4D - 1D)$
- Feed per Flute : $f_z = 0.15mm(0.02-0.2)$

Cutting parameters should be suitably modified based on different processing materials and hardness. (Reference page:p28~p32)

Standard Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
2F650040-075D04	4	16	75	4	2	AISiTiN
2F650030-075D06	3	13	75	6	2	AISiTiN
2F650040-075D06	4	16	75	6	2	AISiTiN
2F650050-075D06	5	20	75	6	2	AISiTiN
2F650060-075D06	6	24	75	6	2	AISiTiN
2F650080-075D08	8	32	75	8	2	AISiTiN
2F650100-100D10	10	40	100	10	2	AISiTiN
2F650120-100D12	12	48	100	12	2	AISiTiN
2F650140-150D16	14	56	150	16	2	AISiTiN
2F650160-150D16	16	64	150	16	2	AISiTiN
2F650180-150D20	18	72	150	20	2	AISiTiN
2F650200-150D20	20	80	150	20	2	AISiTiN

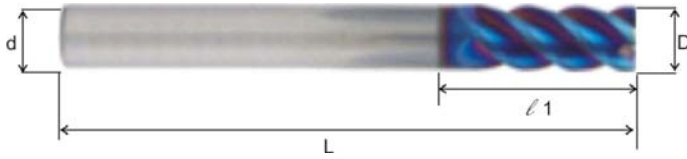
Extra Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
2F650040-100D04	4	20	100	4	2	AISiTiN
2F650060-100D06	6	30	100	6	2	AISiTiN
2F650080-100D08	8	40	100	8	2	AISiTiN
2F650100-150D10	10	50	150	10	2	AISiTiN
2F650120-150D12	12	60	150	12	2	AISiTiN
2F650160-200D16	16	80	200	16	2	AISiTiN
2F650200-200D20	20	100	200	20	2	AISiTiN

- Suitable for $HRC \leq 65$ tough material (Carbon Steel, Cast Steel, Alloy Steel, Cast Iron, and Die Steel, Nickel Alloy).
- Profile endmill with sharp cutting edge.
- Good chip removal ; Durability ; High Precision.
- Base metal of workpiece : SS400, S45C, SCM, SKS, SKD, SKT, SKD, NAK80



Extra Long 4 Flutes Solid Carbide Endmill



General Cutting Parameters :

- 1 . Cutting Speed : $V_c = 130m(120m-180m)/min$
- 2 . Cutting Depth : $a_p = 1/3D(1/8D - 1/2D)$
- 3 . Cutting Width : $a_e = 1/2D(1/4D-1D)$
- 4 . Feed per Flute : $f_z = 0.15mm(0.02-0.2)$

Cutting parameters should be suitably modified based on different processing materials and hardness. (Reference page:p28~p32)

Standard Long

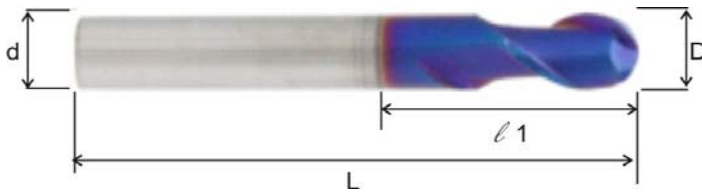
Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
4F600040-075D04	4	16	75	4	4	TiSiN
4F600030-075D06	3	13	75	6	4	TiSiN
4F600040-075D06	4	16	75	6	4	TiSiN
4F600050-075D06	5	20	75	6	4	TiSiN
4F600060-075D06	6	24	75	6	4	TiSiN
4F600080-075D08	8	32	75	8	4	TiSiN
4F600100-100D12	10	40	100	10	4	TiSiN
4F600120-100D12	12	48	100	12	4	TiSiN
4F600140-150D16	14	56	150	16	4	TiSiN
4F600160-150D16	16	64	150	16	4	TiSiN
4F600180-150D20	18	72	150	20	4	TiSiN
4F600200-150D20	20	80	150	20	4	TiSiN

Super Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
4F600040-100D04	4	20	100	4	4	TiSiN
4F600060-100D06	6	30	100	6	4	TiSiN
4F600080-100D08	8	40	100	8	4	TiSiN
4F600100-150D10	10	50	150	10	4	TiSiN
4F600120-150D12	12	60	150	12	4	TiSiN
4F600160-200D16	16	80	200	16	4	TiSiN
4F600200-200D20	20	100	200	20	4	TiSiN

1. Suitable for $HRC \leq 65$ tough material (Carbon Steel, Cast Steel, Alloy Steel, Cast Iron, and Die Steel, Nickel Alloy).
2. Profile endmill with sharp cutting edge.
3. Good chip removal ; Durability ; High Precision.
4. Base metal of workpiece : SS400, S45C, SCM, SKS, SKD, SKT, SKD, NAK80

2 Flutes Ball-nose Solid Carbide Endmill



General Cutting Parameters :

- 1 . Cutting Speed : $V_c = 130m(120m-180m)/min$
- 2 . Cutting Depth : $a_p = 1/3D(1/8D - 1/2D)$
- 3 . Cutting Width : $a_e = 1/2D(1/4D-1D)$
- 4 . Feed per Flute : $f_z = 0.15mm(0.02-0.2)$

Cutting parameters should be suitably modified based on different processing materials and hardness. (Reference page:p28~p32)

Standard Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
2F650R050050D04	R0.5	2	50	4	2	AISiTiN
2F650R075050D04	R0.75	3	50	4	2	AISiTiN
2F650R100050D04	R1.0	4	50	4	2	AISiTiN
2F650R125050D04	R1.25	5	50	4	2	AISiTiN
2F650R150050D04	R1.5	6	50	4	2	AISiTiN
2F650R200050D04	R2.0	8	50	4	2	AISiTiN
2F650R050050D06	R0.5	2	50	6	2	AISiTiN
2F650R075050D06	R0.75	3	50	6	2	AISiTiN
2F650R100050D06	R1.0	4	50	6	2	AISiTiN
2F650R150050D06	R1.5	6	50	6	2	AISiTiN
2F650R200050D06	R2.0	10	50	6	2	AISiTiN
2F650R300050D06	R3.0	12	50	6	2	AISiTiN
2F650R400060D08	R4.0	16	60	8	2	AISiTiN
2F650R500075D10	R5.0	20	75	10	2	AISiTiN
2F650R600075D12	R6.0	24	75	12	2	AISiTiN
2F650R800100D16	R8.0	30	100	16	2	AISiTiN
2F650R100100D20	R10.0	32	100	20	2	AISiTiN

Extra Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
2F650R200075D04	R2.0	8	75	4	2	AISiTiN
2F650R300075D06	R3.0	12	75	6	2	AISiTiN
2F650R400075D08	R4.0	16	75	8	2	AISiTiN
2F650R500100D10	R5.0	20	100	10	2	AISiTiN
2F650R600100D12	R6.0	24	100	12	2	AISiTiN

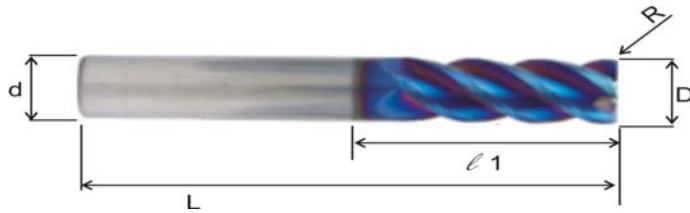
Super Long

Model No.	Cutting Diameter (D)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
2F650R200100D04	R2.0	8	100	4	2	AISiTiN
2F650R300100D06	R3.0	12	100	6	2	AISiTiN
2F650R400100D08	R4.0	16	100	8	2	AISiTiN
2F650R500150D10	R5.0	20	150	10	2	AISiTiN
2F650R600150D12	R6.0	24	150	12	2	AISiTiN

1. Suitable for $HRC \leq 65$ tough material (Carbon Steel, Cast Steel, Alloy Steel, Cast Iron, and Die Steel, Nickel Alloy).
2. Profile endmill with sharp cutting edge.
3. Good chip removal ; Durability ; High Pricision.
4. Base metal of workpiece : SS400, S45C, SCM, SKS, SKD, SKT, SKD, NAK80



4 Flutes Carbide Radius End mill



General Cutting Parameters :

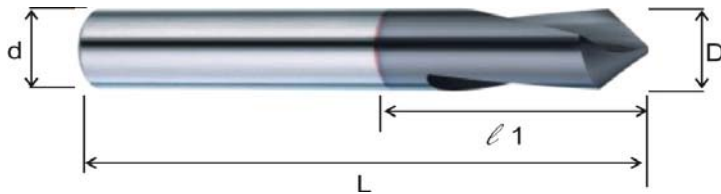
- Cutting Speed : $V_c = 130m(120m-180m)/min$
 - Cutting Depth : $a_p = 1/3D(1/8D - 1/2D)$
 - Cutting Width : $a_e = 1/2D(1/4D-1D)$
 - Feed per Flute : $f_z = 0.15mm(0.02-0.2)$
- Cutting parameters should be suitably modified based on different processing materials and hardness. (Reference page:p28~p32)

Standard Long

Model No.	Cutting Diameter (D)	(R)	Flute Length (e1)	Over Length (L)	Shank Diameter (d)	Flute (T)	Coating
65B010R02050D04	1	0.2	2	50	4	4	AlSiTiN
65B015R02050D04	1.5	0.2	3	50	4	4	AlSiTiN
65B020R02050D04	2	0.2	4	50	4	4	AlSiTiN
65B025R02050D04	2.5	0.2	5	50	4	4	AlSiTiN
65B030R05050D04	3	0.5	6	50	4	4	AlSiTiN
65B040R05050D04	4	0.5	8	50	4	4	AlSiTiN
65B050R05050D06	5	0.5	12	50	6	4	AlSiTiN
65B060R05050D06	6	0.5	12	50	6	4	AlSiTiN
65B080R05060D08	8	0.5	16	60	8	4	AlSiTiN
65B100R05075D10	10	0.5	20	75	10	4	AlSiTiN
65B120R05075D12	12	0.5	24	75	12	4	AlSiTiN
65B040R05075D04	4	0.5	8	75	4	4	AlSiTiN
65B060R05075D06	6	0.5	12	75	6	4	AlSiTiN
65B080R05075D08	8	0.5	16	75	8	4	AlSiTiN
65B040R05100D04	4	0.5	8	100	4	4	AlSiTiN
65B060R05100D06	6	0.5	12	100	6	4	AlSiTiN
65B080R05100D08	8	0.5	16	100	8	4	AlSiTiN
65B100R05100D10	10	0.5	20	100	10	4	AlSiTiN
65B120R05100D12	12	0.5	24	100	12	4	AlSiTiN
65B030R10050D04	3	1	6	50	4	4	AlSiTiN
65B040R10050D04	4	1	8	50	4	4	AlSiTiN
65B050R10050D06	5	1	12	50	6	4	AlSiTiN
65B060R10050D06	6	1	12	50	6	4	AlSiTiN
65B080R10060D08	8	1	16	60	8	4	AlSiTiN
65B040R10075D04	4	1	8	75	4	4	AlSiTiN
65B060R10075D06	6	1	12	75	6	4	AlSiTiN
65B080R10075D08	8	1	16	75	8	4	AlSiTiN
65B100R10075D10	10	1	20	75	10	4	AlSiTiN
65B120R10075D12	12	1	24	75	12	4	AlSiTiN
65B040R10100D04	4	1	8	100	4	4	AlSiTiN
65B060R10100D06	6	1	12	100	6	4	AlSiTiN
65B080R10100D08	8	1	16	100	8	4	AlSiTiN
65B100R10100D10	10	1	20	100	10	4	AlSiTiN
65B120R10100D12	12	1	24	100	12	4	AlSiTiN

- Suitable for $HRC \leq 65$ tough material (Carbon Steel, Cast Steel, Alloy Steel, Cast Iron, and Die Steel, Nickel Alloy).
- Profile endmill with sharp cutting edge.
- Good chip removal ; Durability ; High Pricision.
- Base metal of workpiece : SS400, S45C, SCM, SKS, SKD, SKT, SKD, NAK80

60 ° 90 ° 120 ° Solid Carbide NC Spotting Drills



Applicable materials:
 Structural Steels, Mild Stssls, Alloy Steels,
 Hardened Steels, Extra Hard Steels, Ductile
 Cast Iron, Mold Steels, Aluminum

Standard Long

Model No.	Cutting Diameter (D)	Over Length (L)	Shank Diameter (d)	Flute (T)	Angle (A °)	Coating
3	12	50	3	2	60 ° 90° 120°	AITiN
4	12	50	4	2	60 ° 90° 120°	AITiN
5	15	50	5	2	60 ° 90° 120°	AITiN
6	20	60	6	2	60 ° 90° 120°	AITiN
8	25	60	8	2	60 ° 90° 120°	AITiN
10	25	75	10	2	60 ° 90° 120°	AITiN
12	30	75	12	2	60 ° 90° 120°	AITiN
16	35	100	16	2	60 ° 90° 120°	AITiN
20	40	100	20	2	60 ° 90° 120°	AITiN

Extra Long

Model No.	Cutting Diameter (D)	Over Length (L)	Shank Diameter (d)	Flute (T)	Angle (A °)	Coating
3	12	75	3	2	60 ° 90° 120°	AITiN
4	12	75	4	2	60 ° 90° 120°	AITiN
5	15	75	5	2	60 ° 90° 120°	AITiN
6	20	75	6	2	60 ° 90° 120°	AITiN
8	25	75	8	2	60 ° 90° 120°	AITiN
10	25	100	10	2	60 ° 90° 120°	AITiN
12	30	100	12	2	60 ° 90° 120°	AITiN
16	35	150	16	2	60 ° 90° 120°	AITiN
20	40	150	20	2	60 ° 90° 120°	AITiN

Work Material	Structural Steels SS41		Mild Steels S45C		Alloy Steels SCM		Mold Steels Hardened Steels		Extra Hard Steels (40~52HRC)		Ductile Cast Iron FCD		Aluminum ADC	
	70		55		45		25		20		75		110	
Cutting Speed														
Dia Of Drill	N	Fv mm/min	N	Fv mm/min	N	Fv mm/min	N	Fv mm/min	N	Fv mm/min	N	Fv mm/min	N	Fv mm/min
3	7500	450	5800	350	4800	300	2600	160	2100	130	8000	600	12000	1800
4	5600	450	4400	350	3600	300	2000	160	1600	180	6000	600	9000	1600
5	4500	400	3500	320	2800	250	1600	145	1300	120	4800	600	7000	1400
6	3800	380	2900	290	2400	240	1300	130	1050	110	4000	600	6000	1300
8	2800	340	2200	260	1800	220	1000	120	800	100	3000	500	4500	1100
10	2300	320	1800	250	1400	200	800	110	650	90	2400	500	3500	1000
12	1900	300	1500	240	1200	190	650	110	550	90	2000	500	3000	950
16	1400	280	1100	220	900	180	500	100	400	80	1500	400	2300	900
20	1100	280	900	220	700	180	400	100	320	80	1200	400	1800	900

2 Flutes Solid Carbide Endmill of Aluminum Cutting

Recommended Milling Conditions

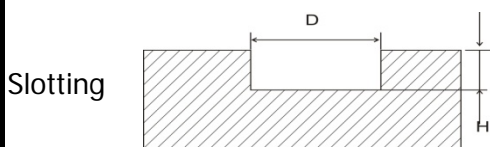
Work Material	Pure Aluminum		Aluminm Alloy Cu-Mg SERIES		Aluminm Alloy Si SERIES		Aluminm Alloy Mg SERIES		Aluminm Alloy Mg-Si SERIES		Aluminm Alloy Zn-Mgi SERIES		Casting Aluminm Alloy	
	Vc	Vf	Vc	Vf	Vc	Vf	Vc	Vf	Vc	Vf	Vc	Vf	Vc	Vf
3	32000	1900	27000	1600	2700	150	13000	800	21600	880	27000	250	5300	200
4	24000	1900	20000	1600	2000	200	10000	800	16000	880	20000	300	4000	250
5	1900	1900	16000	1600	1600	200	8000	800	12800	880	16000	300	3200	250
6	16000	1900	13500	1600	1350	200	6500	800	10800	880	13500	300	2650	250
8	12000	1900	10000	1600	1000	300	5000	800	8000	880	10000	350	2000	300
10	9600	1900	8000	1600	800	300	4000	800	6400	880	8000	350	1600	300
12	8000	1900	6600	1600	660	250	3300	800	5300	880	6600	400	1300	350
16	6000	1900	5000	1600	500	150	2700	800	4000	880	5000	400	1000	350
20	4800	1900	4000	1600	400	150	2000	800	3200	880	4000	400	800	350
DEPT H Of Cut	h=1.5D w=0.1D		h=1.5D w=0.1D		h=1.5D w=0.1D		h=1.5D w=0.1D		h=1.5D w=0.1D		h=1.5D w=0.1D		h=1.5D w=0.1D	



3 Flutes Solid Carbide Endmill of Aluminum Cutting

Recommended Milling Conditions

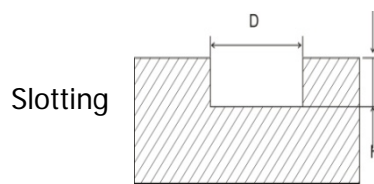
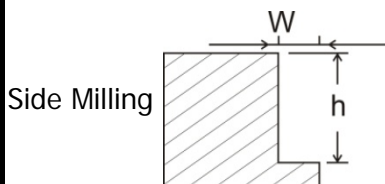
Work Material	Pure Aluminum		Aluminm Alloy Cu-Mg SERIES		Aluminm Alloy Si SERIES		Aluminm Alloy Mg SERIES		Aluminm Alloy Mg-Si SERIES		Aluminm Alloy Zn-Mgi SERIES		Casting Aluminm Alloy	
	Vc	Vf	Vc	Vf	Vc	Vf	Vc	Vf	Vc	Vf	Vc	Vf	Vc	Vf
3	32000	800	27000	800	2700	150	13000	400	21600	500	27000	640	16000	500
4	24000	1000	20000	1000	2000	200	10000	500	16000	640	20000	800	12000	600
5	1900	1000	16000	1000	1600	200	8000	500	12800	640	16000	800	9600	600
6	16000	1000	13500	1000	1350	200	6500	500	10800	640	13500	800	8000	600
8	12000	1000	10000	1000	1000	300	5000	600	8000	640	10000	800	6000	700
10	9600	1200	8000	1200	800	300	4000	600	6400	780	8000	960	4800	700
12	8000	1200	6600	1200	660	250	3300	700	5300	780	6600	960	4000	700
16	6000	1000	5000	1000	500	150	2700	500	4000	640	5000	800	3000	800
20	4800	1000	4000	1000	400	150	2000	500	3200	640	4000	800	2400	600
DEPT H Of Cut	H=1.0D		H=1.0D		H=1.0D		H=1.0D		H=1.0D		H=1.0D		H=1.0D	



2 Flutes Solid Carbide Endmill

Recommended Milling Conditions

Work Material	Cast Iron Structural Steels Carbon Steels FC SS400 S45C		Alloys Steels Tool Steels SCM SKS SKD		Hardened Steels Prehardened Steele SKT,SKD		Stainless Steels Hardened Steels SUS,SKD		Hardened Steels Nickel Alloy	
Hardness	~750N/mm		~HRC30		HRC30~40		HRC40~50		HRC50~60	
Cutting Speed Vc m/min	130~260		90~110		70~90		50~70		30~40	
Dia Of Drill End Mill	N	Fv mm/min	N	Fv mm/min	N	Fv mm/min	N	Fv mm/min	N	Fv mm/min
1	16000	80	16000	100	12000	85	12000	65	8000	40
2	10000	130	9000	100	7500	95	6400	65	4800	50
3	7600	140	6500	160	5300	100	5300	70	3500	45
4	6500	250	5600	130	4300	130	3600	90	2800	55
5	5000	270	4300	240	3700	135	3100	105	2100	55
6	4200	290	3600	240	3200	135	2600	105	1700	60
8	3200	320	2500	225	2300	125	2000	100	1350	55
10	2600	280	2100	210	1900	120	1500	90	1000	50
12	2100	240	1800	210	1500	120	1300	90	800	45
14	1800	220	1600	200	1300	115	1100	90	700	45
16	1500	190	1300	200	1200	110	950	85	650	40
18	1300	150	1200	185	1000	100	900	85	550	35
20	1250	140	1000	170	900	90	750	70	500	30
DEPTH Of Cut	h=1.5D w=0.25D H=0.5D		h=1.5D w=0.2D H=0.3D		h=1.2D w=0.1D H=0.2D		h=1.2D w=0.05D H=0.15D		h=1.0D w=0.03D H=0.1D	

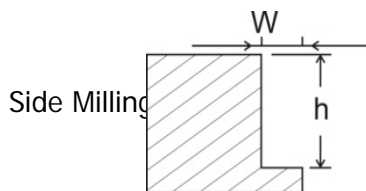


Feed speed may be increased by 10~20% when performing side milling

4 Flutes Solid Carbide Endmill

Recommended Milling Conditions

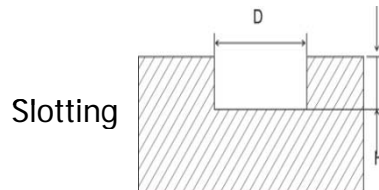
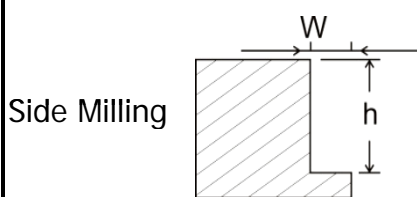
Work Material	Cast Iron Structural Steels Carbon Steels FC SS400 S45C		Alloys Steels Tool Steels SCM SKS SKD		Hardened Steels Prehardened Steele SKT,SKD		Stainless Steels Hardened Steels SUS,SKD		Hardened Steels Nickel Alloy	
Hardness	~750N/mm		~HRC30		HRC30~40		HRC40~50		HRC50~60	
Cutting Speed Vc m/min	130~260		90~110		70~90		50~70		30~40	
Dia Of Drill End Mill	N	Fv mm/min	N	Fv mm/min	N	Fv mm/min	N	Fv mm/min	N	Fv mm/min
1	18000	120	9000	300	7000	120	6000	100	4000	70
2	10000	180	8000	310	6200	120	5500	100	3500	65
3	7500	180	6800	320	5500	130	4800	115	2900	65
4	7000	300	5400	280	4300	135	2000	140	1800	60
5	5500	320	4600	320	3600	140	3800	120	2300	70
6	5000	350	3800	380	3100	150	2750	130	1700	75
8	3700	380	2800	400	2300	150	2000	130	1200	70
10	2800	320	2300	420	1900	145	1650	130	950	70
12	2400	310	2000	420	1600	140	1350	135	850	60
16	1800	300	1450	410	1150	135	1000	120	650	50
18	1600	210	1300	400	1050	120	930	110	550	45
20	1400	200	1150	380	900	110	850	90	500	40
DEPTH Of Cut	w=0.25D		w=0.2D		w=0.1D		w=0.05D		w=0.03D	



Extra Long 2 Flutes Solid Carbide Endmill

Recommended Milling Conditions

Work Material	Cast Iron Structural Steels Carbon Steels FC SS400 S45C		Alloys Steels Tool Steels SCM SKS SKD		Hardened Steels Prehardened Steele SKT,SKD		Stainless Steels Hardened Steels SUS,SKD		Hardened Steels Nickel Alloy	
Hardness	~750N/mm		~HRC30		HRC30~40		HRC40~50		HRC50~60	
Cutting Speed Vc m/min	130~260		90~110		70~90		50~70		30~40	
Dia Of Drill End Mill	N	Fv mm/min	N	Fv mm/min	N	Fv mm/min	N	Fv mm/min	N	Fv mm/min
1	16000	80	16000	100	1200	85	12000	65	8000	40
2	10000	130	9000	100	7500	95	6400	65	4800	50
3	7600	140	6600	160	5300	100	5300	70	3500	45
4	6500	250	5600	180	4300	130	3600	90	2800	55
5	5000	270	4350	240	3700	135	3100	105	2100	55
6	4200	290	3650	240	3250	135	2600	105	1700	60
8	3200	320	2500	225	2300	125	2000	100	1350	55
10	2600	280	2150	210	1900	120	1500	90	1000	50
12	2100	240	1850	210	1550	120	1350	90	800	45
16	1500	190	1300	200	1200	110	950	85	650	40
20	1250	140	1000	170	900	90	750	70	500	30
DEPTH Of Cut	h=2.5D w=0.025D H=0.15D		h=2.5D w=0.025D H=0.15D		h=2.5D w=0.02D H=0.15D		h=2.0D w=0.015D H=0.05D		h=2.0D w=0.015D H=0.025D	

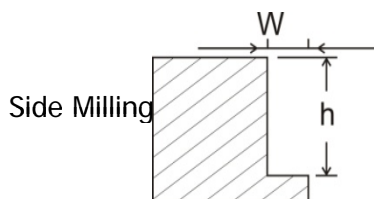


Feed speed may be increased by 10~15% when performing side milling

Extra Long 4 Flutes Solid Carbide Endmill

Recommended Milling Conditions

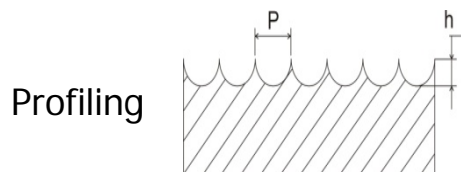
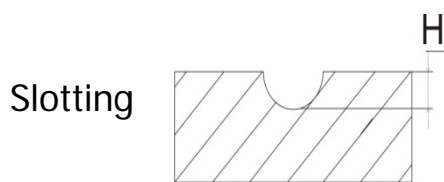
Work Material	Cast Iron Structural Steels Carbon Steels FC SS400 S45C		Alloys Steels Tool Steels SCM SKS SKD		Hardened Steels Prehardened Steels SKT,SKD		Stainless Steels Hardened Steels SUS,SKD		Hardened Steels Nickel Alloy	
Hardness	~750N/mm		~HRC30		HRC30~40		HRC40~50		HRC50~60	
Cutting Speed Vc m/min	130~260		90~110		70~90		50~70		30~40	
Dia Of Drill End Mill	N	Fv mm/min	N	Fv mm/min	N	Fv mm/min	N	Fv mm/min	N	Fv mm/min
1	18000	120	9000	300	7000	120	6000	100	4000	70
2	10000	180	8000	310	6200	120	5500	100	3500	65
3	8000	180	6800	320	5500	130	4800	115	2900	65
4	7000	300	5400	360	4300	135	3800	120	2300	70
5	5500	320	4600	410	3600	140	3200	120	2000	70
6	5000	350	3800	410	3100	150	2750	130	1700	75
8	3700	380	2800	420	2300	150	2000	130	1200	70
10	2800	320	2300	420	1900	145	1650	130	950	70
12	2400	310	2000	420	1600	140	1350	135	850	60
16	1800	300	1450	410	1150	135	1000	120	650	50
20	1400	180	950	310	750	90	650	80	400	30
DEPTH Of Cut	h=3.0D w=0.05D		h=2.5D w=0.05D		h=2.5D w=0.05D		h=2.0D w=0.025D		h=2.0D w=0.02D	



2 Flutes Ball-nose Solid Carbide Endmill

Recommended Milling Conditions

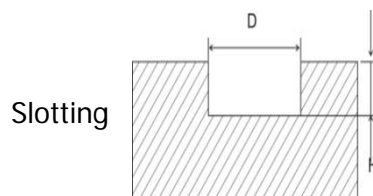
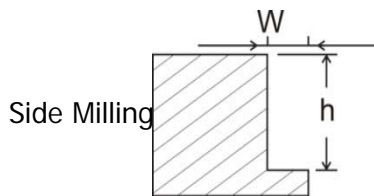
Work Material	Carbon Steels Low Alloy Steels SS400 S45C		Alloys Steels Tool Steels SCr SK SKT SNCM		Prehardened Steels Mold Steels		Prehardened Steels Hardened Steels		Hardened Steels	
	N	Fv mm/min	N	Fv mm/min	N	Fv mm/min	N	Fv mm/min	N	Fv mm/min
Hardness	~750N/mm		~HRC30		HRC30~40		HRC40~50		HRC50~60	
Cutting Speed Vc m/min	130~260		90~110		70~90		50~70		30~40	
Dia Of Drill End Mill	N	Fv mm/min	N	Fv mm/min	N	Fv mm/min	N	Fv mm/min	N	Fv mm/min
D1 X 0.5R	32000	680	25500	580	21000	450	19000	330	12700	240
D2 X 1.0R	16000	500	12700	400	10500	330	9500	250	6400	150
D3 X 1.5R	11000	500	8500	400	6900	330	6500	250	4200	150
D4 X 2.0R	8000	500	6400	300	5200	280	4800	250	3200	150
D6 X 3.0R	5500	500	4200	300	3500	280	3200	250	2100	150
D8 X 4.0R	4000	450	3200	300	2550	280	2400	200	1600	100
D10 X 5.0R	3200	450	2500	300	2060	250	1900	200	1300	100
D12 X 6.0R	2700	400	2100	250	1720	220	1600	200	1050	100
D16 X 8.0R	2000	400	1600	250	1300	200	1200	150	800	100
D20 X 10R	1600	400	1300	250	1030	180	1000	150	640	100
DEPTH Of Cut	h=0.15R		h=0.15R		h=0.1R		h=0.06R		h=0.03R	



4 Flutes Carbide Radius End mill

Recommended Milling Conditions

Work Material	Carbon Steels Low Alloy Steels SS400 S45C		Alloys Steels Tool Steels SCr SK SKT SNCM		Prehardened Steele Mold Steels		Prehardened Steele Hardened Steels		Hardened Steels	
Hardness	~750N/mm		~HRC30		HRC30~40		HRC40~50		HRC50~60	
Cutting Speed Vc m/min	130~260		90~110		70~90		50~70		30~40	
Dia Of Drill End Mill	N	Fv mm/min	N	Fv mm/min	N	Fv mm/min	N	Fv mm/min	N	Fv mm/min
3	7400	180	4500	110	4000	100	3600	80	1500	40
4	6400	250	3800	145	3400	130	3000	115	1300	50
5	5600	300	3400	180	3000	160	2700	140	1150	60
6	5300	380	3200	220	2900	200	2500	180	1050	80
8	4000	400	2400	230	2200	200	1900	180	800	80
10	3200	400	1900	230	1650	200	1500	180	650	80
12	2600	380	1600	210	1450	190	1250	170	550	75
DEPTH Of Cut	h=1.5D w=0.15D H=0.3D		h=1.5D w=0.1D H=0.25D		h=1.5D w=0.1D H=0.25D		h=1.0D w=0.05D H=0.1D		h=1.0D w=0.05D H=0.1D	



Feed speed may be increased by 10~15% when performing side milling

Cutting Speed Specifications

Formulas

Fz [mm]=Feed per tooth

N [1/min]=Rotation number

Vc [mm]=Cutting speed

Vf [mm/min]=Feed speed

$$Fz = \frac{Vf}{Z \times N} \text{ mm}$$

$$N = \frac{Vc \times 1000}{\pi \times \emptyset} \text{ 1min}$$

$$Vc = \frac{\pi \times \emptyset \times N}{1000} \text{ 1min}$$

$$Vf = Z \times N \times fz \text{ m/min}$$

1. When first using thin tool, the feeding speed is suggested to set at 50% of the aforesaid data for test cutting. The feeding speed is allowed to gradually increase when the cutting condition becomes stable.
2. Please use high precision/rigidity and better balanced chucking sets. if the cutting precision is over 0.01mm, process the cutting after resetting.
3. Keeping the length of the cutting tool extending the chuck be shorter be better. If the length becomes much longer, please reduce the turning speed, feeding, and/or cutting volume.
4. Please reduce the turning speed of spindle, feeding speed, or cutting volume if abnormal vibration and noises occur during the cutting.
5. In order to void both breakibg of the blade aud over cutting, please use the smilling cutting method.
6. For better cooling of the steel materials, please use air or spraying tyoes. For stainless steel, titanium alloy, and heat-resistant alloy, please use non-water solution cutting fluid.