

200NaNo Series



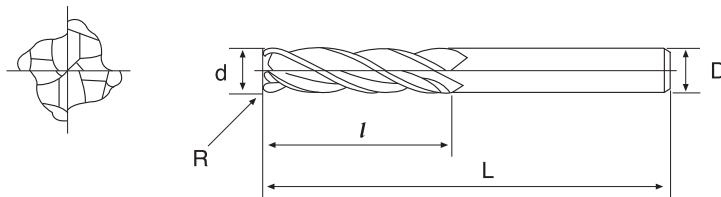
Corner Radius End Mill - 4 flutes

Super Ultra Fine Micro Grain Carbide

WC = 91 Co = 9 HRA = 93.2 Rupture = 4000N/mm² Grain Size = 0.2μm

Application Iron, Carbon steel, Cast Iron, Alloy Steel, Tool Steel, Heat treatment Steel, Welding Steel

Main Character Super Ultra Fine Micro Grain Carbide that has high toughness, coating ALTIN (TiAlN) and wear-resisting, non-general titanium aluminium is specialized in milling on M/C high hardness at a high speed and can carry on rough machining get to detailed process directly for heat treatment mould to reduce change times, improve machine flexible rate and shorten producing time.



! Attention : In order to get better cutting surface and lengthen the life-time of the end mill, please use high accuracy, high rigidity and dynamic equilibrium of holder.

1. Before using the end mill, please examine the end mill to lean towards and put, when the precision of the leaning towards of end mill exceeds 0.01mm, please cut after correcting.
2. It is better that end mill stretches out shorter from chuck, when the end mill stretches out longer, please adjust the rotational speed, feeding speed or cutting amount.
3. Unusual vibrations or sound happen when cutting, please adjust and lower the rotational speed of the main shaft one by one, feeding speed and cutting amount until improving the situation, or change the high-quality end mill.
4. It is the best way to cool steel material by spraying or air in order to make TiAlN efficiently; we commend to adopt non-water cutting liquid to cool the stainless steel, titanium alloy or heat-resisting alloy liquid.
5. Cutting will be influenced by work piece, machine and software; the above-mentioned data are only for reference, please improve feeding speed by 30%~50% up after cutting situation steadily.



MODE	Diameter d	Flute Length l	Full Length L	Shank Diameter D	Flute No. Z	Cornet Radius R	Packing Quantity	Price
SFURTA06034- π HSC	6	16	75	6	4 Z	0.3R	2	
SFURTA06054- π HSC	6	16	75	6	4 Z	0.5R	2	
SFURTA06104- π HSC	6	16	75	6	4 Z	1R	2	
SFURTA06204- π HSC	6	16	75	6	4 Z	2R	2	
SFURTA08034- π HSC	8	20	75	8	4 Z	0.3R	2	
SFURTA08054- π HSC	8	20	75	8	4 Z	0.5R	2	
SFURTA08104- π HSC	8	20	75	8	4 Z	1R	2	
SFURTA08204- π HSC	8	20	75	8	4 Z	2R	2	
SFURTA10054- π HSC	10	25	75	10	4 Z	0.5R	2	
SFURTA10104- π HSC	10	25	75	10	4 Z	1R	2	
SFURTA10154- π HSC	10	25	75	10	4 Z	1.5R	2	
SFURTA10204- π HSC	10	25	75	10	4 Z	2R	2	
SFURTA10304- π HSC	10	25	75	10	4 Z	3R	2	
SFURTA12054- π HSC	12	30	75	12	4 Z	0.5R	2	
SFURTA12104- π HSC	12	30	75	12	4 Z	1R	2	
SFURTA12154- π HSC	12	30	75	12	4 Z	1.5R	2	
SFURTA12204- π HSC	12	30	75	12	4 Z	2R	2	
SFURTA12304- π HSC	12	30	75	12	4 Z	3R	2	

SFURTA 4 Flutes Recommended Milling conditions

Working material hardness	HRC30°		HRC40°		HRC50°		HRC55°		HRC60°	
	Rotational speed	Feeding speed	Rotational speed	Feeding speed	Rotational speed	Feeding speed	Rotational speed	Feeding speed	Rotational speed	Feeding speed
	RPM	mm/min.	RPM	mm/min.	RPM	mm/min.	RPM	mm/min.	RPM	mm/min.
Corner Radius										
D1.0 x 0.1R	11880	588	10500	510	8700	390	7200	336	5880	270
D1.0 x 0.2R	11880	588	10500	510	8700	390	7200	336	5880	270
D1.0 x 0.3R	11880	588	10500	510	8700	390	7200	336	5880	270
D1.5 x 0.2R	10500	720	9120	540	8280	420	6300	360	5100	300
D1.5 x 0.3R	10500	720	9120	540	8280	420	6300	360	5100	300
D2.0 x 0.1R	9600	900	7920	660	7560	540	5880	450	4320	300
D2.0 x 0.2R	9600	900	7920	660	7560	540	5880	450	4320	300
D2.0 x 0.3R	9600	900	7920	660	7560	540	5880	450	4320	300
D3.0 x 0.1R	7800	1080	6600	900	5880	720	4920	630	4500	300
D3.0 x 0.2R	7800	1080	6600	900	5880	720	4920	630	4500	300
D3.0 x 0.3R	7800	1080	6600	900	5880	720	4920	630	4500	300
D4.0 x 0.2R	7500	1200	6300	1080	5580	630	4710	510	4080	300
D4.0 x 0.3R	7500	1200	6300	1080	5580	630	4710	510	4080	300

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	RPM	mm/min.	RPM	mm/min.	RPM	mm/min.	RPM	mm/min.	RPM	mm/min.
Corner Radius										
D2.0 x 0.5R	9600	720	8700	660	7800	540	660	450	5520	360
D3.0 x 0.5R	7800	1200	6600	1080	5880	900	4920	660	4500	300
D4.0 x 0.5R	7500	1200	6300	1080	5580	630	4710	510	4080	300
D6.0 x 0.5R	6900	1800	6000	1560	5280	1200	4320	900	2760	450
D8.0 x 0.5R	5190	2040	4770	1620	3210	1020	2790	720	2310	492
D10.0 x 0.5R	3300	1680	2520	1140	1920	660	1620	570	990	348
D12.0 x 0.5R	2790	1740	2070	1020	1320	570	1080	480	780	318



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	RPM	mm/min.	RPM	mm/min.	RPM	mm/min.	RPM	mm/min.	RPM	mm/min.
Corner Radius										
D3.0 x 1R	8970	1380	7590	1242	6762	1035	5658	759	5175	345
D4.0 x 1R	8625	1380	7245	1243	6417	725	5417	587	4692	345
D6.0 x 1R	7935	2070	6900	1794	6072	1380	4968	1035	3174	518
D8.0 x 1R	5969	2346	5486	1863	3692	1173	3209	828	2657	566
D10.0 x 1R	3795	1920	2898	1311	2208	759	1863	656	1139	400
D12.0 x 1R	3209	2001	2381	1173	1518	855	1242	522	897	366

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	RPM	mm/min.	RPM	mm/min.	RPM	mm/min.	RPM	mm/min.	RPM	mm/min.
Corner Radius										
D6.0 x 1.5R	28280	2160	7200	1872	6336	1440	5184	1080	3312	540
D8.0 x 1.5R	6228	2448	5724	1944	3852	1224	3348	864	2772	590
D10.0 x 1.5R	3960	2016	3024	1368	2304	792	1944	684	1188	418
D12.0 x 1.5R	3348	2088	2484	1224	1584	684	1296	576	936	382

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	RPM	mm/min.	RPM	mm/min.	RPM	mm/min.	RPM	mm/min.	RPM	mm/min.
Corner Radius										
D6.0 x 2R	8970	2340	7800	2028	6864	1560	5616	1170	3588	585
D8.0 x 2R	6747	2652	6201	2106	4173	1326	3627	3003	3003	640
D10.0 x 2R	4290	2184	3276	1482	2496	858	2106	1287	1287	452
D12.0 x 2R	3627	2262	2691	1326	1716	741	1404	1014	1014	413

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	Rotational speed	Feeding speed	Rotational speed	Feeding speed	Rotational speed	Feeding speed	Rotational speed	Feeding speed	Rotational speed	Feeding speed
	RPM	mm/min.	RPM	mm/min.	RPM	mm/min.	RPM	mm/min.	RPM	mm/min.
Corner Radius										
D8.0 x 3R	7007	2754	6440	2187	4334	1377	3767	972	3120	664
D10.0 x 3R	4455	2268	3402	1539	2592	891	2187	770	1337	470
D12.0 x 3R	3767	2349	2795	1377	1782	770	1458	648	1053	430