

SFUET® 200NaNo Series



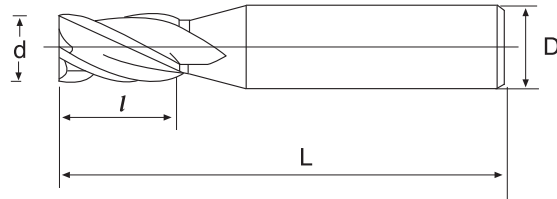
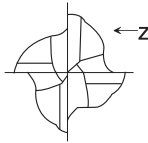
Square End Mill - 4 flutes

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.



MODE	Diameter d	Flute Length l	Full Length L	Shank Diameter D	Flute No. Z	Packing Quantity	Price
SFUET0104-HSC	1	2.5	50	4.0	4 Z	6	
SFUET0154-HSC	1.5	3.0	50	4.0	4 Z	6	
SFUET0204-HSC	2	5.0	50	4.0	4 Z	6	
SFUET0254-HSC	2.5	6.0	50	4.0	4 Z	6	
SFUET0304-HSC	3	7.5	50	4.0	4 Z	6	
SFUET0354-HSC	3.5	8.0	50	4.0	4 Z	6	
SFUET0404-HSC	4	10.0	50	4.0	4 Z	6	
SFUET0454-HSC	4.5	10.0	50	6.0	4 Z	6	
SFUET0504-HSC	5	12.0	50	6.0	4 Z	6	
SFUET0554-HSC	5.5	12.5	60	6.0	4 Z	4	
SFUET0604-HSC	6	15.0	60	6.0	4 Z	4	
SFUET0704-HSC	7	20.0	60	8.0	4 Z	4	
SFUET0804-HSC	8	20.0	60	8.0	4 Z	4	
SFUET1004-HSC	10	25.0	75	10.0	4 Z	2	
SFUET1204-HSC	12	30.0	75	12.0	4 Z	2	
SFUET1404-HSC	14	30.0	80	16.0	4 Z	1	
SFUET1604-HSC	16	45.0	100	16.0	4 Z	1	
SFUET2004-HSC	20	50.0	100	20.0	4 Z	1	
SFUET2504-HSC	25	55.0	100	25.0	4 Z	1	



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 TiAIN 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.

SFUET 4 Flutes Recommended Milling conditions

Working material hardness	Below HRC30°		HRC30°~HRC35°		HRC35°~HRC40°		HRC40°~HRC45°		HRC45°~HRC65°	
	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.
Shank Diameter										
φ 1.0	16000	600	14800	500	13900	450	13000	400	10500	380
φ 2.0	14800	700	13900	650	12800	600	11150	580	9000	500
φ 3.0	12000	1100	11000	1000	9800	900	9000	800	7800	500
φ 4.0	11500	1600	9800	1350	9000	950	8500	750	7000	680
φ 5.0	10000	2000	9500	1700	8900	1300	7800	1000	5500	600
φ 6.0	10000	2000	9000	1650	8200	1200	7600	950	5000	550
φ 8.0	6500	2200	6000	1800	4500	1500	4000	1200	2500	650
φ 10.0	3800	1900	3000	1500	2500	1100	2000	900	1600	500
φ 12.0	3200	1800	2700	1500	2500	1200	2000	1000	1200	450