

ST[®] 200NaNo Series



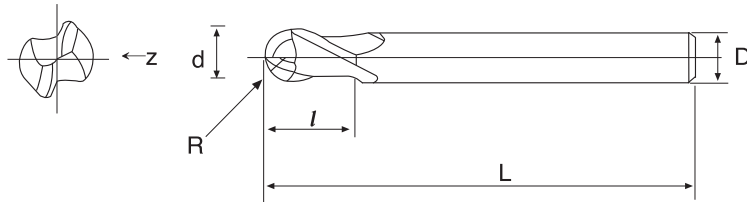
Ball Nose End Mill - 2 flutes

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	Radius of Ball Nose R	Packing Quantity	Price
SFUBT0102-HSC	1	1.5	50	4.0	0.5R	6	
SFUBT0152-HSC	1.5	2.5	50	4.0	0.75R	6	
SFUBT0202-HSC	2	3.0	50	4.0	1.0R	6	
SFUBT0252-HSC	2.5	4.0	50	4.0	1.25R	6	
SFUBT0302-HSC	3	5.0	50	4.0	1.5R	6	
SFUBT0402-HSC	4	6.0	50	4.0	2.0R	6	
SFUBT0502-HSC	5	8.0	60	6.0	2.5R	6	
SFUBT0602-HSC	6	9.0	60	6.0	3.0R	6	
SFUBT0702-HSC	7	14.0	60	8.0	3.5R	4	
SFUBT0802-HSC	8	16.0	60	8.0	4.0R	4	
SFUBT0902-HSC	9	18.0	75	10.0	4.5R	2	
SFUBT1002-HSC	10	20.0	75	10.0	5.0R	2	
SFUBT1202-HSC	12	24.0	75	12.0	6.0R	2	
SFUBT1402-HSC	14	24.0	80	16.0	7.0R	1	
SFUBT1602-HSC	16	24.0	100	16.0	8.0R	1	
SFUBT2002-HSC	20	30.0	150	20.0	10.0R	1	
SFUBT2502-HSC	25	35.0	150	25.0	12.5R	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.

SFUBT 2 Flutes Recommended Milling conditions

Working material hardness	Below HRC30°		HRC30°~HRC45°		HRC45°~HRC65°	
	Rotational speed	Feeding speed	Rotational speed	Feeding speed	Rotational speed	Feeding speed
	RPM	mm/min.	RPM	mm/min.	RPM	mm/min.
R0.5	25600	960	20800	640	16800	608
R1.0	23680	1120	17840	928	14400	800
R1.5	19200	1760	14400	1280	12480	800
R2.0	18400	2560	13600	1200	11200	1088
R2.5	16000	3200	12480	1600	8800	960
R3.0	16000	3200	12160	1520	8000	880
R4.0	10400	3520	6400	1920	4000	1040
R5.0	6080	3040	3200	1440	2560	800
R6.0	5120	2880	3200	1600	1920	720