

ST[®] 200NaNo Series



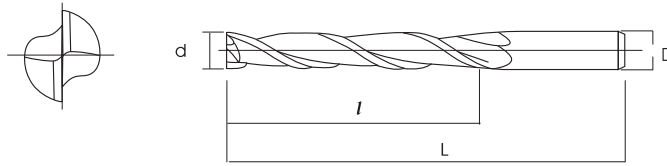
Square Long Flute End Mill - 2 flutes

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	Flute No. Z	Packing Quantity	Price
SFULET0102-HSC	1.0	4.0	50	4.0	2 Z	6	
SFULET0152-HSC	1.5	6.0	50	4.0	2 Z	6	
SFULET0202-HSC	2.0	8.0	50	4.0	2 Z	6	
SFULET0302-HSC	3.0	11.0	60	6.0	2 Z	4	
SFULET0402-HSC	4.0	14.0	60	6.0	2 Z	4	
SFULET0452-HSC	4.5	16.0	60	6.0	2 Z	4	
SFULET0502-HSC	5.0	18.0	60	6.0	2 Z	4	
SFULET0552-HSC	5.5	20.0	60	6.0	2 Z	4	
SFULET0602-HSC	6.0	25.0	75	6.0	2 Z	2	
SFULET0652-HSC	6.5	25.0	75	8.0	2 Z	2	
SFULET0702-HSC	7.0	25.0	75	8.0	2 Z	2	
SFULET0752-HSC	7.5	25.0	75	8.0	2 Z	2	
SFULET0802-HSC	8.0	25.0	75	8.0	2 Z	2	
SFULET0812-HSC	8.0	35.0	100	8.0	2 Z	2	
SFULET0852-HSC	8.5	35.0	100	10.0	2 Z	2	
SFULET0902-HSC	9.0	35.0	100	10.0	2 Z	2	
SFULET0952-HSC	9.5	40.0	100	10.0	2 Z	2	
SFULET1002-HSC	10.0	40.0	100	10.0	2 Z	2	
SFULET1052-HSC	10.5	40.0	100	12.0	2 Z	2	
SFULET1102-HSC	11.0	40.0	100	12.0	2 Z	2	
SFULET1152-HSC	11.5	45.0	100	12.0	2 Z	2	
SFULET1202-HSC	12.0	45.0	100	12.0	2 Z	2	
SFULET1402-HSC	14.0	45.0	100	16.0	2 Z	1	
SFULET1502-HSC	15.0	45.0	100	16.0	2 Z	1	
SFULET1602-HSC	16.0	45.0	100	16.0	2 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.

SFULET 2 Flutes Recommended Milling conditions

Working material hardness	Below HRC30°		HRC30°~HRC35°		HRC35°~HRC40°		HRC40°~HRC45°		HRC45°~HRC65°	
	Rotational speed RPM	Feeding speed mm/min.	Rotational speed RPM	Feeding speed mm/min.	Rotational speed RPM	Feeding speed mm/min.	Rotational speed RPM	Feeding speed mm/min.	Rotational speed RPM	Feeding speed mm/min.
Shank Diameter \$ 1.0	6400	240	5920	200	5560	180	5200	160	4200	152
\$ 2.0	5920	480	5560	260	5120	240	4460	232	3600	200
\$ 3.0	4800	440	4400	400	3920	360	3600	320	3120	200
\$ 4.0	4600	640	3920	540	3600	380	3400	300	2800	272
\$ 5.0	4000	800	3800	680	3560	520	3120	320	2200	240
\$ 6.0	4000	800	3600	660	3280	480	3040	380	2000	220
\$ 8.0	2600	880	2400	720	1800	600	1600	480	1000	260
\$ 10.0	1520	760	1200	600	1000	440	800	360	640	200
\$ 12.0	1280	720	1080	600	1000	480	800	400	480	180