

UET I Square Type End Mills - 2 flutes

Ultra Fine Micro Grain Carbide

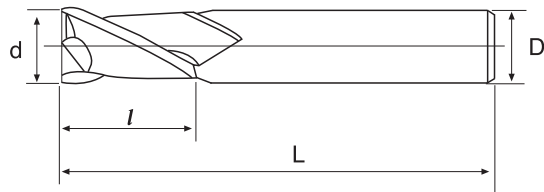
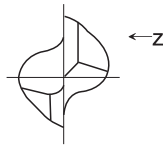
WC = 87 Co = 12 HRA = 92.1 Rupture = 3800N/mm² Grain Size = 0.4μm

Application

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

Main Character

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	Packing Quantity	Price
UET0102-π HSC	1	3	50	4	6	
UET0152-π HSC	1.5	4	50	4	6	
UET0202-π HSC	2	6	50	4	6	
UET0252-π HSC	2.5	8	50	4	6	
UET0302-π HSC	3	8	50	4	6	
UET0352-π HSC	3.5	10	50	4	6	
UET0402-π HSC	4	11	50	4	6	
UET0452-π HSC	4.5	13	50	6	6	
UET0502-π HSC	5	13	50	6	6	
UET0552-π HSC	5.5	13	50	6	6	
UET0602-π HSC	6	16	50	6	6	
UET0652-π HSC	6.5	16	60	8	4	
UET0702-π HSC	7	17	60	8	4	
UET0752-π HSC	7.5	17	60	8	4	
UET0802-π HSC	8	21	60	8	4	
UET0852-π HSC	8.5	25	75	10	2	
UET0902-π HSC	9	25	75	10	2	
UET0952-π HSC	9.5	25	75	10	2	
UET1002-π HSC	10	26	75	10	2	
UET1102-π HSC	11	28	75	12	2	
UET1202-π HSC	12	30	75	12	2	
UET1302-π HSC	13	33	75	14	1	
UET1402-π HSC	14	33	75	14	1	
UET1502-π HSC	15	33	75	16	1	
UET1602-π HSC	16	33	75	16	1	
UET1802-π HSC	18	45	100	18	1	
UET2002-π HSC	20	50	100	20	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 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.

UET 2F Recommended Milling conditions

Working material hardness	HRC30°		HRC50°		HRC60°	
	Rotational speed	Feeding speed	Rotational speed	Feeding speed	Rotational speed	Feeding speed
	RPM	mm/min.	RPM	mm/min.	RPM	mm/min.
Shank Diameter						
φ 1.0	11500	384	8896	288	6720	243
φ 1.5	10800	480	8250	380	6400	290
φ 2.0	9472	448	8192	384	5760	320
φ 2.5	9100	500	8050	420	5600	320
φ 3.0	7680	550	7150	480	4992	320
φ 3.5	7200	610	6850	520	4680	350
φ 4.0	6950	680	6350	580	4480	350
φ 4.5	6660	700	6100	600	4500	360
φ 5.0	6400	700	5850	600	4310	360
φ 5.5	6200	750	5900	650	4100	380
φ 6.0	6200	750	5900	650	3900	380
φ 6.5	6000	800	5700	710	3800	410
φ 7.0	5900	850	5000	760	3700	420
φ 7.5	5900	850	4600	760	3600	420
φ 8.0	4500	950	2880	800	1850	470
φ 8.5	4100	1020	2450	900	1750	500
φ 10.0	2900	1400	1500	750	1100	380
φ 10.5	2800	1400	1350	680	1000	350
φ 11.0	2700	1300	1250	500	950	300
φ 11.5	2600	1300	1100	450	850	250
φ 12.0	2450	1000	1020	420	790	210
φ 12.5	2100	900	950	380	680	200
φ 13.0	1800	700	870	350	620	180
φ 14.0	1680	650	740	320	570	170
φ 15.0	1500	600	700	320	520	170
φ 16.0	1400	600	670	300	490	170
φ 17.0	1300	600	630	290	450	170
φ 18.0	1190	550	580	270	430	160
φ 19.0	1050	550	490	250	395	150
φ 20.0	920	550	440	210	310	120
φ 25.0	780	400	380	165	280	120