

URTA Corner Radius Cutter - 4 flutes

Ultra Fine Micro Grain Carbide

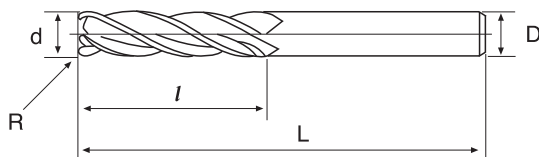
WC = 87 Co = 12 HRA = 92.1 Rupture = 3800N/mm² Grain size = 0.4μm

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	Corner Radius R	Packing Quantity	Price
URTA03034-HSC	3	8	50	3	0.3R	6	
URTA03054-HSC	3	8	50	3	0.5R	6	
URTA03104-HSC	3	8	50	3	1.0R	6	
URTA04024-HSC	4	10	50	4	0.2R	6	
URTA04034-HSC	4	10	50	4	0.3R	6	
URTA04054-HSC	4	10	50	4	0.5R	6	
URTA04104-HSC	4	10	50	4	1.0R	6	
URTA05034-HSC	5	13	75	6	0.3R	2	
URTA05054-HSC	5	13	75	6	0.5R	2	
URTA05104-HSC	5	13	75	6	1.0R	2	
URTA06024-HSC	6	16	75	6	0.2R	2	
URTA06034-HSC	6	16	75	6	0.3R	2	
URTA06054-HSC	6	16	75	6	0.5R	2	
URTA06104-HSC	6	16	75	6	1.0R	2	
URTA06204-HSC	6	16	75	6	2.0R	2	
URTA08034-HSC	8	20	75	8	0.3R	2	
URTA08054-HSC	8	20	75	8	0.5R	2	
URTA08104-HSC	8	20	75	8	1.0R	2	
URTA08204-HSC	8	20	75	8	2.0R	2	
URTA10054-HSC	10	25	75	10	0.5R	2	
URTA10104-HSC	10	25	75	10	1.0R	2	
URTA10154-HSC	10	25	75	10	1.5R	2	
URTA10204-HSC	10	25	75	10	2.0R	2	
URTA10304-HSC	10	25	75	10	3.0R	2	
URTA12054-HSC	12	30	75	12	0.5R	2	
URTA12104-HSC	12	30	75	12	1.0R	2	
URTA12154-HSC	12	30	75	12	1.5R	2	
URTA12204-HSC	12	30	75	12	2.0R	2	
URTA12304-HSC	12	30	75	12	3.0R	2	

! 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.

URTA Recommended Milling conditions

Working material hardness Corner Radius	HRC30°		HRC50°		HRC60°	
	Rotational speed	Feeding speed	Rotational speed	Feeding speed	Rotational speed	Feeding speed
	RPM	mm/min.	RPM	mm/min.	RPM	mm/min.
D3.0 x 0.1R	7280	1008	5488	672	4200	280
D3.0 x 0.2R	7280	1008	5488	672	4200	280
D3.0 x 0.3R	7280	1008	5488	672	4200	280
D4.0 x 0.2R	7000	1120	5208	588	3808	280
D4.0 x 0.3R	7000	1120	5208	588	3808	280
D3.0 x 0.5R	7280	1120	5488	840	4200	280
D4.0 x 0.5R	7000	1120	5208	588	3808	280
D6.0 x 0.5R	6440	1680	4928	1120	2576	420
D8.0 x 0.5R	4844	1904	2996	952	2156	459
D10.0 x1R	3080	1568	1792	616	924	325
D12.0 x1R	2604	1624	1323	532	728	297
D3.0 x 1R	3872	1288	6311	966	4830	322
D4.0 x 1R	8050	1588	5989	676	4379	322
D6.0 x 1R	7406	1932	5667	1288	2962	483
D8.0 x 1R	5571	2190	3446	1095	2480	528
D10.0 x1R	3541	1792	2016	708	1063	374
D12.0 x 1R	2995	1868	1417	798	837	342
D6.0 x 1.5R	7728	2016	5914	1344	3091	504
D8.0 x 1.5R	5813	2285	3595	1142	2587	551
D10.0 x1.5R	3696	1882	2150	739	1109	390
D12.0 x 1.5R	3125	1949	1478	638	874	356
D6.0 x 2R	8372	2184	6406	1456	3349	546
D8.0 x 2R	6297	2475	3895	1238	2803	597
D10.0 x2R	4004	2038	2330	801	1201	422
D12.0 x 2R	3385	2111	1602	692	946	386
D8.0 x 2.5R	6540	2570	4045	1285	2912	620
D10.0 x2.5R	4158	2117	2419	832	1248	438
D12.0 x 2.5R	3516	2192	1663	718	983	401