

Recommended Cutting Data 305 Micro-Tuff® - Inch

Workpiece Material Group	ISO	Hardness	Tool Series	TYPE	vc - SFM	Drill Diameter				
						1/64	1/32	1/16	3/32	1/8
						f - IPR				
Free Machining & Low Carbon Steels: 1006, 1008, 1015, 1018, 1020, 1022, 1025, 1117, 1140, 1141, 11L08, 11L14, 1213, 12L13, 12L14, 1215, 1330	P	up to 28 Rc	305	●	300	.0004	.0008	.0015	.0023	.0030
			305AM		360					
Medium Carbon & High Carbon Steels, Alloy Steels & Easy to Machine Tool Steels: 1030, 1035, 1040, 1045, 1050, 1052, 1055, 1060, 1085, 1095, 1541, 1551, 9255, 2515, 3135, 3415, 4130, 4137, 4140, 4150, 4320, 4340, 4520, 5015, 5115, 5120, 5132, 5140, 5155, 6150, 8620, 9262, 9840, 52100, O1, O2, O6, S2, W1 to W310	P	28 to 38 Rc	305		225					
			305AM		270					
Tool Steels & Die Steels: O7, M1, M2, M3, M4, M7, T1, T2, T4, T5, T8, T15, A2, A3, A6, A7, H10, H11, H12, H13, H19, H21, L3, L6, L7, P2, P20, S1, S6, S7, 52100, A128, D2, D3, D4, D5, D7	P	28 to 44 Rc	305		200					
			305AM		240					
Hardened Steels A2 / 52100	H	35-55 Rc	305	50						
			305AM	60						
Free Machining Stainless	M	up to 28 Rc	305	175						
			305AM	210						
Stainless Steel - Austenitic 304 / 316	M	up to 28 Rc	305	200						
			305AM	240						
Stainless Steel - Ferritic / Martensitic	M	up to 28 Rc	305	100						
			305AM	120						
Stainless Steel - Moderately Difficult: 301, 302, 303 High Tensile, 304, 304L, 305, 420, 15-5PH, 17-4PH, 17-7PH	M	over 28 Rc	305	75						
			305AM	90						
Aluminum (<10% Si)	N		305	450						
			305AM	-						
Aluminum (>10% Si)	N		305	325						
			305AM	-						
Plastics	N		305	550						
			305AM	-						
Composites / Fiber Reinforced Materials / Circuit Boards	N	305	650							
		305AM	-							
Cast Iron - Gray CG: ASTM A48, CLASS 20, 25, 30, 35, SAE J431C, GRADES G1800, G3000, G3500, GG 10, 15, 20, 25, 30, 35, 40	K	up to 240 HB	305	400						
			305AM	480						
Cast Iron - Ductile & Malleable CGI: 60-40-18, 65-45-12, D4018, D4512, D5506, 32510, 35108, M3210, M4504, M5503, 250, 300, 350, 400, 450	K	over 240 HB	305	350						
			305AM	420						
Titanium 6Al-4V	S	up to 40 Rc	305	60						
			305AM	70						
High Temp Alloys Inconel / Hastelloy / Waspeloy / Nickel Based Alloys-Monel	S	up to 40 Rc	305	50						
			305AM	60						

Recommended Peck Depths by Diameter*

Diameter	Peck Depth
1/64	.2 x Diameter
1/32	.3 x Diameter
1/16	.6 x Diameter
5/64	.8 x Diameter
3/32	1.0 x Diameter
1/8	1.2 x Diameter

*Peck depths can vary by material type.

Technical data provided should be considered advisory only as variations may be necessary depending on the particular application.