

Twister® GP

205 / 207 Series Recommended Cutting Data - Inch

Screw Machine & 3xD, Solid Drilling

Workpiece Material Group	I S O	Hardness	Tool Series	T Y P E	D E P T H	vc - SFM	Drill Diameter (Inch)							
							1/32	1/16	1/8	1/4	3/8	1/2	5/8	3/4
							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	205	●	Screw Machine	175	.0010	.0020	.0030	.0060	.0080	.0100	.0110	.0120
			205T				.0010	.0020	.0030	.0060	.0080	.0100	.0110	.0120
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, 1 to W310	P	28 to 38 Rc	205	●	Screw Machine	165	.0010	.0020	.0030	.0060	.0080	.0100	.0110	.0120
			205T				.0010	.0020	.0030	.0060	.0080	.0100	.0110	.0120
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, S5, S7, 52100, A 128, D2, D3, D4, D5, D7	P	28 to 44 Rc	205	●	Screw Machine	150	.0010	.0020	.0030	.0060	.0080	.0100	.0110	.0120
			205T				.0010	.0020	.0030	.0060	.0080	.0100	.0110	.0120
Stainless Steel - Moderately Difficult 301, 302, 303 High Tensile, 304, 304L, 305, 420, 15-5PH, 17-4PH, 17-7PH	M	up to 28 Rc	205	●	Screw Machine	140	.0010	.0020	.0030	.0060	.0080	.0100	.0110	.0120
			205T				.0010	.0020	.0030	.0060	.0080	.0100	.0110	.0120
Stainless Steel - Difficult to Machine 302B, 304B, 309, 310, 316, 316B, 316L, 316Ti, 317, 317L, 321, PH13-8Mo, Nitronics	M	up to 28 Rc	205	●	Screw Machine	60	.0003	.0005	.0020	.0040	.0050	.0060	.0080	.0100
			205T				.0003	.0005	.0020	.0040	.0050	.0060	.0080	.0100
High Temp Alloys Nimonic, Inconel, Monel, Hastelloy	S	up to 42 Rc	205	●	Screw Machine	60	.0003	.0005	.0020	.0040	.0050	.0060	.0080	.0100
			205T				.0003	.0005	.0020	.0040	.0050	.0060	.0080	.0100
Titanium Alloys 6Al-4V, 5Al-2.5 Sn, 6Al-2 Sn-4Zr-6Mo, 3Al-8V-6Cr-4Mo-4Zr, 10V-2Fe-3Al, 13V-11Cr-3Al	S	up to 42 Rc	205	●	Screw Machine	80	.0003	.0005	.0020	.0040	.0050	.0060	.0080	.0100
			205T				.0003	.0005	.0020	.0040	.0050	.0060	.0080	.0100
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	205	●	Screw Machine	175	.0010	.0020	.0030	.0060	.0080	.0100	.0110	.0120
			205T				.0010	.0020	.0030	.0060	.0080	.0100	.0110	.0120
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	205	●	Screw Machine	175	.0010	.0020	.0030	.0060	.0080	.0100	.0110	.0120
			205T				.0010	.0020	.0030	.0060	.0080	.0100	.0110	.0120
Plastics	N		205	●	Screw Machine	300	.0003	.0005	.0020	.0040	.0050	.0060	.0080	.0100
			205T				.0003	.0005	.0020	.0040	.0050	.0060	.0080	.0100
Kevlar/Graphite	N		207	●	3x	300	.0003	.0005	.0020	.0040	.0050	.0060	.0080	.0100
			207				.0003	.0005	.0020	.0040	.0050	.0060	.0080	.0100
Hardened Steel	H	45 to 65 Rc	205	●	Screw Machine	50	.0003	.0010	.0010	.0010	.0020	.0020	.0020	.0030
			205T				.0003	.0010	.0010	.0010	.0020	.0020	.0020	.0030

Drills - Technical Information
Series 205 / 207

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

Twister® GP

205 / 207 Series Recommended Cutting Data - Metric Screw Machine & 3xD, Solid Drilling

Workpiece Material Group	I S O	Hardness	Tool Series	T Y P E	D E P T H	vc - m/min	Drill Diameter (mm)							
							1	2	3	6	10	12	16	20
							f - mm/Rev							
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	205		Screw Machine	55	.025	.050	.078	.152	.203	.254	.275	.305
			205T				.025	.050	.078	.152	.203	.254	.275	.305
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	205		Screw Machine	45	.025	.050	.078	.152	.203	.254	.275	.305
			205T				.025	.050	.078	.152	.203	.254	.275	.305
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, S5, S7, 52100, A 128, D2, D3, D4, D5, D7	P	28 to 44 Rc	205		Screw Machine	35	.025	.050	.078	.152	.203	.254	.275	.305
			205T				.025	.050	.078	.152	.203	.254	.275	.305
Stainless Steel - Moderately Difficult 301, 302, 303 High Tensile, 304, 304L, 305, 420, 15-5PH, 17-4PH, 17-7PH	M	up to 28 Rc	205		Screw Machine	45	.025	.050	.078	.152	.203	.254	.275	.305
			205T				.025	.050	.078	.152	.203	.254	.275	.305
Stainless Steel - Difficult to Machine 302B, 304B, 309, 310, 316, 316B, 316L, 316Ti, 317, 317L, 321, PH13-8Mo, Nitronics	M	up to 28 Rc	205		Screw Machine	20	.006	.013	.050	.076	.101	.152	.203	.225
			205T				.006	.013	.050	.076	.101	.152	.203	.225
High Temp Alloys Nimonic, Inconel, Monel, Hastelloy	S	up to 42 Rc	205		Screw Machine	20	.006	.013	.050	.076	.101	.152	.203	.225
			205T				.006	.013	.050	.076	.101	.152	.203	.225
Titanium Alloys 6Al-4V, 5Al-2.5 Sn, 6Al-2 Sn-4Zr-6Mo, 3Al-8V-6Cr4Mo-4Zr, 10V-2Fe-3Al, 13V-11Cr-3Al	S	up to 42 Rc	205		Screw Machine	25	.006	.013	.050	.076	.101	.152	.203	.225
			205T				.006	.013	.050	.076	.101	.152	.203	.225
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	205		Screw Machine	55	.025	.050	.078	.152	.203	.254	.275	.305
			205T				.025	.050	.078	.152	.203	.254	.275	.305
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	205		Screw Machine	55	.025	.050	.078	.152	.203	.254	.275	.305
			205T				.025	.050	.078	.152	.203	.254	.275	.305
Plastics	N		205		Screw Machine	90	.006	.013	.050	.076	.101	.152	.203	.225
			205T											
			207											
Kevlar/Graphite	N		207		3x	115	.006	.013	.050	.076	.101	.152	.203	.225
Hardened Steel	H	45 to 65 Rc	205		Screw Machine	15	.0063	.0254	.0254	.0254	.0508	.0508	.0508	.0762
			205T				.0063	.0254	.0254	.0254	.0508	.0508	.0508	.0762

Drills - Technical Information
Series 205 / 207

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