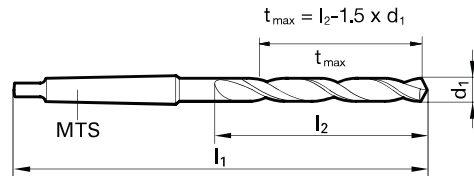


- P** Steel ● web thinning ≥ Ø 14.050 • relieved cone
 - M** Stainless steel
 - K** Cast iron ● alloyed/unalloyed steel and cast steel • grey cast iron, malleable and spheroidal iron • sintered powder metal, German silver and graphite
 - N** Aluminum ○
 - S** Titanium alloys
 - H** Hardened steel
- =Optimal
○=Limited



Speeds and feeds information on pg. 481

Morse Taper Length

Diameter (d ₁)			Shank Size	l ₁ mm	t _{max} mm	l ₂ mm	EDP #
inch	wire/ltr	mm					
0.0937	3/32	2.38	MTS 1	111.00	26.43	30.00	9002450023800
0.0984		2.50	MTS 1	111.00	26.25	30.00	9002450025000
0.1094	7/64	2.78	MTS 1	114.00	28.83	33.00	9002450027800
0.1248	1/8	3.17	MTS 1	117.00	31.25	36.00	9002450031700
0.1406	9/64	3.57	MTS 1	120.00	33.65	39.00	9002450035700
0.1496		3.80	MTS 1	124.00	37.30	43.00	9002450038000
0.1563	5/32	3.97	MTS 1	124.00	37.05	43.00	9002450039700
0.1575		4.00	MTS 1	124.00	37.00	43.00	9002450040000
0.1673		4.25	MTS 1	124.00	36.63	43.00	9002450042500
0.1720	11/64	4.37	MTS 1	128.00	40.45	47.00	9002450043700
0.1772		4.50	MTS 1	128.00	40.25	47.00	9002450045000
0.1874	3/16	4.76	MTS 1	133.00	44.86	52.00	9002450047600
0.1969		5.00	MTS 1	133.00	44.50	52.00	9002450050000
0.2008		5.10	MTS 1	133.00	44.35	52.00	9002450051000
0.2031	13/64	5.16	MTS 1	133.00	44.26	52.00	9002450051600
0.2047		5.20	MTS 1	133.00	44.20	52.00	9002450052000
0.2067		5.25	MTS 1	133.00	44.13	52.00	9002450052500
0.2087		5.30	MTS 1	133.00	44.05	52.00	9002450053000
0.2126		5.40	MTS 1	138.00	48.90	57.00	9002450054000
0.2165		5.50	MTS 1	138.00	48.75	57.00	9002450055000
0.2189	7/32	5.56	MTS 1	138.00	48.66	57.00	9002450055600
0.2205		5.60	MTS 1	138.00	48.60	57.00	9002450056000
0.2244		5.70	MTS 1	138.00	48.45	57.00	9002450057000
0.2264		5.75	MTS 1	138.00	48.38	57.00	9002450057500
0.2283		5.80	MTS 1	138.00	48.30	57.00	9002450058000
0.2323		5.90	MTS 1	138.00	48.15	57.00	9002450059000
0.2343	15/64	5.95	MTS 1	138.00	48.08	57.00	9002450059500
0.2362		6.00	MTS 1	138.00	48.00	57.00	9002450060000
0.2402		6.10	MTS 1	144.00	53.85	63.00	9002450061000
0.2441		6.20	MTS 1	144.00	53.70	63.00	9002450062000
0.2461	D	6.25	MTS 1	144.00	53.63	63.00	9002450062500
0.2480		6.30	MTS 1	144.00	53.55	63.00	9002450063000
0.2500	1/4	6.35	MTS 1	144.00	53.48	63.00	9002450063500
0.2520		6.40	MTS 1	144.00	53.40	63.00	9002450064000
0.2559		6.50	MTS 1	144.00	53.25	63.00	9002450065000
0.2598		6.60	MTS 1	144.00	53.10	63.00	9002450066000
0.2638		6.70	MTS 1	144.00	52.95	63.00	9002450067000
0.2657	17/64	6.75	MTS 1	150.00	58.88	69.00	9002450067500
0.2677		6.80	MTS 1	150.00	58.80	69.00	9002450068000
0.2717	I	6.90	MTS 1	150.00	58.65	69.00	9002450069000
0.2756		7.00	MTS 1	150.00	58.50	69.00	9002450070000
0.2811	9/32	7.14	MTS 1	150.00	58.29	69.00	9002450071400
0.2835		7.20	MTS 1	150.00	58.20	69.00	9002450072000

Diameter (d ₁)			Shank Size	l ₁ mm	t _{max} mm	l ₂ mm	EDP #
inch	wire/ltr	mm					
0.2854		7.25	MTS 1	150.00	58.13	69.00	9002450072500
0.2874		7.30	MTS 1	150.00	58.05	69.00	9002450073000
0.2913		7.40	MTS 1	150.00	57.90	69.00	9002450074000
0.2953		7.50	MTS 1	150.00	57.75	69.00	9002450075000
0.2969	19/64	7.54	MTS 1	156.00	63.69	75.00	9002450075400
0.2992		7.60	MTS 1	156.00	63.60	75.00	9002450076000
0.3031		7.70	MTS 1	156.00	63.45	75.00	9002450077000
0.3051		7.75	MTS 1	156.00	63.38	75.00	9002450077500
0.3071		7.80	MTS 1	156.00	63.30	75.00	9002450078000
0.3110		7.90	MTS 1	156.00	63.15	75.00	9002450079000
0.3126	5/16	7.94	MTS 1	156.00	63.09	75.00	9002450079400
0.3150		8.00	MTS 1	156.00	63.00	75.00	9002450080000
0.3189		8.10	MTS 1	156.00	62.85	75.00	9002450081000
0.3228	P	8.20	MTS 1	156.00	62.70	75.00	9002450082000
0.3248		8.25	MTS 1	156.00	62.63	75.00	9002450082500
0.3268		8.30	MTS 1	156.00	62.55	75.00	9002450083000
0.3280	21/64	8.33	MTS 1	156.00	62.51	75.00	9002450083300
0.3307		8.40	MTS 1	156.00	62.40	75.00	9002450084000
0.3346		8.50	MTS 1	156.00	62.25	75.00	9002450085000
0.3386		8.60	MTS 1	162.00	68.10	81.00	9002450086000
0.3425		8.70	MTS 1	162.00	67.95	81.00	9002450087000
0.3437	11/32	8.73	MTS 1	162.00	67.91	81.00	9002450087300
0.3445		8.75	MTS 1	162.00	67.88	81.00	9002450087500
0.3465		8.80	MTS 1	162.00	67.80	81.00	9002450088000
0.3504		8.90	MTS 1	162.00	67.65	81.00	9002450089000
0.3543		9.00	MTS 1	162.00	67.50	81.00	9002450090000
0.3583		9.10	MTS 1	162.00	67.35	81.00	9002450091000
0.3594	23/64	9.13	MTS 1	162.00	67.31	81.00	9002450091300
0.3622		9.20	MTS 1	162.00	67.20	81.00	9002450092000
0.3642		9.25	MTS 1	162.00	67.13	81.00	9002450092500
0.3661		9.30	MTS 1	162.00	67.05	81.00	9002450093000
0.3701		9.40	MTS 1	162.00	66.90	81.00	9002450094000
0.3740		9.50	MTS 1	162.00	66.75	81.00	9002450095000
0.3748	3/8	9.52	MTS 1	168.00	72.72	87.00	9002450095200
0.3819		9.70	MTS 1	168.00	72.45	87.00	9002450097000
0.3839		9.75	MTS 1	168.00	72.38	87.00	9002450097500
0.3858	W	9.80	MTS 1	168.00	72.30	87.00	9002450098000
0.3898		9.90	MTS 1	168.00	72.15	87.00	9002450099000
0.3906	25/64	9.92	MTS 1	168.00	72.12	87.00	9002450099200
0.3937		10.00	MTS 1	168.00	72.00	87.00	9002450100000
0.3976		10.10	MTS 1	168.00	71.85	87.00	9002450101000
0.4016		10.20	MTS 1	168.00	71.70	87.00	9002450102000
0.4035		10.25	MTS 1	168.00	71.63	87.00	9002450102500

Diameter (d ₁)			Shank Size	l ₁ mm	t _{max} mm	l ₂ mm	EDP #
inch	wire/ltr	mm					
0.4055		10.30	MTS 1	168.00	71.55	87.00	9002450103000
0.4063	13/32	10.32	MTS 1	168.00	71.52	87.00	9002450103200
0.4094		10.40	MTS 1	168.00	71.40	87.00	9002450104000
0.4134		10.50	MTS 1	168.00	71.25	87.00	9002450105000
0.4173		10.60	MTS 1	168.00	71.10	87.00	9002450106000
0.4213		10.70	MTS 1	175.00	77.95	94.00	9002450107000
0.4220	27/64	10.72	MTS 1	175.00	77.92	94.00	9002450107200
0.4232		10.75	MTS 1	175.00	77.88	94.00	9002450107500
0.4252		10.80	MTS 1	175.00	77.80	94.00	9002450108000
0.4291		10.90	MTS 1	175.00	77.65	94.00	9002450109000
0.4331		11.00	MTS 1	175.00	77.50	94.00	9002450110000
0.4370		11.10	MTS 1	175.00	77.35	94.00	9002450111000
0.4374	7/16	11.11	MTS 1	175.00	77.34	94.00	9002450111100
0.4409		11.20	MTS 1	175.00	77.20	94.00	9002450112000
0.4429		11.25	MTS 1	175.00	77.13	94.00	9002450112500
0.4449		11.30	MTS 1	175.00	77.05	94.00	9002450113000
0.4488		11.40	MTS 1	175.00	76.90	94.00	9002450114000
0.4528		11.50	MTS 1	175.00	76.75	94.00	9002450115000
0.4531	29/64	11.51	MTS 1	175.00	76.74	94.00	9002450115100
0.4567		11.60	MTS 1	175.00	76.60	94.00	9002450116000
0.4606		11.70	MTS 1	175.00	76.45	94.00	9002450117000
0.4626		11.75	MTS 1	175.00	76.38	94.00	9002450117500
0.4646		11.80	MTS 1	175.00	76.30	94.00	9002450118000
0.4685		11.90	MTS 1	182.00	83.15	101.00	9002450119000
0.4689	15/32	11.91	MTS 1	182.00	83.14	101.00	9002450119100
0.4724		12.00	MTS 1	182.00	83.00	101.00	9002450120000
0.4764		12.10	MTS 1	182.00	82.85	101.00	9002450121000
0.4803		12.20	MTS 1	182.00	82.70	101.00	9002450122000
0.4823		12.25	MTS 1	182.00	82.63	101.00	9002450122500
0.4843	31/64	12.30	MTS 1	182.00	82.55	101.00	9002450123000
0.4882		12.40	MTS 1	182.00	82.40	101.00	9002450124000
0.4921		12.50	MTS 1	182.00	82.25	101.00	9002450125000
0.4961		12.60	MTS 1	182.00	82.10	101.00	9002450126000
0.5000	1/2	12.70	MTS 1	182.00	81.95	101.00	9002450127000
0.5020		12.75	MTS 1	182.00	81.88	101.00	9002450127500
0.5039		12.80	MTS 1	182.00	81.80	101.00	9002450128000
0.5059		12.85	MTS 1	182.00	81.73	101.00	9002450128500
0.5079		12.90	MTS 1	182.00	81.65	101.00	9002450129000
0.5118		13.00	MTS 1	182.00	81.50	101.00	9002450130000
0.5157	33/64	13.10	MTS 1	182.00	81.35	101.00	9002450131000
0.5197		13.20	MTS 1	182.00	81.20	101.00	9002450132000
0.5217		13.25	MTS 1	189.00	88.13	108.00	9002450132500
0.5236		13.30	MTS 1	189.00	88.05	108.00	9002450133000
0.5276		13.40	MTS 1	189.00	87.90	108.00	9002450134000
0.5311	17/32	13.49	MTS 1	189.00	87.77	108.00	9002450134900
0.5315		13.50	MTS 1	189.00	87.75	108.00	9002450135000
0.5354		13.60	MTS 1	189.00	87.60	108.00	9002450136000
0.5394		13.70	MTS 1	189.00	87.45	108.00	9002450137000
0.5413		13.75	MTS 1	189.00	87.38	108.00	9002450137500
0.5433		13.80	MTS 1	189.00	87.30	108.00	9002450138000
0.5469	35/64	13.89	MTS 1	189.00	87.17	108.00	9002450138900
0.5472		13.90	MTS 1	189.00	87.15	108.00	9002450139000
0.5512		14.00	MTS 1	189.00	87.00	108.00	9002450140000
0.5551		14.10	MTS 2	212.00	92.85	114.00	9002450141000
0.5591		14.20	MTS 2	212.00	92.70	114.00	9002450142000
0.5610		14.25	MTS 2	212.00	92.63	114.00	9002450142500
0.5626	9/16	14.29	MTS 2	212.00	92.57	114.00	9002450142900
0.5630		14.30	MTS 2	212.00	92.55	114.00	9002450143000
0.5669		14.40	MTS 2	212.00	92.40	114.00	9002450144000
0.5709		14.50	MTS 2	212.00	92.25	114.00	9002450145000
0.5748		14.60	MTS 2	212.00	92.10	114.00	9002450146000
0.5780	37/64	14.68	MTS 2	212.00	91.98	114.00	9002450146800
0.5787		14.70	MTS 2	212.00	91.95	114.00	9002450147000
0.5807		14.75	MTS 2	212.00	91.88	114.00	9002450147500
0.5827		14.80	MTS 2	212.00	91.80	114.00	9002450148000
0.5866		14.90	MTS 2	212.00	91.65	114.00	9002450149000

Diameter (d ₁)			Shank Size	l ₁ mm	t _{max} mm	l ₂ mm	EDP #
inch	wire/ltr	mm					
0.5906		15.00	MTS 2	212.00	91.50	114.00	9002450150000
0.5937	19/32	15.08	MTS 2	218.00	97.38	120.00	9002450150800
0.5945		15.10	MTS 2	218.00	97.35	120.00	9002450151000
0.5984		15.20	MTS 2	218.00	97.20	120.00	9002450152000
0.6004		15.25	MTS 2	218.00	97.13	120.00	9002450152500
0.6024		15.30	MTS 2	218.00	97.05	120.00	9002450153000
0.6063		15.40	MTS 2	218.00	96.90	120.00	9002450154000
0.6094	39/64	15.48	MTS 2	218.00	96.78	120.00	9002450154800
0.6102		15.50	MTS 2	218.00	96.75	120.00	9002450155000
0.6142		15.60	MTS 2	218.00	96.60	120.00	9002450156000
0.6181		15.70	MTS 2	218.00	96.45	120.00	9002450157000
0.6201		15.75	MTS 2	218.00	96.38	120.00	9002450157500
0.6220		15.80	MTS 2	218.00	96.30	120.00	9002450158000
0.6248	5/8	15.87	MTS 2	218.00	96.20	120.00	9002450158700
0.6260		15.90	MTS 2	218.00	96.15	120.00	9002450159000
0.6299		16.00	MTS 2	218.00	96.00	120.00	9002450160000
0.6319		16.05	MTS 2	223.00	100.93	125.00	9002450160500
0.6339		16.10	MTS 2	223.00	100.85	125.00	9002450161000
0.6378		16.20	MTS 2	223.00	100.70	125.00	9002450162000
0.6398		16.25	MTS 2	223.00	100.63	125.00	9002450162500
0.6406	41/64	16.27	MTS 2	223.00	100.60	125.00	9002450162700
0.6417		16.30	MTS 2	223.00	100.55	125.00	9002450163000
0.6457		16.40	MTS 2	223.00	100.40	125.00	9002450164000
0.6496		16.50	MTS 2	223.00	100.25	125.00	9002450165000
0.6535		16.60	MTS 2	223.00	100.10	125.00	9002450166000
0.6563	21/32	16.67	MTS 2	223.00	100.00	125.00	9002450166700
0.6575		16.70	MTS 2	223.00	99.95	125.00	9002450167000
0.6594		16.75	MTS 2	223.00	99.88	125.00	9002450167500
0.6614		16.80	MTS 2	223.00	99.80	125.00	9002450168000
0.6654		16.90	MTS 2	223.00	99.65	125.00	9002450169000
0.6693		17.00	MTS 2	223.00	99.50	125.00	9002450170000
0.6720	43/64	17.07	MTS 2	228.00	104.40	130.00	9002450170700
0.6732		17.10	MTS 2	228.00	104.35	130.00	9002450171000
0.6772		17.20	MTS 2	228.00	104.20	130.00	9002450172000
0.6791		17.25	MTS 2	228.00	104.13	130.00	9002450172500
0.6811		17.30	MTS 2	228.00	104.05	130.00	9002450173000
0.6850		17.40	MTS 2	228.00	103.90	130.00	9002450174000
0.6874	11/16	17.46	MTS 2	228.00	103.81	130.00	9002450174600
0.6890		17.50	MTS 2	228.00	103.75	130.00	9002450175000
0.6929		17.60	MTS 2	228.00	103.60	130.00	9002450176000
0.6969		17.70	MTS 2	228.00	103.45	130.00	9002450177000
0.6988		17.75	MTS 2	228.00	103.38	130.00	9002450177500
0.7008		17.80	MTS 2	228.00	103.30	130.00	9002450178000
0.7031	45/64	17.86	MTS 2	228.00	103.21	130.00	9002450178600
0.7047		17.90	MTS 2	228.00	103.15	130.00	9002450179000
0.7087		18.00	MTS 2	228.00	103.00	130.00	9002450180000
0.7126		18.10	MTS 2	233.00	107.85	135.00	9002450181000
0.7165		18.20	MTS 2	233.00	107.70	135.00	9002450182000
0.7185		18.25	MTS 2	233.00	107.63	135.00	9002450182500
0.7189	23/32	18.26	MTS 2	233.00	107.61	135.00	9002450182600
0.7205		18.30	MTS 2	233.00	107.55	135.00	9002450183000
0.7283		18.50	MTS 2	233.00	107.25	135.00	9002450185000
0.7323		18.60	MTS 2	233.00	107.10	135.00	9002450186000
0.7343	47/64	18.65	MTS 2	233.00	107.03	135.00	9002450186500
0.7382		18.75	MTS 2	233.00	106.88	135.00	9002450187500
0.7402		18.80	MTS 2	233.00	106.80	135.00	9002450188000
0.7441		18.90	MTS 2	233.00	106.65	135.00	9002450189000
0.7480		19.00	MTS 2	233.00	106.50	135.00	9002450190000
0.7500	3/4	19.05	MTS 2	238.00	111.43	140.00	9002450190500
0.7520		19.10	MTS 2	238.00	111.35	140.00	9002450191000
0.7559		19.20	MTS 2	238.00	111.20	140.00	9002450192000
0.7579		19.25	MTS 2	238.00	111.13	140.00	9002450192500
0.7657	49/64	19.45	MTS 2	238.00	110.83	140.00	9002450194500
0.7677		19.50	MTS 2	238.00	110.75	140.00	9002450195000
0.7717		19.60	MTS 2	238.00	110.60	140.00	9002450196000
0.7756		19.70	MTS 2	238.00	110.45	140.00	90024501

Diameter (d ₁)			Shank Size	l ₁ mm	t _{max} mm	l ₂ mm	EDP #
inch	wire/ltr	mm					
0.7776		19.75	MTS 2	238.00	110.38	140.00	9002450197500
0.7795		19.80	MTS 2	238.00	110.30	140.00	9002450198000
0.7811	25/32	19.84	MTS 2	238.00	110.24	140.00	9002450198400
0.7835		19.90	MTS 2	238.00	110.15	140.00	9002450199000
0.7874		20.00	MTS 2	238.00	110.00	140.00	9002450200000
0.7913		20.10	MTS 2	243.00	114.85	145.00	9002450201000
0.7953		20.20	MTS 2	243.00	114.70	145.00	9002450202000
0.7969	51/64	20.24	MTS 2	243.00	114.64	145.00	9002450202400
0.7972		20.25	MTS 2	243.00	114.63	145.00	9002450202500
0.7992		20.30	MTS 2	243.00	114.55	145.00	9002450203000
0.8031		20.40	MTS 2	243.00	114.40	145.00	9002450204000
0.8071		20.50	MTS 2	243.00	114.25	145.00	9002450205000
0.8110		20.60	MTS 2	243.00	114.10	145.00	9002450206000
0.8126	13/16	20.64	MTS 2	243.00	114.04	145.00	9002450206400
0.8150		20.70	MTS 2	243.00	113.95	145.00	9002450207000
0.8169		20.75	MTS 2	243.00	113.88	145.00	9002450207500
0.8189		20.80	MTS 2	243.00	113.80	145.00	9002450208000
0.8268		21.00	MTS 2	243.00	113.50	145.00	9002450210000
0.8280	53/64	21.03	MTS 2	243.00	113.46	145.00	9002450210300
0.8307		21.10	MTS 2	243.00	113.35	145.00	9002450211000
0.8346		21.20	MTS 2	243.00	113.20	145.00	9002450212000
0.8366		21.25	MTS 2	248.00	118.13	150.00	9002450212500
0.8425		21.40	MTS 2	248.00	117.90	150.00	9002450214000
0.8437	27/32	21.43	MTS 2	248.00	117.86	150.00	9002450214300
0.8465		21.50	MTS 2	248.00	117.75	150.00	9002450215000
0.8543		21.70	MTS 2	248.00	117.45	150.00	9002450217000
0.8563		21.75	MTS 2	248.00	117.38	150.00	9002450217500
0.8594	55/64	21.83	MTS 2	248.00	117.26	150.00	9002450218300
0.8661		22.00	MTS 2	248.00	117.00	150.00	9002450220000
0.8701		22.10	MTS 2	248.00	116.85	150.00	9002450221000
0.8740		22.20	MTS 2	248.00	116.70	150.00	9002450222000
0.8748	7/8	22.22	MTS 2	248.00	116.67	150.00	9002450222200
0.8760		22.25	MTS 2	248.00	116.63	150.00	9002450222500
0.8780		22.30	MTS 2	248.00	116.55	150.00	9002450223000
0.8819		22.40	MTS 2	248.00	116.40	150.00	9002450224000
0.8858		22.50	MTS 2	253.00	121.25	155.00	9002450225000
0.8906	57/64	22.62	MTS 2	253.00	121.07	155.00	9002450226200
0.8957		22.75	MTS 2	253.00	120.88	155.00	9002450227500
0.9055		23.00	MTS 2	253.00	120.50	155.00	9002450230000
0.9063	29/32	23.02	MTS 2	253.00	120.47	155.00	9002450230200
0.9154		23.25	MTS 3	276.00	120.13	155.00	9002450232500
0.9220	59/64	23.42	MTS 3	276.00	119.87	155.00	9002450234200
0.9252		23.50	MTS 3	276.00	119.75	155.00	9002450235000
0.9350		23.75	MTS 3	281.00	124.38	160.00	9002450237500
0.9374	15/16	23.81	MTS 3	281.00	124.29	160.00	9002450238100
0.9449		24.00	MTS 3	281.00	124.00	160.00	9002450240000
0.9531	61/64	24.21	MTS 3	281.00	123.69	160.00	9002450242100
0.9547		24.25	MTS 3	281.00	123.63	160.00	9002450242500
0.9567		24.30	MTS 3	281.00	123.55	160.00	9002450243000
0.9646		24.50	MTS 3	281.00	123.25	160.00	9002450245000
0.9689	31/32	24.61	MTS 3	281.00	123.09	160.00	9002450246100
0.9744		24.75	MTS 3	281.00	122.88	160.00	9002450247500
0.9843	63/64	25.00	MTS 3	281.00	122.50	160.00	9002450250000
0.9941		25.25	MTS 3	286.00	127.13	165.00	9002450252500
1.0000	1.0000	25.40	MTS 3	286.00	126.90	165.00	9002450254000
1.0039		25.50	MTS 3	286.00	126.75	165.00	9002450255000
1.0138		25.75	MTS 3	286.00	126.38	165.00	9002450257500
1.0157	1 1/64	25.80	MTS 3	286.00	126.30	165.00	9002450258000
1.0236		26.00	MTS 3	286.00	126.00	165.00	9002450260000
1.0311	1 1/32	26.19	MTS 3	286.00	125.72	165.00	9002450261900

Diameter (d ₁)			Shank Size	l ₁ mm	t _{max} mm	l ₂ mm	EDP #
inch	wire/ltr	mm					
1.0335		26.25	MTS 3	286.00	125.63	165.00	9002450262500
1.0433		26.50	MTS 3	286.00	125.25	165.00	9002450265000
1.0469	1 3/64	26.59	MTS 3	291.00	130.12	170.00	9002450265900
1.0531		26.75	MTS 3	291.00	129.88	170.00	9002450267500
1.0626	1 1/16	26.99	MTS 3	291.00	129.52	170.00	9002450269900
1.0630		27.00	MTS 3	291.00	129.50	170.00	9002450270000
1.0728		27.25	MTS 3	291.00	129.13	170.00	9002450272500
1.0780	1 5/64	27.38	MTS 3	291.00	128.93	170.00	9002450273800
1.0827		27.50	MTS 3	291.00	128.75	170.00	9002450275000
1.0925		27.75	MTS 3	291.00	128.38	170.00	9002450277500
1.0937	1 3/32	27.78	MTS 3	291.00	128.33	170.00	9002450277800
1.0945		27.80	MTS 3	291.00	128.30	170.00	9002450278000
1.1024		28.00	MTS 3	291.00	128.00	170.00	9002450280000
1.1122		28.25	MTS 3	296.00	132.63	175.00	9002450282500
1.1220		28.50	MTS 3	296.00	132.25	175.00	9002450285000
1.1248	1 1/8	28.57	MTS 3	296.00	132.15	175.00	9002450285700
1.1319		28.75	MTS 3	296.00	131.88	175.00	9002450287500
1.1417		29.00	MTS 3	296.00	131.50	175.00	9002450290000
1.1516		29.25	MTS 3	296.00	131.13	175.00	9002450292500
1.1563	1 5/32	29.37	MTS 3	296.00	130.95	175.00	9002450293700
1.1614		29.50	MTS 3	296.00	130.75	175.00	9002450295000
1.1713		29.75	MTS 3	296.00	130.38	175.00	9002450297500
1.1811		30.00	MTS 3	296.00	130.00	175.00	9002450300000
1.1874	1 3/16	30.16	MTS 3	301.00	134.76	180.00	9002450301600
1.1909		30.25	MTS 3	301.00	134.63	180.00	9002450302500
1.2008		30.50	MTS 3	301.00	134.25	180.00	9002450305000
1.2106		30.75	MTS 3	301.00	133.88	180.00	9002450307500
1.2205		31.00	MTS 3	301.00	133.50	180.00	9002450310000
1.2303		31.25	MTS 3	301.00	133.13	180.00	9002450312500
1.2402		31.50	MTS 3	301.00	132.75	180.00	9002450315000
1.2500	1 1/4	31.75	MTS 3	306.00	137.38	185.00	9002450317500
1.2598		32.00	MTS 4	334.00	137.00	185.00	9002450320000
1.2657	1 17/64	32.15	MTS 4	334.00	136.78	185.00	9002450321500
1.2697		32.25	MTS 4	334.00	136.63	185.00	9002450322500
1.2795		32.50	MTS 4	334.00	136.25	185.00	9002450325000
1.2811	1 9/32	32.54	MTS 4	334.00	136.19	185.00	9002450325400
1.2992		33.00	MTS 4	334.00	135.50	185.00	9002450330000
1.3126	1 5/16	33.34	MTS 4	334.00	134.99	185.00	9002450333400
1.3189		33.50	MTS 4	334.00	134.75	185.00	9002450335000
1.3280	1 21/64	33.73	MTS 4	339.00	139.41	190.00	9002450337300
1.3386		34.00	MTS 4	339.00	139.00	190.00	9002450340000
1.3437	1 11/32	34.13	MTS 4	339.00	138.81	190.00	9002450341300
1.3583		34.50	MTS 4	339.00	138.25	190.00	9002450345000
1.3748	1 3/8	34.92	MTS 4	339.00	137.62	190.00	9002450349200
1.3780		35.00	MTS 4	339.00	137.50	190.00	9002450350000
1.3976		35.50	MTS 4	339.00	136.75	190.00	9002450355000
1.4173		36.00	MTS 4	344.00	141.00	195.00	9002450360000
1.4370		36.50	MTS 4	344.00	140.25	195.00	9002450365000
1.4567		37.00	MTS 4	344.00	139.50	195.00	9002450370000
1.4689	1 15/32	37.31	MTS 4	344.00	139.04	195.00	9002450373100
1.4764		37.50	MTS 4	344.00	138.75	195.00	9002450375000
1.4961		38.00	MTS 4	349.00	143.00	200.00	9002450380000
1.5000	1 1/2	38.10	MTS 4	349.00	142.85	200.00	9002450381000
1.6094	1 39/64	40.88	MTS 4	354.00	143.68	205.00	9002450408800
1.7189	1 23/32	43.66	MTS 4	359.00	144.51	210.00	9002450436600
1.7811	1 25/32	45.24	MTS 4	364.00	147.14	215.00	9002450452400
1.8437	1 27/32	46.83	MTS 4	364.00	144.76	215.00	9002450468300
1.9220	1 59/64	48.82	MTS 4	369.00	146.77	220.00	9002450488200
2.1874	2 3/16	55.56	MTS 5	417.00	146.66	230.00	9002450555600
3.1248	3 1/8	79.37	MTS 6	514.00	140.95	260.00	9002450793700

Morse Taper Length

Material group	Hardness		SFM	Feed Rate - IPR									
	HRc	Bhn		1/16 in. 1.590 mm	1/8 in. 3.170 mm	1/4 in. 6.350 mm	3/8 in. 9.520 mm	1/2 in. 12.700 mm	5/8 in. 15.870 mm	3/4 in. 19.050 mm	1 in. 25.400 mm	1 1/4 in. 31.750 mm	1 1/2 in. 38.100 mm
Common structural steels	-	150	70	0.0015	0.0040	0.0065	0.0080	0.0100					
Free-cutting steels	25	255	70	0.0015	0.0040	0.0065	0.0080	0.0100					
Unalloyed heat-treatable steels	20	220	70	0.0012	0.0030	0.0050	0.0065	0.0080					
Alloyed heat-treatable steels	32	301	35	0.0010	0.0025	0.0040	0.0050	0.0065					
Unalloyed case hardened steels	25	255	70	0.0015	0.0040	0.0065	0.0080	0.0100					
Alloyed case hardened steels	32	301	30	0.0010	0.0025	0.0040	0.0050	0.0065					
Nitriding steels	32	301	25	0.0010	0.0025	0.0040	0.0050	0.0065					
Tool steels	25	255	35	0.0010	0.0025	0.0040	0.0050	0.0065					
High speed steels	43	402	15	0.0007	0.0020	0.0030	0.0040	0.0050					
Spring steels	38	354											
Hardened steels	48	460											
Stainless steels, sulphured austenitic martensitic	28	273	25	0.001	0.0025	0.0040	0.0050	0.0065					
Cast iron	23	242	70	0.0015	0.0040	0.0065	0.0080	0.0100					
Spheroidal graphite iron and malleable cast iron	23	242	65	0.0015	0.0040	0.0065	0.0080	0.0100					
Chilled cast iron	38	354											
New cast materials GGV	20	220											
New cast materials ADI	32	301											
Special alloys	54	549											
Ti and Ti-alloys	25	255											
Aluminium and Al-alloys	-	120											
Al wrought alloys	-	200											
Al cast alloys ≤ 10 % Si ≤ 24 % Si	-	180	145	0.0017	0.0050	0.0080	0.0100	0.0125					
Magnesium alloys	-	120	180	0.0015	0.0040	0.0065	0.0080	0.0100					
Copper, low-alloyed	-	150	70	0.0012	0.0030	0.0050	0.0065	0.0080					
Brass, short-chipping	-	180	145	0.0012	0.0030	0.0050	0.0065	0.0080					
Brass, long-chipping	-	180	90	0.0012	0.0030	0.0050	0.0065	0.0080					
Bronze, short-chipping	-	180	70	0.0010	0.0025	0.0040	0.0050	0.0065					
Bronze, long-chipping	25	255	65	0.0010	0.0025	0.0040	0.0050	0.0065					
Duroplastics	25	255	55	0.0010	0.0025	0.0040	0.0050	0.0065					
Thermoplastics	32	301	45	0.0010	0.0025	0.0040	0.0050	0.0065					
Reinforced plastics - Kevlar			35	0.0010	0.0025	0.0040	0.0050	0.0065					
Reinforced plastics - GFK / CFK			55	0.0012	0.0030	0.0050	0.0065	0.0080					

Material group	Hardness		SFM	Feed Rate - IPR									
	HRc	Bhn		1/16 in. 1.590 mm	1/8 in. 3.170 mm	1/4 in. 6.350 mm	3/8 in. 9.520 mm	1/2 in. 12.700 mm	5/8 in. 15.870 mm	3/4 in. 19.050 mm	1 in. 25.400 mm	1 1/4 in. 31.750 mm	1 1/2 in. 38.100 mm
Common structural steels	-	150	100		0.0050	0.0080	0.0100	0.0125	0.0125	0.0140	0.0160	0.0200	0.0245
Free-cutting steels	25	255	80		0.0040	0.0065	0.0080	0.0100	0.0100	0.0110	0.0125	0.0160	0.0200
Unalloyed heat-treatable steels	20	220	100		0.0040	0.0065	0.0080	0.0100	0.0100	0.0110	0.0125	0.0160	0.0200
Alloyed heat-treatable steels	32	301	80		0.0040	0.0065	0.0080	0.0100	0.0100	0.0110	0.0125	0.0160	0.0200
Unalloyed case hardened steels	25	255	100		0.0050	0.0080	0.0100	0.0125	0.0125	0.0140	0.0160	0.0200	0.0245
Alloyed case hardened steels	32	301	80		0.0040	0.0065	0.0080	0.0100	0.0100	0.0110	0.0125	0.0160	0.0200
Nitriding steels	32	301											
Tool steels	25	255	50		0.0030	0.0050	0.0065	0.0080	0.0080	0.0090	0.0100	0.0125	0.0160
High speed steels	43	402											
Spring steels	38	354											
Hardened steels	48	460											
Stainless steels, sulphured austenitic martensitic	28	273											
Cast iron	23	242	100		0.0050	0.0080	0.0100	0.0125	0.0125	0.0140	0.0160	0.0200	0.0245
Spheroidal graphite iron and malleable cast iron	23	242	90		0.0050	0.0080	0.0100	0.0125	0.0125	0.0140	0.0160	0.0200	0.0245
Chilled cast iron	38	354											
New cast materials GGV	20	220											
New cast materials ADI	32	301											
Special alloys	54	549											
Ti and Ti-alloys	25	255											
Aluminium and Al-alloys	-	120											
Al wrought alloys	-	200											
Al cast alloys ≤ 10 % Si ≤ 24 % Si	-	180	205		0.0065	0.0100	0.0125	0.0160	0.0160	0.0180	0.0200	0.0245	0.0290
Magnesium alloys	-	120	160		0.0050	0.0080	0.0100	0.0125	0.0125	0.0140	0.0160	0.0200	0.0245
Copper, low-alloyed	-	150	260		0.0050	0.0080	0.0100	0.0125	0.0125	0.0140	0.0160	0.0200	0.0245
Brass, short-chipping	-	180	100		0.0040	0.0065	0.0080	0.0100	0.0100	0.0110	0.0125	0.0160	0.0200
Brass, long-chipping	-	180	130		0.0040	0.0065	0.0080	0.0100	0.0100	0.0110	0.0125	0.0160	0.0200
Bronze, short-chipping	-	180	100		0.0030	0.0050	0.0065	0.0080	0.0080	0.0090	0.0100	0.0125	0.0160
Bronze, long-chipping	25	255	90		0.0030	0.0050	0.0065	0.0080	0.0080	0.0090	0.0100	0.0125	0.0160
Duroplastics	25	255	80		0.0030	0.0050	0.0065	0.0080	0.0080	0.0090	0.0100	0.0125	0.0160
Thermoplastics	32	301			0.0040	0.0065	0.0080	0.0100	0.0100	0.0110	0.0125	0.0160	0.0200
Reinforced plastics - Kevlar			50		0.0030	0.0050	0.0065	0.0080	0.0080	0.0090	0.0100	0.0125	0.0160
Reinforced plastics - GFK / CFK			80		0.0040	0.0065	0.0080	0.0100	0.0100	0.0110	0.0125	0.0160	0.0200