

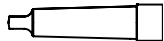
5xD



Steam Oxide



External Coolant



Morse Taper Shank

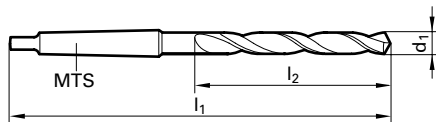
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Series 245

General Purpose

HSS, general purpose (Type N), Standard (MTS), 118° point, Form A
web thinned >14.0mm dia. Morse Taper shank, RH helix

Cut / Shank Dia. = h8 tolerance range



Application Materials:

General Steels/
Brass

Universal Steels



Cast Iron

Diameter (d1)		Wire / letter	Shank size	l1 mm	l2 mm	EDP #
Dec. inch	Fract. inch					
0.0937	3/32		MTS 1	111.00	30.00	9002450023800
0.0984			MTS 1	111.00	30.00	9002450025000
0.1094	7/64		MTS 1	114.00	33.00	9002450027800
0.1248	1/8		MTS 1	117.00	36.00	9002450031700
0.1406	9/64	28	MTS 1	120.00	39.00	9002450035700
0.1496		25	MTS 1	124.00	43.00	9002450038000
0.1563	5/32		MTS 1	124.00	43.00	9002450039700
0.1575			MTS 1	124.00	43.00	9002450040000
0.1673			MTS 1	124.00	43.00	9002450042500
0.1720	11/64		MTS 1	128.00	47.00	9002450043700
0.1772		16	MTS 1	128.00	47.00	9002450045000
0.1874	3/16		MTS 1	133.00	52.00	9002450047600
0.1969			MTS 1	133.00	52.00	9002450050000
0.2008			MTS 1	133.00	52.00	9002450051000
0.2031	13/64		MTS 1	133.00	52.00	9002450051600
0.2047			MTS 1	133.00	52.00	9002450052000
0.2067			MTS 1	133.00	52.00	9002450052500
0.2087			MTS 1	133.00	52.00	9002450053000
0.2126			MTS 1	138.00	57.00	9002450054000
0.2165			MTS 1	138.00	57.00	9002450055000
0.2189	7/32		MTS 1	138.00	57.00	9002450055600
0.2205			MTS 1	138.00	57.00	9002450056000
0.2244			MTS 1	138.00	57.00	9002450057000
0.2264			MTS 1	138.00	57.00	9002450057500
0.2283			MTS 1	138.00	57.00	9002450058000
0.2323			MTS 1	138.00	57.00	9002450059000
0.2343	15/64		MTS 1	138.00	57.00	9002450059500
0.2362			MTS 1	138.00	57.00	9002450060000
0.2402			MTS 1	144.00	63.00	9002450061000
0.2441			MTS 1	144.00	63.00	9002450062000
0.2461		D	MTS 1	144.00	63.00	9002450062500
0.2480			MTS 1	144.00	63.00	9002450063000
0.2500	1/4	E	MTS 1	144.00	63.00	9002450063500
0.2520			MTS 1	144.00	63.00	9002450064000
0.2559			MTS 1	144.00	63.00	9002450065000
0.2598			MTS 1	144.00	63.00	9002450066000
0.2638			MTS 1	144.00	63.00	9002450067000
0.2657	17/64	H	MTS 1	150.00	69.00	9002450067500
0.2677			MTS 1	150.00	69.00	9002450068000
0.2717		I	MTS 1	150.00	69.00	9002450069000
0.2756			MTS 1	150.00	69.00	9002450070000
0.2811	9/32	K	MTS 1	150.00	69.00	9002450071400
0.2835			MTS 1	150.00	69.00	9002450072000
0.2854			MTS 1	150.00	69.00	9002450072500
0.2874			MTS 1	150.00	69.00	9002450073000
0.2913			MTS 1	150.00	69.00	9002450074000
0.2953			MTS 1	150.00	69.00	9002450075000
0.2969	19/64		MTS 1	156.00	75.00	9002450075400
0.2992			MTS 1	156.00	75.00	9002450076000
0.3031			MTS 1	156.00	75.00	9002450077000
0.3051			MTS 1	156.00	75.00	9002450077500
0.3071			MTS 1	156.00	75.00	9002450078000
0.3110			MTS 1	156.00	75.00	9002450079000
0.3126	5/16		MTS 1	156.00	75.00	9002450079400

Diameter (d1)		Wire / letter	Shank size	l1 mm	l2 mm	EDP #
Dec. inch	Fract. inch					
0.3150			MTS 1	156.00	75.00	9002450080000
0.3189			MTS 1	156.00	75.00	9002450081000
0.3228		P	MTS 1	156.00	75.00	9002450082000
0.3248			MTS 1	156.00	75.00	9002450082500
0.3268			MTS 1	156.00	75.00	9002450083000
0.3280	21/64		MTS 1	156.00	75.00	9002450083300
0.3307			MTS 1	156.00	75.00	9002450084000
0.3346			MTS 1	156.00	75.00	9002450085000
0.3386			MTS 1	162.00	81.00	9002450086000
0.3425			MTS 1	162.00	81.00	9002450087000
0.3437	11/32		MTS 1	162.00	81.00	9002450087300
0.3445			MTS 1	162.00	81.00	9002450087500
0.3465			MTS 1	162.00	81.00	9002450088000
0.3504			MTS 1	162.00	81.00	9002450089000
0.3543			MTS 1	162.00	81.00	9002450090000
0.3583			MTS 1	162.00	81.00	9002450091000
0.3594	23/64		MTS 1	162.00	81.00	9002450091300
0.3622			MTS 1	162.00	81.00	9002450092000
0.3642			MTS 1	162.00	81.00	9002450092500
0.3661			MTS 1	162.00	81.00	9002450093000
0.3701			MTS 1	162.00	81.00	9002450094000
0.3740			MTS 1	162.00	81.00	9002450095000
0.3748	3/8		MTS 1	168.00	87.00	9002450095200
0.3819			MTS 1	168.00	87.00	9002450097000
0.3839			MTS 1	168.00	87.00	9002450097500
0.3858		W	MTS 1	168.00	87.00	9002450098000
0.3898			MTS 1	168.00	87.00	9002450099000
0.3906	25/64		MTS 1	168.00	87.00	9002450099200
0.3937			MTS 1	168.00	87.00	9002450100000
0.3976			MTS 1	168.00	87.00	9002450101000
0.4016			MTS 1	168.00	87.00	9002450102000
0.4035			MTS 1	168.00	87.00	9002450102500
0.4055			MTS 1	168.00	87.00	9002450103000
0.4063	13/32		MTS 1	168.00	87.00	9002450103200
0.4094			MTS 1	168.00	87.00	9002450104000
0.4134			MTS 1	168.00	87.00	9002450105000
0.4173			MTS 1	168.00	87.00	9002450106000
0.4213			MTS 1	175.00	94.00	9002450107000
0.4220	27/64		MTS 1	175.00	94.00	9002450107200
0.4232			MTS 1	175.00	94.00	9002450107500
0.4252			MTS 1	175.00	94.00	9002450108000
0.4291			MTS 1	175.00	94.00	9002450109000
0.4331			MTS 1	175.00	94.00	9002450110000
0.4370			MTS 1	175.00	94.00	9002450111000
0.4374	7/16		MTS 1	175.00	94.00	9002450111100
0.4409			MTS 1	175.00	94.00	9002450112000
0.4429			MTS 1	175.00	94.00	9002450112500
0.4449			MTS 1	175.00	94.00	9002450113000
0.4488			MTS 1	175.00	94.00	9002450114000
0.4528			MTS 1	175.00	94.00	9002450115000
0.4531	29/64		MTS 1	175.00	94.00	9002450115100
0.4567			MTS 1	175.00	94.00	9002450116000
0.4606			MTS 1	175.00	94.00	9002450117000
0.4626			MTS 1	175.00	94.00	9002450117500

Series 245

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Twist Drills

Diameter (d1)		Shank size	l1 mm	l2 mm	EDP #
Dec. inch	Fract. inch				
0.4646		MTS 1	175.00	94.00	9002450118000
0.4685		MTS 1	182.00	101.00	9002450119000
0.4689	15/32	MTS 1	182.00	101.00	9002450119100
0.4724		MTS 1	182.00	101.00	9002450120000
0.4764		MTS 1	182.00	101.00	9002450121000
0.4803		MTS 1	182.00	101.00	9002450122000
0.4823		MTS 1	182.00	101.00	9002450122500
0.4843	31/64	MTS 1	182.00	101.00	9002450123000
0.4882		MTS 1	182.00	101.00	9002450124000
0.4921		MTS 1	182.00	101.00	9002450125000
0.4961		MTS 1	182.00	101.00	9002450126000
0.5000	1/2	MTS 1	182.00	101.00	9002450127000
0.5020		MTS 1	182.00	101.00	9002450127500
0.5039		MTS 1	182.00	101.00	9002450128000
0.5059		MTS 1	182.00	101.00	9002450128500
0.5079		MTS 1	182.00	101.00	9002450129000
0.5118		MTS 1	182.00	101.00	9002450130000
0.5157	33/64	MTS 1	182.00	101.00	9002450131000
0.5197		MTS 1	182.00	101.00	9002450132000
0.5217		MTS 1	189.00	108.00	9002450132500
0.5236		MTS 1	189.00	108.00	9002450133000
0.5276		MTS 1	189.00	108.00	9002450134000
0.5311	17/32	MTS 1	189.00	108.00	9002450134900
0.5315		MTS 1	189.00	108.00	9002450135000
0.5354		MTS 1	189.00	108.00	9002450136000
0.5394		MTS 1	189.00	108.00	9002450137000
0.5413		MTS 1	189.00	108.00	9002450137500
0.5433		MTS 1	189.00	108.00	9002450138000
0.5469	35/64	MTS 1	189.00	108.00	9002450138900
0.5472		MTS 1	189.00	108.00	9002450139000
0.5512		MTS 1	189.00	108.00	9002450140000
0.5551		MTS 2	212.00	114.00	9002450141000
0.5591		MTS 2	212.00	114.00	9002450142000
0.5610		MTS 2	212.00	114.00	9002450142500
0.5626	9/16	MTS 2	212.00	114.00	9002450142900
0.5630		MTS 2	212.00	114.00	9002450143000
0.5669		MTS 2	212.00	114.00	9002450144000
0.5709		MTS 2	212.00	114.00	9002450145000
0.5748		MTS 2	212.00	114.00	9002450146000
0.5780	37/64	MTS 2	212.00	114.00	9002450146800
0.5787		MTS 2	212.00	114.00	9002450147000
0.5807		MTS 2	212.00	114.00	9002450147500
0.5827		MTS 2	212.00	114.00	9002450148000
0.5866		MTS 2	212.00	114.00	9002450149000
0.5906		MTS 2	212.00	114.00	9002450150000
0.5937	19/32	MTS 2	218.00	120.00	9002450150800
0.5945		MTS 2	218.00	120.00	9002450151000
0.5984		MTS 2	218.00	120.00	9002450152000
0.6004		MTS 2	218.00	120.00	9002450152500
0.6024		MTS 2	218.00	120.00	9002450153000
0.6063		MTS 2	218.00	120.00	9002450154000
0.6094	39/64	MTS 2	218.00	120.00	9002450154800
0.6102		MTS 2	218.00	120.00	9002450155000
0.6142		MTS 2	218.00	120.00	9002450156000
0.6181		MTS 2	218.00	120.00	9002450157000
0.6201		MTS 2	218.00	120.00	9002450157500
0.6220		MTS 2	218.00	120.00	9002450158000
0.6248	5/8	MTS 2	218.00	120.00	9002450158700
0.6260		MTS 2	218.00	120.00	9002450159000
0.6299		MTS 2	218.00	120.00	9002450160000
0.6319		MTS 2	218.00	120.00	9002450160500
0.6339		MTS 2	223.00	125.00	9002450161000
0.6378		MTS 2	223.00	125.00	9002450162000
0.6398		MTS 2	223.00	125.00	9002450162500
0.6406	41/64	MTS 2	223.00	125.00	9002450162700
0.6417		MTS 2	223.00	125.00	9002450163000
0.6457		MTS 2	223.00	125.00	9002450164000

Diameter (d1)		Shank size	l1 mm	l2 mm	EDP #
Dec. inch	Fract. inch				
0.6496		MTS 2	223.00	125.00	9002450165000
0.6535		MTS 2	223.00	125.00	9002450166000
0.6563	21/32	MTS 2	223.00	125.00	9002450166700
0.6575		MTS 2	223.00	125.00	9002450167000
0.6594		MTS 2	223.00	125.00	9002450167500
0.6614		MTS 2	223.00	125.00	9002450168000
0.6654		MTS 2	223.00	125.00	9002450169000
0.6693		MTS 2	223.00	125.00	9002450170000
0.6720	43/64	MTS 2	228.00	130.00	9002450170700
0.6732		MTS 2	228.00	130.00	9002450171000
0.6772		MTS 2	228.00	130.00	9002450172000
0.6791		MTS 2	228.00	130.00	9002450172500
0.6811		MTS 2	228.00	130.00	9002450173000
0.6850		MTS 2	228.00	130.00	9002450174000
0.6874	11/16	MTS 2	228.00	130.00	9002450174600
0.6890		MTS 2	228.00	130.00	9002450175000
0.6929		MTS 2	228.00	130.00	9002450176000
0.6969		MTS 2	228.00	130.00	9002450177000
0.6988		MTS 2	228.00	130.00	9002450177500
0.7008		MTS 2	228.00	130.00	9002450178000
0.7031	45/64	MTS 2	228.00	130.00	9002450178600
0.7047		MTS 2	228.00	130.00	9002450179000
0.7087		MTS 2	228.00	130.00	9002450180000
0.7126		MTS 2	233.00	135.00	9002450181000
0.7165		MTS 2	233.00	135.00	9002450182000
0.7185		MTS 2	233.00	135.00	9002450182500
0.7189	23/32	MTS 2	233.00	135.00	9002450182600
0.7205		MTS 2	233.00	135.00	9002450183000
0.7283		MTS 2	233.00	135.00	9002450185000
0.7323		MTS 2	233.00	135.00	9002450186000
0.7343	47/64	MTS 2	233.00	135.00	9002450186500
0.7382		MTS 2	233.00	135.00	9002450187500
0.7402		MTS 2	233.00	135.00	9002450188000
0.7441		MTS 2	233.00	135.00	9002450189000
0.7480		MTS 2	233.00	135.00	9002450190000
0.7500	3/4	MTS 2	238.00	140.00	9002450190500
0.7520		MTS 2	238.00	140.00	9002450191000
0.7559		MTS 2	238.00	140.00	9002450192000
0.7579		MTS 2	238.00	140.00	9002450192500
0.7657	49/64	MTS 2	238.00	140.00	9002450194500
0.7677		MTS 2	238.00	140.00	9002450195000
0.7717		MTS 2	238.00	140.00	9002450196000
0.7756		MTS 2	238.00	140.00	9002450197000
0.7776		MTS 2	238.00	140.00	9002450197500
0.7795		MTS 2	238.00	140.00	9002450198000
0.7811	25/32	MTS 2	238.00	140.00	9002450198400
0.7835		MTS 2	238.00	140.00	9002450199000
0.7874		MTS 2	238.00	140.00	9002450200000
0.7913		MTS 2	243.00	145.00	9002450201000
0.7953		MTS 2	243.00	145.00	9002450202000
0.7969	51/64	MTS 2	243.00	145.00	9002450202400
0.7972		MTS 2	243.00	145.00	9002450202500
0.7992		MTS 2	243.00	145.00	9002450203000
0.8031		MTS 2	243.00	145.00	9002450204000
0.8071		MTS 2	243.00	145.00	9002450205000
0.8110		MTS 2	243.00	145.00	9002450206000
0.8126	13/16	MTS 2	243.00	145.00	9002450206400
0.8150		MTS 2	243.00	145.00	9002450207000
0.8169		MTS 2	243.00	145.00	9002450207500
0.8189		MTS 2	243.00	145.00	9002450208000
0.8268		MTS 2	243.00	145.00	9002450210000
0.8280	53/64	MTS 2	243.00	145.00	9002450210300
0.8307		MTS 2	243.00	145.00	9002450211000
0.8346		MTS 2	243.00	145.00	9002450212000
0.8366		MTS 2	248.00	150.00	9002450212500
0.8425		MTS 2	248.00	150.00	9002450214000
0.8437	27/32	MTS 2	248.00	150.00	9002450214300

*Items listed in red are non-stocked items, and may take 2 - 6 weeks to receive

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Dec. inch	Diameter (d1)			Shank size	l1 mm	l2 mm	EDP #
	Fract. inch	Wire / letter	mm				
0.8465			21.500	MTS 2	248.00	150.00	9002450215000
0.8543			21.700	MTS 2	248.00	150.00	9002450217000
0.8563			21.750	MTS 2	248.00	150.00	9002450217500
0.8594	5/64		21.830	MTS 2	248.00	150.00	9002450218300
0.8661			22.000	MTS 2	248.00	150.00	9002450220000
0.8701			22.100	MTS 2	248.00	150.00	9002450221000
0.8740			22.200	MTS 2	248.00	150.00	9002450222000
0.8748	7/8		22.220	MTS 2	248.00	150.00	9002450222200
0.8760			22.250	MTS 2	248.00	150.00	9002450222500
0.8780			22.300	MTS 2	248.00	150.00	9002450223000
0.8819			22.400	MTS 2	248.00	150.00	9002450224000
0.8858			22.500	MTS 2	253.00	155.00	9002450225000
0.8906	57/64		22.620	MTS 2	253.00	155.00	9002450226200
0.8957			22.750	MTS 2	253.00	155.00	9002450227500
0.9055			23.000	MTS 2	253.00	155.00	9002450230000
0.9063	29/32		23.020	MTS 2	253.00	155.00	9002450230200
0.9154			23.250	MTS 3	276.00	155.00	9002450232500
0.9220	59/64		23.420	MTS 3	276.00	155.00	9002450234200
0.9252			23.500	MTS 3	276.00	155.00	9002450235000
0.9350			23.750	MTS 3	281.00	160.00	9002450237500
0.9374	15/16		23.810	MTS 3	281.00	160.00	9002450238100
0.9449			24.000	MTS 3	281.00	160.00	9002450240000
0.9531	61/64		24.210	MTS 3	281.00	160.00	9002450242100
0.9547			24.250	MTS 3	281.00	160.00	9002450242500
0.9567			24.300	MTS 3	281.00	160.00	9002450243000
0.9646			24.500	MTS 3	281.00	160.00	9002450245000
0.9689	31/32		24.610	MTS 3	281.00	160.00	9002450246100
0.9744			24.750	MTS 3	281.00	160.00	9002450247500
0.9843	63/64		25.000	MTS 3	281.00	160.00	9002450250000
0.9941			25.250	MTS 3	286.00	165.00	9002450252500
1.0000	1		25.400	MTS 3	286.00	165.00	9002450254000
1.0039			25.500	MTS 3	286.00	165.00	9002450255000
1.0138			25.750	MTS 3	286.00	165.00	9002450257500
1.0157	1 1/64		25.800	MTS 3	286.00	165.00	9002450258000
1.0236			26.000	MTS 3	286.00	165.00	9002450260000
1.0311	1 1/32		26.190	MTS 3	286.00	165.00	9002450261900
1.0335			26.250	MTS 3	286.00	165.00	9002450262500
1.0433			26.500	MTS 3	286.00	165.00	9002450265000
1.0469	1 3/64		26.590	MTS 3	291.00	170.00	9002450265900
1.0531			26.750	MTS 3	291.00	170.00	9002450267500
1.0626	1 1/16		26.990	MTS 3	291.00	170.00	9002450269900
1.0630			27.000	MTS 3	291.00	170.00	9002450270000
1.0728			27.250	MTS 3	291.00	170.00	9002450272500
1.0780	1 5/64		27.380	MTS 3	291.00	170.00	9002450273800
1.0827			27.500	MTS 3	291.00	170.00	9002450275000
1.0925			27.750	MTS 3	291.00	170.00	9002450277500
1.0937	1 3/32		27.780	MTS 3	291.00	170.00	9002450277800
1.0945			27.800	MTS 3	291.00	170.00	9002450278000
1.1024			28.000	MTS 3	291.00	170.00	9002450280000
1.1122			28.250	MTS 3	296.00	175.00	9002450282500
1.1220			28.500	MTS 3	296.00	175.00	9002450285000
1.1248	1 1/8		28.570	MTS 3	296.00	175.00	9002450285700

Dec. inch	Diameter (d1)			Shank size	l1 mm	l2 mm	EDP #
	Fract. inch	Wire / letter	mm				
1.1319			28.750	MTS 3	296.00	175.00	9002450287500
1.1417			29.000	MTS 3	296.00	175.00	9002450290000
1.1516			29.250	MTS 3	296.00	175.00	9002450292500
1.1563	1 5/32		29.370	MTS 3	296.00	175.00	9002450293700
1.1614			29.500	MTS 3	296.00	175.00	9002450295000
1.1713			29.750	MTS 3	296.00	175.00	9002450297500
1.1811			30.000	MTS 3	296.00	175.00	9002450300000
1.1874	1 3/16		30.160	MTS 3	301.00	180.00	9002450301600
1.1909			30.250	MTS 3	301.00	180.00	9002450302500
1.2008			30.500	MTS 3	301.00	180.00	9002450305000
1.2106			30.750	MTS 3	301.00	180.00	9002450307500
1.2205			31.000	MTS 3	301.00	180.00	9002450310000
1.2303			31.250	MTS 3	301.00	180.00	9002450312500
1.2402			31.500	MTS 3	301.00	180.00	9002450315000
1.2500	1 1/4		31.750	MTS 3	306.00	185.00	9002450317500
1.2598			32.000	MTS 4	334.00	185.00	9002450320000
1.2657	1 17/64		32.150	MTS 4	334.00	185.00	9002450321500
1.2697			32.250	MTS 4	334.00	185.00	9002450322500
1.2795			32.500	MTS 4	334.00	185.00	9002450325000
1.2811	1 9/32		32.540	MTS 4	334.00	185.00	9002450325400
1.2992			33.000	MTS 4	334.00	185.00	9002450330000
1.3126	1 5/16		33.340	MTS 4	334.00	185.00	9002450333400
1.3189			33.500	MTS 4	334.00	185.00	9002450335000
1.3280	1 21/64		33.730	MTS 4	339.00	190.00	9002450337300
1.3386			34.000	MTS 4	339.00	190.00	9002450340000
1.3437	1 11/32		34.130	MTS 4	339.00	190.00	9002450341300
1.3583			34.500	MTS 4	339.00	190.00	9002450345000
1.3748	1 3/8		34.920	MTS 4	339.00	190.00	9002450349200
1.3780			35.000	MTS 4	339.00	190.00	9002450350000
1.3976			35.500	MTS 4	339.00	190.00	9002450355000
1.4173			36.000	MTS 4	344.00	195.00	9002450360000
1.4370			36.500	MTS 4	344.00	195.00	9002450365000
1.4567			37.000	MTS 4	344.00	195.00	9002450370000
1.4689	1 15/32		37.310	MTS 4	344.00	195.00	9002450373100
1.4764			37.500	MTS 4	344.00	195.00	9002450375000
1.4961			38.000	MTS 4	349.00	200.00	9002450380000
1.5000	1 1/2		38.100	MTS 4	349.00	200.00	9002450381000
1.6094	1 39/64		40.880	MTS 4	354.00	205.00	9002450408800
1.7189	1 23/32		43.660	MTS 4	359.00	210.00	9002450436600
1.7811	1 25/32		45.240	MTS 4	364.00	215.00	9002450452400
1.8437	1 27/32		46.830	MTS 4	364.00	215.00	9002450468300
1.9220	1 59/64		48.820	MTS 4	369.00	220.00	9002450488200
2.1874	2 3/16		55.560	MTS 5	417.00	230.00	9002450555600
3.1248	3 1/8		79.370	MTS 6	514.00	260.00	9002450793700

Alternative Drill Series:

- #654 HSS, GP, 5xD, 118 pt, TiN
- #345 Cobalt, GP, 5xD, 118 pt, Oxide
- #661 Cobalt, GT100, 5xD, 130 pt, TiN