Taper length drills 5537

Tool material **HSCO**

Surface **S**

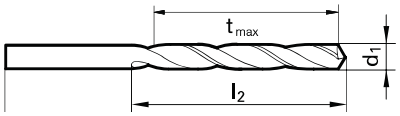
P	Steel	●
M	Stainless steel	●
K	Cast iron	●
N	Aluminum	●
S	Titanium alloys	
H	Hardened steel	

●=Optimal
○=Limited

web thinning ≥ Ø 1.000 • facet split point • Co-alloyed high speed steel • low feed force required • low torque required • increased wear resistance • for universal application • only suitable for short drilling depths when used at full length for reach purposes

alloyed/unalloyed steels up to 800 N/mm² • cold/hot work steels • antifriction bearing steels • non-ferrous metals • cast materials • stainless steels • plastics

$t_{max} = l_2 - 1.5 \times d_1$



Speeds and feeds information on pg. 557

Shank diameter = cut diameter

Diameter (d_1) inch	wire/ltr	mm	l_1 mm	t_{max} mm	l_2 mm	EDP #
0.0394		1.00	56.00	31.50	33.00	9055370010000
0.0402		1.02	56.00	32.00	33.00	9055370010200
0.0409		1.04	56.00	32.00	33.00	9055370010400
0.0421		1.07	60.00	36.00	37.00	9055370010700
0.0429		1.09	60.00	36.00	37.00	9055370010900
0.0433		1.10	60.00	35.35	37.00	9055370011000
0.0465		1.18	60.00	36.00	37.00	9055370011800
0.0469	3/64	1.19	65.00	40.00	41.00	9055370011900
0.0472		1.20	65.00	39.20	41.00	9055370012000
0.0512		1.30	65.00	39.05	41.00	9055370013000
0.0520		1.32	65.00	40.00	41.00	9055370013200
0.0551		1.40	70.00	42.90	45.00	9055370014000
0.0591		1.50	70.00	42.75	45.00	9055370015000
0.0594		1.51	76.00	49.00	50.00	9055370015100
0.0626	1/16	1.59	76.00	49.00	50.00	9055370015900
0.0630		1.60	76.00	47.60	50.00	9055370016000
0.0634		1.61	76.00	49.00	50.00	9055370016100
0.0669		1.70	76.00	47.45	50.00	9055370017000
0.0701		1.78	80.00	51.00	53.00	9055370017800
0.0709		1.80	80.00	50.30	53.00	9055370018000
0.0728		1.85	80.00	51.00	53.00	9055370018500
0.0748		1.90	80.00	50.15	53.00	9055370019000
0.0760		1.93	85.00	54.00	56.00	9055370019300
0.0780	5/64	1.98	85.00	54.00	56.00	9055370019800
0.0783		1.99	85.00	54.00	56.00	9055370019900
0.0787		2.00	85.00	53.00	56.00	9055370020000
0.0811		2.06	85.00	54.00	56.00	9055370020600
0.0819		2.08	85.00	54.00	56.00	9055370020800
0.0827		2.10	85.00	52.85	56.00	9055370021000
0.0858		2.18	90.00	57.00	59.00	9055370021800
0.0866		2.20	90.00	55.70	59.00	9055370022000
0.0890		2.26	90.00	57.00	59.00	9055370022600
0.0906		2.30	90.00	55.55	59.00	9055370023000
0.0933		2.37	95.00	60.00	62.00	9055370023700
0.0937	3/32	2.38	95.00	60.00	62.00	9055370023800
0.0945		2.40	95.00	58.40	62.00	9055370024000
0.0961		2.44	95.00	60.00	62.00	9055370024400
0.0980		2.49	95.00	60.00	62.00	9055370024900
0.0984		2.50	95.00	58.25	62.00	9055370025000
0.0996		2.53	95.00	60.00	62.00	9055370025300
0.1016		2.58	95.00	60.00	62.00	9055370025800
0.1024		2.60	95.00	58.10	62.00	9055370026000

Diameter (d_1) inch	wire/ltr	mm	l_1 mm	t_{max} mm	l_2 mm	EDP #
0.1039		2.64	95.00	60.00	62.00	9055370026400
0.1063		2.70	100.00	61.95	66.00	9055370027000
0.1067		2.71	100.00	64.00	66.00	9055370027100
0.1094	7/64	2.78	100.00	63.00	66.00	9055370027800
0.1098		2.79	100.00	63.00	66.00	9055370027900
0.1102		2.80	100.00	61.80	66.00	9055370028000
0.1110		2.82	100.00	63.00	66.00	9055370028200
0.1130		2.87	100.00	63.00	66.00	9055370028700
0.1142		2.90	100.00	61.65	66.00	9055370029000
0.1161		2.95	100.00	63.00	66.00	9055370029500
0.1181		3.00	100.00	61.50	66.00	9055370030000
0.1201		3.05	106.00	66.00	69.00	9055370030500
0.1220		3.10	106.00	64.35	69.00	9055370031000
0.1248	1/8	3.17	106.00	66.00	69.00	9055370031700
0.1260		3.20	106.00	64.20	69.00	9055370032000
0.1283		3.26	106.00	66.00	69.00	9055370032600
0.1299		3.30	106.00	64.05	69.00	9055370033000
0.1339		3.40	112.00	67.90	73.00	9055370034000
0.1358		3.45	112.00	70.00	73.00	9055370034500
0.1378		3.50	112.00	67.75	73.00	9055370035000
0.1406	9/64	#28 3.57	112.00	70.00	73.00	9055370035700
0.1417		3.60	112.00	67.60	73.00	9055370036000
0.1441		3.66	112.00	70.00	73.00	9055370036600
0.1457		3.70	112.00	67.45	73.00	9055370037000
0.1469		3.73	112.00	70.00	73.00	9055370037300
0.1496		3.80	119.00	72.30	78.00	9055370038000
0.1520		3.86	119.00	75.00	78.00	9055370038600
0.1535		3.90	119.00	72.15	78.00	9055370039000
0.1539		3.91	119.00	74.00	78.00	9055370039100
0.1563	5/32	3.97	119.00	74.00	78.00	9055370039700
0.1571		3.99	119.00	74.00	78.00	9055370039900
0.1575		4.00	119.00	72.00	78.00	9055370040000
0.1591		4.04	119.00	74.00	78.00	9055370040400
0.1610		4.09	119.00	74.00	78.00	9055370040900
0.1614		4.10	119.00	71.85	78.00	9055370041000
0.1654		4.20	119.00	71.70	78.00	9055370042000
0.1661		4.22	119.00	74.00	78.00	9055370042200
0.1693		4.30	126.00	75.55	82.00	9055370043000
0.1720	11/64	4.37	126.00	78.00	82.00	9055370043700
0.1728		4.39	126.00	78.00	82.00	9055370043900
0.1732		4.40	126.00	75.40	82.00	9055370044000
0.1772		4.50	126.00	75.25	82.00	9055370045000

Taper length drills

Series no. **5537**

Diameter (d_1) inch	wire/ltr	mm	l_1 mm	t_{max} mm	l_2 mm	EDP #
0.1799		4.57	126.00	78.00	82.00	9055370045700
0.1811		4.60	126.00	75.10	82.00	9055370046000
0.1819		4.62	126.00	78.00	82.00	9055370046200
0.1850		4.70	126.00	74.95	82.00	9055370047000
0.1874	3/16	4.76	132.00	83.00	87.00	9055370047600
0.1890		4.80	132.00	79.80	87.00	9055370048000
0.1909		4.85	132.00	83.00	87.00	9055370048500
0.1929		4.90	132.00	79.65	87.00	9055370049000
0.1937		4.92	132.00	83.00	87.00	9055370049200
0.1961		4.98	132.00	83.00	87.00	9055370049800
0.1969		5.00	132.00	79.50	87.00	9055370050000
0.1992		5.06	132.00	82.00	87.00	9055370050600
0.2008		5.10	132.00	79.35	87.00	9055370051000
0.2012		5.11	132.00	82.00	87.00	9055370051100
0.2031	13/64	5.16	132.00	82.00	87.00	9055370051600
0.2039		5.18	132.00	82.00	87.00	9055370051800
0.2047		5.20	132.00	79.20	87.00	9055370052000
0.2055		5.22	132.00	82.00	87.00	9055370052200
0.2087		5.30	132.00	79.05	87.00	9055370053000
0.2091		5.31	139.00	86.00	91.00	9055370053100
0.2126		5.40	139.00	82.90	91.00	9055370054000
0.2130		5.41	139.00	86.00	91.00	9055370054100
0.2165		5.50	139.00	82.75	91.00	9055370055000
0.2189	7/32	5.56	139.00	86.00	91.00	9055370055600
0.2205		5.60	139.00	82.60	91.00	9055370056000
0.2209		5.61	139.00	86.00	91.00	9055370056100
0.2244		5.70	139.00	82.45	91.00	9055370057000
0.2280		5.79	139.00	86.00	91.00	9055370057900
0.2283		5.80	139.00	82.30	91.00	9055370058000
0.2323		5.90	139.00	82.15	91.00	9055370059000
0.2339	A	5.94	139.00	86.00	91.00	9055370059400
0.2343	15/64	5.95	139.00	86.00	91.00	9055370059500
0.2362		6.00	139.00	82.00	91.00	9055370060000
0.2378	B	6.04	148.00	92.00	97.00	9055370060400
0.2402		6.10	148.00	87.85	97.00	9055370061000
0.2421	C	6.15	148.00	91.00	97.00	9055370061500
0.2441		6.20	148.00	87.70	97.00	9055370062000
0.2461	D	6.25	148.00	91.00	97.00	9055370062500
0.2480		6.30	148.00	87.55	97.00	9055370063000
0.2500	1/4 E	6.35	148.00	91.00	97.00	9055370063500
0.2520		6.40	148.00	87.40	97.00	9055370064000
0.2559		6.50	148.00	87.25	97.00	9055370065000
0.2571	F	6.53	148.00	91.00	97.00	9055370065300
0.2598		6.60	148.00	87.10	97.00	9055370066000
0.2610	G	6.63	148.00	91.00	97.00	9055370066300
0.2638		6.70	148.00	86.95	97.00	9055370067000
0.2657	17/64 H	6.75	156.00	96.00	102.00	9055370067500
0.2677		6.80	156.00	91.80	102.00	9055370068000
0.2717	I	6.90	156.00	91.65	102.00	9055370069000
0.2756		7.00	156.00	91.50	102.00	9055370070000
0.2768	J	7.03	156.00	96.00	102.00	9055370070300
0.2795		7.10	156.00	91.35	102.00	9055370071000
0.2811	9/32 K	7.14	156.00	96.00	102.00	9055370071400
0.2835		7.20	156.00	91.20	102.00	9055370072000
0.2874		7.30	156.00	91.05	102.00	9055370073000
0.2902	L	7.37	156.00	95.00	102.00	9055370073700
0.2913		7.40	156.00	90.90	102.00	9055370074000
0.2949	M	7.49	156.00	95.00	102.00	9055370074900
0.2953		7.50	156.00	90.75	102.00	9055370075000
0.2969	19/64	7.54	165.00	102.00	109.00	9055370075400
0.2992		7.60	165.00	97.60	109.00	9055370076000
0.3020	N	7.67	165.00	102.00	109.00	9055370076700

Diameter (d_1) inch	wire/ltr	mm	l_1 mm	t_{max} mm	l_2 mm	EDP #
0.3031		7.70	165.00	97.45	109.00	9055370077000
0.3071		7.80	165.00	97.30	109.00	9055370078000
0.3110		7.90	165.00	97.15	109.00	9055370079000
0.3126	5/16	7.94	165.00	102.00	109.00	9055370079400
0.3150		8.00	165.00	97.00	109.00	9055370080000
0.3161	O	8.03	165.00	102.00	109.00	9055370080300
0.3189		8.10	165.00	96.85	109.00	9055370081000
0.3228	P	8.20	165.00	96.70	109.00	9055370082000
0.3268		8.30	165.00	96.55	109.00	9055370083000
0.3280	21/64	8.33	165.00	101.00	109.00	9055370083300
0.3307		8.40	165.00	96.40	109.00	9055370084000
0.3319	Q	8.43	165.00	101.00	109.00	9055370084300
0.3346		8.50	165.00	96.25	109.00	9055370085000
0.3386		8.60	175.00	102.10	115.00	9055370086000
0.3390	R	8.61	175.00	107.00	115.00	9055370086100
0.3425		8.70	175.00	101.95	115.00	9055370087000
0.3437	11/32	8.73	175.00	107.00	115.00	9055370087300
0.3465		8.80	175.00	101.80	115.00	9055370088000
0.3480	S	8.84	175.00	107.00	115.00	9055370088400
0.3504		8.90	175.00	101.65	115.00	9055370089000
0.3543		9.00	175.00	101.50	115.00	9055370090000
0.3579	T	9.09	175.00	107.00	115.00	9055370090900
0.3583		9.10	175.00	101.35	115.00	9055370091000
0.3594	23/64	9.13	175.00	107.00	115.00	9055370091300
0.3622		9.20	175.00	101.20	115.00	9055370092000
0.3661		9.30	175.00	101.05	115.00	9055370093000
0.3677	U	9.34	175.00	107.00	115.00	9055370093400
0.3701		9.40	175.00	100.90	115.00	9055370094000
0.3740		9.50	175.00	100.75	115.00	9055370095000
0.3748	3/8	9.52	184.00	112.00	121.00	9055370095200
0.3772	V	9.58	184.00	112.00	121.00	9055370095800
0.3780		9.60	184.00	106.60	121.00	9055370096000
0.3819		9.70	184.00	106.45	121.00	9055370097000
0.3858	W	9.80	184.00	106.30	121.00	9055370098000
0.3898		9.90	184.00	106.15	121.00	9055370099000
0.3906	25/64	9.92	184.00	112.00	121.00	9055370099200
0.3937		10.00	184.00	106.00	121.00	9055370100000
0.3969	X	10.08	184.00	112.00	121.00	9055370100800
0.3976		10.10	184.00	105.85	121.00	9055370101000
0.4016		10.20	184.00	105.70	121.00	9055370102000
0.4039	Y	10.26	184.00	112.00	121.00	9055370102600
0.4055		10.30	184.00	105.55	121.00	9055370103000
0.4063	13/32	10.32	184.00	112.00	121.00	9055370103200
0.4094		10.40	184.00	105.40	121.00	9055370104000
0.4130	Z	10.49	184.00	111.00	121.00	9055370104900
0.4134		10.50	184.00	105.25	121.00	9055370105000
0.4220	27/64	10.72	195.00	118.00	128.00	9055370107200
0.4331		11.00	195.00	111.50	128.00	9055370110000
0.4374	7/16	11.11	195.00	118.00	128.00	9055370111100
0.4528		11.50	195.00	110.75	128.00	9055370115000
0.4531	29/64	11.51	195.00	118.00	128.00	9055370115100
0.4689	15/32	11.91	205.00	123.00	134.00	9055370119100
0.4724		12.00	205.00	116.00	134.00	9055370120000
0.4843	31/64	12.30	205.00	123.00	134.00	9055370123000
0.4921		12.50	205.00	115.25	134.00	9055370125000
0.5000	1/2	12.70	205.00	123.00	134.00	9055370127000
0.5118		13.00	205.00	114.50	134.00	9055370130000
0.5157	33/64	13.10	205.00	122.00	134.00	9055370131000
0.5311	17/32	13.49	214.00	128.00	140.00	9055370134900
0.5315		13.50	214.00	119.75	140.00	9055370135000
0.5512		14.00	214.00	119.00	140.00	9055370140000
0.5626	9/16	14.29	220.00	131.00	144.00	9055370142900

Series # 5536

Material group	Hardness HRc	Hardness Bhn	SFM	Feed Rate - IPR 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	- ≤ 32	≤ 150 ≤ 301											
Free-cutting steels	≤ 25 ≤ 32	≤ 255 ≤ 301											
Unalloyed heat-treatable steels	≤ 20 ≤ 25 ≤ 32	≤ 220 ≤ 255 ≤ 301											
Alloyed heat-treatable steels	≤ 32 ≤ 43	≤ 301 ≤ 402	35	0.0010	0.0025	0.0040	0.0050	0.0065					
Unalloyed case hardened steels	≤ 25	≤ 255											
Alloyed case hardened steels	≤ 32 ≤ 43	≤ 301 ≤ 402											
Nitriding steels	≤ 32 ≤ 43	≤ 301 ≤ 402											
Tool steels	≤ 25 ≤ 43	≤ 255 ≤ 402											
High speed steels	≤ 43	≤ 402											
Spring steels	≤ 38	≤ 354											
Hardened steels	≤ 48 ≤ 66	≤ 460 -											
Stainless steels, sulphured austenitic martensitic	≤ 28 ≤ 36 ≤ 46	≤ 273 ≤ 337 ≤ 435	35 25 30	0.0012 0.0010 0.0010	0.0030 0.0025 0.0025	0.0050 0.0040 0.0040	0.0065 0.0050 0.0050	0.0080 0.0065 0.0065					
Cast iron	≤ 23 ≤ 38	≤ 242 ≤ 354											
Spheroidal graphite iron and malleable cast iron	≤ 23 ≤ 38	≤ 242 ≤ 354											
Chilled cast iron	≤ 38	≤ 354	15	0.0010	0.0025	0.0040	0.0050	0.0065					
New cast materials GGV	≤ 20 ≤ 32	≤ 220 ≤ 301											
New cast materials ADI	≤ 32 ≤ 43	≤ 301 ≤ 402											
Special alloys	≤ 54	≤ 549	15	0.0005	0.0015	0.0025	0.0030	0.0040					
Ti and Ti-alloys	≤ 25 ≤ 43	≤ 255 ≤ 402	25 15	0.0007 0.0007	0.0020 0.0020	0.0030 0.0030	0.0040 0.0040	0.0050 0.0050					
Aluminium and Al-alloys	-	≤ 120											
Al wrought alloys	-	≤ 200											
Al cast alloys ≤ 10 % Si ≤ 24 % Si	- -	≤ 180 ≤ 180											
Magnesium alloys	-	≤ 120											
Copper, low-alloyed	-	≤ 150											
Brass, short-chipping long-chipping	- -	≤ 180 ≤ 180											
Bronze, short-chipping	- ≤ 25	≤ 180 ≤ 255											
Bronze, long-chipping	≤ 25 ≤ 32	≤ 255 ≤ 301											
Duroplastics Thermoplastics Reinforced plastics - Kevlar Reinforced plastics - GFK / CFK			65	0.0012	0.0030	0.0050	0.0065	0.0080					

Series # 5537

Material group	Hardness HRc	Hardness Bhn	SFM	Feed Rate - IPR 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	- ≤ 32	≤ 150 ≤ 301											
Free-cutting steels	≤ 25 ≤ 32	≤ 255 ≤ 301											
Unalloyed heat-treatable steels	≤ 20 ≤ 25 ≤ 32	≤ 220 ≤ 255 ≤ 301											
Alloyed heat-treatable steels	≤ 32 ≤ 43	≤ 301 ≤ 402	45	0.0010	0.0025	0.0040	0.0050	0.0065					
Unalloyed case hardened steels	≤ 25	≤ 255											
Alloyed case hardened steels	≤ 32 ≤ 43	≤ 301 ≤ 402	40	0.0010	0.0025	0.0040	0.0050	0.0065					
Nitriding steels	≤ 32 ≤ 43	≤ 301 ≤ 402	30	0.0010	0.0025	0.0040	0.0050	0.0065					
Tool steels	≤ 25 ≤ 43	≤ 255 ≤ 402	30	0.0010	0.0025	0.0040	0.0050	0.0065					
High speed steels	≤ 43	≤ 402	30	0.0010	0.0025	0.0040	0.0050	0.0065					
Spring steels	≤ 38	≤ 354	25	0.0007	0.0020	0.0030	0.0040	0.0050					
Hardened steels	≤ 48 ≤ 66	≤ 460 -	5	0.0005	0.0015	0.0025	0.0030	0.0040					
Stainless steels, sulphured austenitic martensitic	≤ 28 ≤ 36 ≤ 46	≤ 273 ≤ 337 ≤ 435	45 30 40	0.0012 0.0010 0.0010	0.0030 0.0025 0.0025	0.0050 0.0040 0.0040	0.0065 0.0050 0.0050	0.0080 0.0065 0.0065					
Cast iron	≤ 23 ≤ 38	≤ 242 ≤ 354											
Spheroidal graphite iron and malleable cast iron	≤ 23 ≤ 38	≤ 242 ≤ 354											
Chilled cast iron	≤ 38	≤ 354	15	0.0010	0.0025	0.0040	0.0050	0.0065					
New cast materials GGV	≤ 20 ≤ 32	≤ 220 ≤ 301											
New cast materials ADI	≤ 32 ≤ 43	≤ 301 ≤ 402											
Special alloys	≤ 54	≤ 549	15	0.0005	0.0015	0.0025	0.0030	0.0040					
Ti and Ti-alloys	≤ 25 ≤ 43	≤ 255 ≤ 402	30 15	0.0007 0.0007	0.0020 0.0020	0.0030 0.0030	0.0040 0.0040	0.0050 0.0050					
Aluminium and Al-alloys	-	≤ 120											
Al wrought alloys	-	≤ 200											
Al cast alloys ≤ 10 % Si ≤ 24 % Si	- -	≤ 180 ≤ 180											
Magnesium alloys	-	≤ 120											
Copper, low-alloyed	-	≤ 150											
Brass, short-chipping long-chipping	- -	≤ 180 ≤ 180											
Bronze, short-chipping	- ≤ 25	≤ 180 ≤ 255											
Bronze, long-chipping	≤ 25 ≤ 32	≤ 255 ≤ 301	80	0.0012	0.0030	0.0050	0.0065	0.0080					
Duroplastics Thermoplastics Reinforced plastics - Kevlar Reinforced plastics - GFK / CFK													