



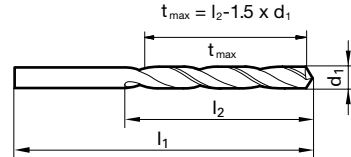
Tool material

HSC0

Surface



- | | | | |
|----------|-----------------|---|---|
| P | Steel | ● | web thinning $\geq \text{Ø } 1.000$ • relieved cone • Co-alloyed high speed steel |
| M | Stainless steel | ● | • wide flutes • increased wear resistance • in case of unsatisfactory chip evacuation |
| K | Cast iron | ● | alloyed/unalloyed steels and castings over 800 N/mm ² • hot and cold rolled steels • antifriction bearing steels • high-alloyed steels • heat treatable and case hardened steels |
| N | Aluminum | ● | |
| S | Titanium alloys | ● | |
| H | Hardened steel | ○ | |
- =Optimal
○=Limited



Speeds and feeds information on pg. 511

Shank diameter = cut diameter

Diameter (d ₁)		l ₁ mm	t _{max} mm	l ₂ mm	EDP #	
inch	wire/ltr mm					
0.0394		1.00	56.00	31.50	33.00	9003360010000
0.0402	#60	1.02	56.00	31.47	33.00	9003360010200
0.0409	#59	1.04	56.00	31.44	33.00	9003360010400
0.0421	#58	1.07	60.00	35.40	37.00	9003360010700
0.0429	#57	1.09	60.00	35.37	37.00	9003360010900
0.0433		1.10	60.00	35.35	37.00	9003360011000
0.0465	#56	1.18	60.00	35.23	37.00	9003360011800
0.0469	3/64	1.19	65.00	39.22	41.00	9003360011900
0.0472		1.20	65.00	39.20	41.00	9003360012000
0.0492		1.25	65.00	39.13	41.00	9003360012500
0.0512		1.30	65.00	39.05	41.00	9003360013000
0.0520	#55	1.32	65.00	39.02	41.00	9003360013200
0.0551	#54	1.40	70.00	42.90	45.00	9003360014000
0.0591		1.50	70.00	42.75	45.00	9003360015000
0.0594	#53	1.51	76.00	47.74	50.00	9003360015100
0.0610		1.55	76.00	47.68	50.00	9003360015500
0.0626	1/16	1.59	76.00	47.62	50.00	9003360015900
0.0630		1.60	76.00	47.60	50.00	9003360016000
0.0634	#52	1.61	76.00	47.59	50.00	9003360016100
0.0669	#51	1.70	76.00	47.45	50.00	9003360017000
0.0689		1.75	80.00	50.38	53.00	9003360017500
0.0701	#50	1.78	80.00	50.33	53.00	9003360017800
0.0709		1.80	80.00	50.30	53.00	9003360018000
0.0728	#49	1.85	80.00	50.23	53.00	9003360018500
0.0748		1.90	80.00	50.15	53.00	9003360019000
0.0760	#48	1.93	85.00	53.11	56.00	9003360019300
0.0780	5/64	1.98	85.00	53.03	56.00	9003360019800
0.0783	#47	1.99	85.00	53.02	56.00	9003360019900
0.0787		2.00	85.00	53.00	56.00	9003360020000
0.0807		2.05	85.00	52.93	56.00	9003360020500
0.0811	#46	2.06	85.00	52.91	56.00	9003360020600
0.0819	#45	2.08	85.00	52.88	56.00	9003360020800
0.0827		2.10	85.00	52.85	56.00	9003360021000
0.0858	#44	2.18	90.00	55.73	59.00	9003360021800
0.0866		2.20	90.00	55.70	59.00	9003360022000
0.0886		2.25	90.00	55.63	59.00	9003360022500
0.0890	#43	2.26	90.00	55.61	59.00	9003360022600
0.0906		2.30	90.00	55.55	59.00	9003360023000
0.0925		2.35	90.00	55.48	59.00	9003360023500
0.0933	#42	2.37	95.00	58.45	62.00	9003360023700
0.0937	3/32	2.38	95.00	58.43	62.00	9003360023800
0.0945		2.40	95.00	58.40	62.00	9003360024000
0.0961	#41	2.44	95.00	58.34	62.00	9003360024400

Diameter (d ₁)			l ₁ mm	t _{max} mm	l ₂ mm	EDP #
inch	wire/ltr mm	mm				
0.0965		2.45	95.00	58.33	62.00	9003360024500
0.0980	#40	2.49	95.00	58.27	62.00	9003360024900
0.0984		2.50	95.00	58.25	62.00	9003360025000
0.0996	#39	2.53	95.00	58.21	62.00	9003360025300
0.1004		2.55	95.00	58.18	62.00	9003360025500
0.1016	#38	2.58	95.00	58.13	62.00	9003360025800
0.1024		2.60	95.00	58.10	62.00	9003360026000
0.1039	#37	2.64	95.00	58.04	62.00	9003360026400
0.1063		2.70	100.00	61.95	66.00	9003360027000
0.1067	#36	2.71	100.00	61.94	66.00	9003360027100
0.1083		2.75	100.00	61.88	66.00	9003360027500
0.1094	7/64	2.78	100.00	61.83	66.00	9003360027800
0.1098	#35	2.79	100.00	61.82	66.00	9003360027900
0.1102		2.80	100.00	61.80	66.00	9003360028000
0.1110	#34	2.82	100.00	61.77	66.00	9003360028200
0.1122		2.85	100.00	61.73	66.00	9003360028500
0.1130	#33	2.87	100.00	61.70	66.00	9003360028700
0.1142		2.90	100.00	61.65	66.00	9003360029000
0.1161	#32	2.95	100.00	61.58	66.00	9003360029500
0.1181		3.00	100.00	61.50	66.00	9003360030000
0.1201	#31	3.05	106.00	64.43	69.00	9003360030500
0.1220		3.10	106.00	64.35	69.00	9003360031000
0.1248	1/8	3.17	106.00	64.25	69.00	9003360031700
0.1260		3.20	106.00	64.20	69.00	9003360032000
0.1283	#30	3.26	106.00	64.11	69.00	9003360032600
0.1299		3.30	106.00	64.05	69.00	9003360033000
0.1339		3.40	112.00	67.90	73.00	9003360034000
0.1354		3.44	112.00	67.84	73.00	9003360034400
0.1358	#29	3.45	112.00	67.83	73.00	9003360034500
0.1378		3.50	112.00	67.75	73.00	9003360035000
0.1406	9/64	3.57	112.00	67.65	73.00	9003360035700
0.1417		3.60	112.00	67.60	73.00	9003360036000
0.1441	#27	3.66	112.00	67.51	73.00	9003360036600
0.1457		3.70	112.00	67.45	73.00	9003360037000
0.1469	#26	3.73	112.00	67.41	73.00	9003360037300
0.1496	#25	3.80	119.00	72.30	78.00	9003360038000
0.1520	#24	3.86	119.00	72.21	78.00	9003360038600
0.1535		3.90	119.00	72.15	78.00	9003360039000
0.1539	#23	3.91	119.00	72.14	78.00	9003360039100
0.1563	5/32	3.97	119.00	72.05	78.00	9003360039700
0.1571	#22	3.99	119.00	72.02	78.00	9003360039900
0.1575		4.00	119.00	72.00	78.00	9003360040000
0.1591	#21	4.04	119.00	71.94	78.00	9003360040400

Taper Length

Diameter (d ₁)			l ₁ mm	t _{max} mm	l ₂ mm	EDP #
inch	wire/ltr	mm				
0.1610	#20	4.09	119.00	71.87	78.00	9003360040900
0.1614		4.10	119.00	71.85	78.00	9003360041000
0.1654		4.20	119.00	71.70	78.00	9003360042000
0.1661	#19	4.22	119.00	71.67	78.00	9003360042200
0.1693	#18	4.30	126.00	75.55	82.00	9003360043000
0.1720	11/64	4.37	126.00	75.45	82.00	9003360043700
0.1728	#17	4.39	126.00	75.42	82.00	9003360043900
0.1732		4.40	126.00	75.40	82.00	9003360044000
0.1772	#16	4.50	126.00	75.25	82.00	9003360045000
0.1799	#15	4.57	126.00	75.15	82.00	9003360045700
0.1811		4.60	126.00	75.10	82.00	9003360046000
0.1819	#14	4.62	126.00	75.07	82.00	9003360046200
0.1850	#13	4.70	126.00	74.95	82.00	9003360047000
0.1874	3/16	4.76	132.00	79.86	87.00	9003360047600
0.1890	#12	4.80	132.00	79.80	87.00	9003360048000
0.1909	#11	4.85	132.00	79.73	87.00	9003360048500
0.1929		4.90	132.00	79.65	87.00	9003360049000
0.1937	#10	4.92	132.00	79.62	87.00	9003360049200
0.1961	#9	4.98	132.00	79.53	87.00	9003360049800
0.1969		5.00	132.00	79.50	87.00	9003360050000
0.1992	#8	5.06	132.00	79.41	87.00	9003360050600
0.2008		5.10	132.00	79.35	87.00	9003360051000
0.2012	#7	5.11	132.00	79.34	87.00	9003360051100
0.2031	13/64	5.16	132.00	79.26	87.00	9003360051600
0.2039	#6	5.18	132.00	79.23	87.00	9003360051800
0.2047		5.20	132.00	79.20	87.00	9003360052000
0.2055	#5	5.22	132.00	79.17	87.00	9003360052200
0.2087		5.30	132.00	79.05	87.00	9003360053000
0.2091	#4	5.31	139.00	83.04	91.00	9003360053100
0.2126		5.40	139.00	82.90	91.00	9003360054000
0.2130	#3	5.41	139.00	82.89	91.00	9003360054100
0.2165		5.50	139.00	82.75	91.00	9003360055000
0.2189	7/32	5.56	139.00	82.66	91.00	9003360055600
0.2205		5.60	139.00	82.60	91.00	9003360056000
0.2244		5.70	139.00	82.45	91.00	9003360057000
0.2280	#1	5.79	139.00	82.32	91.00	9003360057900
0.2283		5.80	139.00	82.30	91.00	9003360058000
0.2323		5.90	139.00	82.15	91.00	9003360059000
0.2343	15/64	5.95	139.00	82.08	91.00	9003360059500
0.2362		6.00	139.00	82.00	91.00	9003360060000
0.2378	B	6.04	148.00	87.94	97.00	9003360060400
0.2402		6.10	148.00	87.85	97.00	9003360061000
0.2421	C	6.15	148.00	87.78	97.00	9003360061500
0.2441		6.20	148.00	87.70	97.00	9003360062000
0.2461	D	6.25	148.00	87.63	97.00	9003360062500
0.2480		6.30	148.00	87.55	97.00	9003360063000
0.2500	1/4	6.35	148.00	87.48	97.00	9003360063500
0.2520		6.40	148.00	87.40	97.00	9003360064000
0.2559		6.50	148.00	87.25	97.00	9003360065000
0.2571		6.53	148.00	87.21	97.00	9003360065300
0.2598		6.60	148.00	87.10	97.00	9003360066000
0.2610	G	6.63	148.00	87.06	97.00	9003360066300
0.2638		6.70	148.00	86.95	97.00	9003360067000

Diameter (d ₁)			l ₁ mm	t _{max} mm	l ₂ mm	EDP #	
inch	wire/ltr	mm					
0.2657	17/64	H	6.75	156.00	91.88	102.00	9003360067500
0.2677			6.80	156.00	91.80	102.00	9003360068000
0.2717		I	6.90	156.00	91.65	102.00	9003360069000
0.2756			7.00	156.00	91.50	102.00	9003360070000
0.2768		J	7.03	156.00	91.46	102.00	9003360070300
0.2795			7.10	156.00	91.35	102.00	9003360071000
0.2811	9/32	K	7.14	156.00	91.29	102.00	9003360071400
0.2835			7.20	156.00	91.20	102.00	9003360072000
0.2874			7.30	156.00	91.05	102.00	9003360073000
0.2913			7.40	156.00	90.90	102.00	9003360074000
0.2953			7.50	156.00	90.75	102.00	9003360075000
0.2969	19/64		7.54	165.00	97.69	109.00	9003360075400
0.3020		N	7.67	165.00	97.50	109.00	9003360076700
0.3031			7.70	165.00	97.45	109.00	9003360077000
0.3071			7.80	165.00	97.30	109.00	9003360078000
0.3110			7.90	165.00	97.15	109.00	9003360079000
0.3126	5/16		7.94	165.00	97.09	109.00	9003360079400
0.3150			8.00	165.00	97.00	109.00	9003360080000
0.3161		O	8.03	165.00	96.96	109.00	9003360080300
0.3189			8.10	165.00	96.85	109.00	9003360081000
0.3228		P	8.20	165.00	96.70	109.00	9003360082000
0.3268			8.30	165.00	96.55	109.00	9003360083000
0.3307			8.40	165.00	96.40	109.00	9003360084000
0.3346			8.50	165.00	96.25	109.00	9003360085000
0.3386			8.60	175.00	102.10	115.00	9003360086000
0.3390		R	8.61	175.00	102.09	115.00	9003360086100
0.3425			8.70	175.00	101.95	115.00	9003360087000
0.3437	11/32		8.73	175.00	101.91	115.00	9003360087300
0.3465			8.80	175.00	101.80	115.00	9003360088000
0.3480		S	8.84	175.00	101.74	115.00	9003360088400
0.3504			8.90	175.00	101.65	115.00	9003360089000
0.3543			9.00	175.00	101.50	115.00	9003360090000
0.3579		T	9.09	175.00	101.37	115.00	9003360090900
0.3583			9.10	175.00	101.35	115.00	9003360091000
0.3622			9.20	175.00	101.20	115.00	9003360092000
0.3661			9.30	175.00	101.05	115.00	9003360093000
0.3677		U	9.34	175.00	100.99	115.00	9003360093400
0.3701			9.40	175.00	100.90	115.00	9003360094000
0.3740			9.50	175.00	100.75	115.00	9003360095000
0.3748	3/8		9.52	184.00	106.72	121.00	9003360095200
0.3819			9.70	184.00	106.45	121.00	9003360097000
0.3839			9.75	184.00	106.38	121.00	9003360097500
0.3858		W	9.80	184.00	106.30	121.00	9003360098000
0.3898			9.90	184.00	106.15	121.00	9003360099000
0.3937			10.00	184.00	106.00	121.00	9003360100000
0.4016			10.20	184.00	105.70	121.00	9003360102000
0.4134			10.50	184.00	105.25	121.00	9003360105000
0.4252			10.80	195.00	111.80	128.00	9003360108000
0.4331			11.00	195.00	111.50	128.00	9003360110000
0.4528			11.50	195.00	110.75	128.00	9003360115000
0.4646			11.80	195.00	110.30	128.00	9003360118000
0.4689	15/32		11.91	205.00	116.14	134.00	9003360119100
0.4724			12.00	205.00	116.00	134.00	9003360120000

Taper Length