



suttontools

D115 -Morse Taper Shank Drills -Sutton Tools

Twist drill with Morse taper shank suitable for a variety of materials and industrial applications. The tang at the end of the shank is used for ejecting the drill from the socket or sleeve. The drive and alignment is derived from the taper lock.

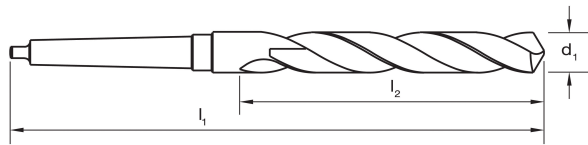
Features:

- General purpose HSS drill
- Suitable for materials up to 900N/mm²

Specifications:

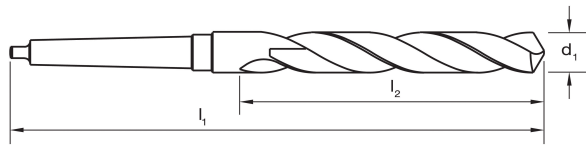
Designation:	N
Material:	HSS
Finish:	Blu
Max Cut Depth:	5XD
Shank Form:	MTS
Helix Angle:	R30
Point Tolerance:	H8
Point Angle:	118°
Point Form:	Form A
Cutting Edges:	ul
Standard:	DIN345

Range:



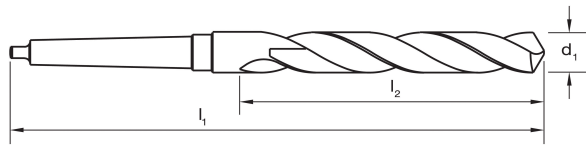
Item #	Diameter d1 (mm)	Diameter d1 (inch)	Length l1 (mm)	Length l2 (mm)	Diameter d2 (mm)
D1150318	3.18	1/8	117	37	MT#1
D1150357	3.57	9/64	121	39	MT#1
D1150397	3.97	5/32	123	43	MT#1
D1150437	4.37	11/64	128	47	MT#1
D1150476	4.76	3/16	133	52	MT#1
D1150516	5.16	13/64	133	52	MT#1
D1150556	5.56	7/32	138	57	MT#1
D1150595	5.95	15/64	138	57	MT#1
D1150635	6.35	1/4	144	63	MT#1
D1150676	6.75	17/64	144	63	MT#1
D1150714	7.14	9/32	150	69	MT#1
D1150754	7.54	19/64	156	75	MT#1
D1150794	7.94	5/16	156	75	MT#1
D1150833	8.33	21/64	156	75	MT#1
D1150873	8.73	11/32	162	81	MT#1
D1150913	9.13	23/64	162	81	MT#1
D1150953	9.53	3/8	168	87	MT#1
D1150992	9.92	25/64	168	87	MT#1
D1151032	10.32	13/32	168	87	MT#1
D1151072	10.72	27/64	175	94	MT#1
D1151111	11.11	7/16	175	94	MT#1
D1151151	11.51	29/64	175	94	MT#1
D1151191	11.91	15/32	182	101	MT#1
D1151231	12.30	31/64	182	101	MT#1
D1151269	12.70	1/2	182	101	MT#1
D1151310	13.10	33/64	182	108	MT#1
D1151349	13.49	17/32	189	108	MT#1
D1151389	13.89	35/64	189	108	MT#1
D1151429	14.29	9/16	212	114	MT#2
D1151468	14.68	37/64	212	114	MT#2
D1151508	15.08	19/32	218	120	MT#2
D1151548	15.48	39/64	218	120	MT#2
D1151588	15.88	5/8	218	120	MT#2
D1151627	16.27	41/64	223	125	MT#2
D1151667	16.67	21/32	223	125	MT#2

Range:



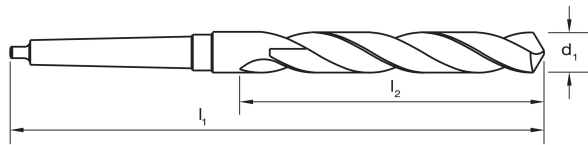
Item #	Diameter d1 (mm)	Diameter d1 (inch)	Length L1 (mm)	Length L2 (mm)	Diameter d2 (mm)
D1151707	17.07	43/64	228	130	MT#2
D1151746	17.46	11/16	228	130	MT#2
D1151786	17.86	45/64	228	130	MT#2
D1151826	18.26	23/32	233	135	MT#2
D1151865	18.65	47/64	233	135	MT#2
D1151905	19.05	3/4	238	140	MT#2
D1151945	19.45	49/64	238	140	MT#2
D1151984	19.84	25/32	238	140	MT#2
D1152024	20.24	51/64	243	145	MT#2
D1152064	20.64	13/16	243	145	MT#2
D1152103	21.03	53/64	243	145	MT#2
D1152143	21.43	27/32	248	150	MT#2
D1152183	21.83	55/64	248	150	MT#2
D1152223	22.23	7/8	248	150	MT#2
D1152262	22.62	57/64	253	155	MT#2
D1152302	23.02	29/32	253	155	MT#2
D1152342	23.41	59/64	276	155	MT#3
D1152381	23.81	15/16	281	160	MT#3
D1152421	24.21	61/64	281	160	MT#3
D1152461	24.61	31/32	281	160	MT#3
D1152501	25.01	63/64	286	165	MT#3
D1152540	25.40	1	286	165	MT#3
D1152580	25.80	1-1/64	286	165	MT#3
D1152619	26.19	1-1/32	286	165	MT#3
D1152659	26.59	1-3/64	291	170	MT#3
D1152699	26.99	1-1/16	291	170	MT#3
D1152738	27.38	1-5/64	291	170	MT#3
D1152778	27.78	1-3/32	291	170	MT#3
D1152818	28.18	1-7/64	296	175	MT#3
D1152858	28.58	1-1/8	296	175	MT#3
D1152897	28.97	1-9/64	296	175	MT#3
D1152937	29.36	1-5/32	296	175	MT#3
D1152977	29.77	1-11/64	296	175	MT#3
D1153016	30.16	1-3/16	301	180	MT#3
D1153056	30.56	1-13/64	301	180	MT#3

Range:



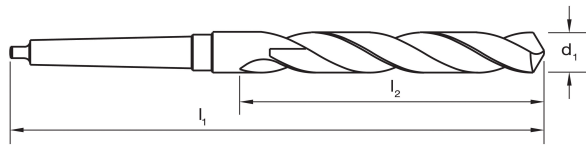
Item #	Diameter d1 (mm)	Diameter d1 (inch)	Length l1 (mm)	Length l2 (mm)	Diameter d2 (mm)
D1153096	30.96	1-7/32	301	180	MT#3
D1153135	31.35	1-15/64	301	180	MT#3
D1153175	31.75	1-1/4	306	185	MT#3
D1153334	33.34	1-5/16	334	185	MT#4
D1153493	34.93	1-3/8	339	190	MT#4
D1153810	38.10	1-1/2	349	200	MT#4
D1154128	41.28	1-5/8	354	205	MT#4
D1154445	44.45	1-3/4	359	210	MT#4
D1154763	47.63	1-7/8	369	215	MT#4
D1155080	50.80	2	374	225	MT#4
D1150550	5.50	-	138	57	MT#1
D1150600	6.00	-	138	57	MT#1
D1150650	6.50	-	144	63	MT#1
D1150700	7.00	-	150	69	MT#1
D1150750	7.50	-	150	69	MT#1
D1150800	8.00	-	156	75	MT#1
D1150850	8.50	-	156	75	MT#1
D1150900	9.00	-	162	81	MT#1
D1150950	9.50	-	162	81	MT#1
D1151000	10.00	-	168	87	MT#1
D1151050	10.50	-	168	87	MT#1
D1151100	11.00	-	175	94	MT#1
D1151150	11.50	-	175	94	MT#1
D1151200	12.00	-	182	101	MT#1
D1151250	12.50	-	182	101	MT#1
D1151300	13.00	-	182	101	MT#1
D1151350	13.50	-	189	108	MT#1
D1151400	14.00	-	189	108	MT#1
D1151450	14.50	-	212	114	MT#2
D1151500	15.00	-	212	114	MT#2
D1151550	15.50	-	218	120	MT#2
D1151600	16.00	-	218	120	MT#2
D1151650	16.50	-	223	125	MT#2
D1151700	17.00	-	223	125	MT#2
D1151750	17.50	-	228	130	MT#2

Range:



Item #	Diameter d1 (mm)	Diameter d1 (inch)	Length l1 (mm)	Length l2 (mm)	Diameter d2 (mm)
D1151800	18.00	-	228	130	MT#2
D1151850	18.50	-	233	135	MT#2
D1151900	19.00	-	233	135	MT#2
D1151950	19.50	-	238	140	MT#2
D1152000	20.00	-	238	140	MT#2
D1152050	20.50	-	243	145	MT#2
D1152100	21.00	-	243	145	MT#2
D1152150	21.50	-	248	150	MT#2
D1152200	22.00	-	248	150	MT#2
D1152250	22.50	-	253	155	MT#2
D1152300	23.00	-	253	155	MT#2
D1152350	23.50	-	276	155	MT#3
D1152400	24.00	-	281	160	MT#3
D1152450	24.50	-	281	160	MT#3
D1152500	25.00	-	281	160	MT#3
D1152550	25.50	-	286	165	MT#3
D1152600	26.00	-	286	165	MT#3
D1152650	26.50	-	286	165	MT#3
D1152700	27.00	-	291	170	MT#3
D1152750	27.50	-	291	170	MT#3
D1152800	28	-	291	170	MT#3
D1152850	28.50	-	296	175	MT#3
D1152900	29.00	-	296	175	MT#3
D1152950	29.50	-	296	175	MT#3
D1153000	30.00	-	296	175	MT#3
D1153050	30.50	-	301	180	MT#3
D1153100	31.00	-	301	180	MT#3
D1153150	31.50	-	301	180	MT#3
D1153200	32.00	-	334	185	MT#4
D1153250	32.50	-	334	185	MT#4
D1153300	33.00	-	334	185	MT#4
D1153350	33.50	-	334	185	MT#4
D1153400	34.00	-	339	190	MT#4
D1153450	34.50	-	339	190	MT#4
D1153500	35.00	-	339	190	MT#4

Range:



Item #	Diameter d1 (mm)	Diameter d1 (inch)	Length l1 (mm)	Length l2 (mm)	Diameter d2 (mm)
D1153550	35.50	-	339	190	MT#4
D1153600	36.00	-	344	195	MT#4
D1153650	36.50	-	344	195	MT#4
D1153700	37.00	-	344	195	MT#4
D1153750	37.50	-	344	195	MT#4
D1153800	38.00	-	349	200	MT#4
D1153850	38.50	-	349	200	MT#4
D1153900	39.00	-	349	200	MT#4
D1153950	39.50	-	349	200	MT#4
D1154000	40.00	-	349	200	MT#4
D1154050	40.50	-	354	205	MT#4
D1154100	41.00	-	354	205	MT#4
D1154150	41.50	-	354	205	MT#4
D1154200	42.00	-	354	205	MT#4
D1154250	42.50	-	354	205	MT#4
D1154300	43.00	-	359	210	MT#4
D1154350	43.50	-	359	210	MT#4
D1154400	44.00	-	359	210	MT#4
D1154450	44.50	-	359	210	MT#4
D1154500	45.00	-	359	210	MT#4
D1154550	45.50	-	364	215	MT#4
D1154600	46.00	-	364	215	MT#4
D1154650	46.50	-	364	215	MT#4
D1154700	47.00	-	364	215	MT#4
D1154750	47.50	-	364	215	MT#4
D1154800	48.00	-	369	220	MT#4
D1154850	48.50	-	369	220	MT#4
D1154900	49.00	-	369	220	MT#4
D1154950	49.50	-	369	220	MT#4
D1155000	50.00	-	369	220	MT#4
D1155050	50.50	-	374	225	MT#4
D1155159	51.59	2-1/32	413	225	MT#5
D1155239	52.39	2-1/16	413	225	MT#5
D1155398	53.98	2-1/8	413	225	MT#5
D1155556	55.56	2-3/16	413	225	MT#5

Applications:

ISO	VDI	Description	Condition	Hardness	Strength	Optimal
P	1	Steel - Non-alloy, cast & free cutting (~ 0.15 %C)	Annealed	125MPa	440MPa	●
P	2	Steel - Non-alloy, cast & free cutting (~ 0.45 %C)	Annealed	190MPa	640MPa	●
P	3	Steel - Non-alloy, cast & free cutting (~ 0.45 %C)	Quenched & Tempered	250MPa	840MPa	○
P	4	Steel - Non-alloy, cast & free cutting (~ 0.75 %C)	Annealed	270MPa	910MPa	○
P	5	Steel - Non-alloy, cast & free cutting (~ 0.75 %C)	Quenched & Tempered	300MPa	1010MPa	○
P	6	Steel - Low alloy & cast < 5% of alloying elements	Annealed	180MPa	610MPa	○
P	7	Steel - Low alloy & cast < 5% of alloying elements	Quenched & Tempered	275MPa	930MPa	○
P	8	Steel - Low alloy & cast < 5% of alloying elements	Quenched & Tempered	300MPa	1010MPa	○
P	9	Steel - Low alloy & cast < 5% of alloying elements	Quenched & Tempered	350HB	1180MPa	
P	10	Steel - High alloy, cast & tool	Annealed	200MPa	680MPa	○
P	11	Steel - High alloy, cast & tool	Hardened & Tempered	325HB	1100MPa	
P	12	Steel - Corrosion resistant & cast - Ferritic / Martensitic	Annealed	200HB	680MPa	
P	13	Steel - Corrosion resistant & cast - Martensitic	Quenched & Tempered	240HB	810MPa	
M	14.1	Stainless Steel - Austenitic	Age Hardened	180MPa	610MPa	○
M	14.2	Stainless Steel - Duplex		250HB	840MPa	
M	14.3	Stainless Steel - Precipitation Hardening		250HB	840MPa	
K	15	Cast Iron, Grey (GG) - Ferritic / Pearlitic		180MPa	610MPa	○
K	16	Cast Iron, Grey (GG) - Pearlitic		260MPa	880MPa	○
K	17	Cast Iron, Nodular (GGG) - Ferritic		160MPa	570MPa	○
K	18	Cast Iron, Nodular (GGG) - Pearlitic		250MPa	840MPa	○
K	19	Cast Iron, Malleable - Ferritic		130MPa	460MPa	○
K	20	Cast Iron, Malleable - Pearlitic		230MPa	780MPa	○
N	21	Aluminum & Magnesium, wrought alloy - Non Heat Treatable		60HB	210MPa	
N	22	Aluminum & Magnesium, wrought alloy - Heat Treatable	Age Hardened	100HB	360MPa	
N	23	Aluminum & Magnesium, cast alloy ≤12% Si - Non Heat Treatable		75HB	270MPa	
N	24	Aluminum & Magnesium, cast alloy ≤12% Si - Heat Treatable	Age Hardened	90HB	320MPa	
N	25	Aluminum & Magnesium, cast alloy >12% Si - Non Heat Treatable		130HB	460MPa	
N	26	Copper & Copper alloys (Brass/Bronze) - Free cutting, Pb > 1		110HB	390MPa	
N	27	Copper & Copper alloys (Brass/Bronze) - Brass (CuZn, CuSnZn)		90HB	320MPa	
N	28	Copper & Copper alloys (Brass/Bronze) - Bronze (CuSn)		100HB	360MPa	
N	29	Non-metallic - Thermosetting & fiber-reinforced plastics				
N	30	Non-metallic - Hard rubber, wood etc.				
S	31	High temperature alloys - Fe based	Annealed	200HB	680MPa	
S	32	High temperature alloys - Fe based	Age Hardened	280HB	950MPa	
S	33	High temperature alloys - Ni / Co based	Annealed	250HB	840MPa	
S	34	High temperature alloys - Ni / Co based	Age Hardened	350HB	1180MPa	
S	35	High temperature alloys - Ni / Co based	Cast	320HB	1080MPa	
S	36	Titanium & Titanium alloys - CP Titanium			400MPa	
S	37.1	Titanium & Titanium alloys - Alpha alloys			860MPa	
S	37.2	Titanium & Titanium alloys - Alpha / Beta alloys	Annealed		960MPa	
S	37.3	Titanium & Titanium alloys - Alpha / Beta alloys	Age Hardened		1170MPa	
S	37.4	Titanium & Titanium alloys - Beta alloys	Annealed		830MPa	
S	37.5	Titanium & Titanium alloys - Beta alloys	Age Hardened		1400MPa	
H	38.1	Hardened steel	Hardened & Tempered	45HRC		
H	38.2	Hardened steel	Hardened & Tempered	55HRC		

KEY

● Optimal ○ Effective | **P** Steel **M** Stainless **K** Cast Iron **N** Non-Ferous Metals **S** Titanium & Super Alloys **H** Hard Materials

Applications:

ISO	VDI	Description	Condition	Hardness	Strength	Optimal
H	39.1	Hardened steel	Hardened & Tempered	58HRC		
H	39.2	Hardened steel	Hardened & Tempered	62HRC		
H	40	Cast Iron - Chilled	Cast	400MPa	1350MPa	o
H	41	Cast Iron	Hardened & Tempered	55HRC		

KEY

Optimal
 Effective
 P Steel
 M Stainless
 K Cast Iron
 N Non-Ferrous Metals
 S Titanium & Super Alloys
 H Hard Materials