

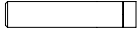
5xD



TiN Coated



External Coolant



Straight Shank

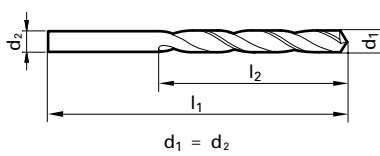
Speeds & Feeds
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Series 657

Type Ti

Cobalt, Type Ti, jobber length, self-centering 130° split point, web thinned >1.0mm dia., standard straight shank, RH helix

Cut / Shank Dia. = h8 tolerance range



Application Materials:

- Universal Steels
- Stainless Steels
- Hardened Materials
- Ti & Ni Alloys

Twist Drills

| Dec. inch | Diameter (d1) | | | l1 mm | l2 mm | EDP # |
|-----------|---------------|---------------|-------|-------|-------|---------------|
| | Fract. inch | Wire / letter | mm | | | |
| 0.0197 | | | 0.500 | 22.00 | 6.00 | 9006570005000 |
| 0.0209 | | 75 | 0.530 | 22.00 | 6.00 | 9006570005300 |
| 0.0236 | | | 0.600 | 24.00 | 7.00 | 9006570006000 |
| 0.0256 | | | 0.650 | 26.00 | 8.00 | 9006570006500 |
| 0.0276 | | | 0.700 | 28.00 | 9.00 | 9006570007000 |
| 0.0295 | | | 0.750 | 28.00 | 9.00 | 9006570007500 |
| 0.0315 | | | 0.800 | 30.00 | 10.00 | 9006570008000 |
| 0.0335 | | | 0.850 | 30.00 | 10.00 | 9006570008500 |
| 0.0346 | | | 0.880 | 32.00 | 11.00 | 9006570008800 |
| 0.0354 | | | 0.900 | 32.00 | 11.00 | 9006570009000 |
| 0.0362 | | | 0.920 | 32.00 | 11.00 | 9006570009200 |
| 0.0370 | | 63 | 0.940 | 32.00 | 11.00 | 9006570009400 |
| 0.0374 | | | 0.950 | 32.00 | 11.00 | 9006570009500 |
| 0.0394 | | | 1.000 | 34.00 | 12.00 | 9006570010000 |
| 0.0409 | | 59 | 1.040 | 34.00 | 12.00 | 9006570010400 |
| 0.0413 | | | 1.050 | 34.00 | 12.00 | 9006570010500 |
| 0.0433 | | | 1.100 | 36.00 | 14.00 | 9006570011000 |
| 0.0453 | | | 1.150 | 36.00 | 14.00 | 9006570011500 |
| 0.0465 | | 56 | 1.180 | 36.00 | 14.00 | 9006570011800 |
| 0.0469 | 3/64 | | 1.190 | 38.00 | 16.00 | 9006570011900 |
| 0.0472 | | | 1.200 | 38.00 | 16.00 | 9006570012000 |
| 0.0476 | | | 1.210 | 38.00 | 16.00 | 9006570012100 |
| 0.0492 | | | 1.250 | 38.00 | 16.00 | 9006570012500 |
| 0.0512 | | | 1.300 | 38.00 | 16.00 | 9006570013000 |
| 0.0520 | | 55 | 1.320 | 38.00 | 16.00 | 9006570013200 |
| 0.0531 | | | 1.350 | 40.00 | 18.00 | 9006570013500 |
| 0.0547 | | | 1.390 | 40.00 | 18.00 | 9006570013900 |
| 0.0551 | | 54 | 1.400 | 40.00 | 18.00 | 9006570014000 |
| 0.0571 | | | 1.450 | 40.00 | 18.00 | 9006570014500 |
| 0.0591 | | | 1.500 | 40.00 | 18.00 | 9006570015000 |
| 0.0594 | | 53 | 1.510 | 43.00 | 20.00 | 9006570015100 |
| 0.0610 | | | 1.550 | 43.00 | 20.00 | 9006570015500 |
| 0.0626 | 1/16 | | 1.590 | 43.00 | 20.00 | 9006570015900 |
| 0.0630 | | | 1.600 | 43.00 | 20.00 | 9006570016000 |
| 0.0634 | | 52 | 1.610 | 43.00 | 20.00 | 9006570016100 |
| 0.0650 | | | 1.650 | 43.00 | 20.00 | 9006570016500 |
| 0.0669 | | 51 | 1.700 | 43.00 | 20.00 | 9006570017000 |
| 0.0689 | | | 1.750 | 46.00 | 22.00 | 9006570017500 |
| 0.0701 | | 50 | 1.780 | 46.00 | 22.00 | 9006570017800 |
| 0.0709 | | | 1.800 | 46.00 | 22.00 | 9006570018000 |
| 0.0728 | | 49 | 1.850 | 46.00 | 22.00 | 9006570018500 |
| 0.0748 | | | 1.900 | 46.00 | 22.00 | 9006570019000 |
| 0.0768 | | | 1.950 | 49.00 | 24.00 | 9006570019500 |
| 0.0780 | 5/64 | | 1.980 | 49.00 | 24.00 | 9006570019800 |
| 0.0787 | | | 2.000 | 49.00 | 24.00 | 9006570020000 |
| 0.0807 | | | 2.050 | 49.00 | 24.00 | 9006570020500 |
| 0.0827 | | | 2.100 | 49.00 | 24.00 | 9006570021000 |
| 0.0846 | | | 2.150 | 53.00 | 27.00 | 9006570021500 |
| 0.0866 | | | 2.200 | 53.00 | 27.00 | 9006570022000 |
| 0.0890 | | 43 | 2.260 | 53.00 | 27.00 | 9006570022600 |
| 0.0906 | | | 2.300 | 53.00 | 27.00 | 9006570023000 |
| 0.0925 | | | 2.350 | 53.00 | 27.00 | 9006570023500 |
| 0.0937 | 3/32 | | 2.380 | 57.00 | 30.00 | 9006570023800 |
| 0.0945 | | | 2.400 | 57.00 | 30.00 | 9006570024000 |
| 0.0961 | | 41 | 2.440 | 57.00 | 30.00 | 9006570024400 |

| Dec. inch | Diameter (d1) | | | l1 mm | l2 mm | EDP # |
|-----------|---------------|---------------|-------|-------|-------|---------------|
| | Fract. inch | Wire / letter | mm | | | |
| 0.0984 | | | 2.500 | 57.00 | 30.00 | 9006570025000 |
| 0.0996 | | 39 | 2.530 | 57.00 | 30.00 | 9006570025300 |
| 0.1004 | | | 2.550 | 57.00 | 30.00 | 9006570025500 |
| 0.1024 | | | 2.600 | 57.00 | 30.00 | 9006570026000 |
| 0.1063 | | | 2.700 | 61.00 | 33.00 | 9006570027000 |
| 0.1094 | 7/64 | | 2.780 | 61.00 | 33.00 | 9006570027800 |
| 0.1102 | | | 2.800 | 61.00 | 33.00 | 9006570028000 |
| 0.1110 | | 34 | 2.820 | 61.00 | 33.00 | 9006570028200 |
| 0.1142 | | | 2.900 | 61.00 | 33.00 | 9006570029000 |
| 0.1161 | | 32 | 2.950 | 61.00 | 33.00 | 9006570029500 |
| 0.1181 | | | 3.000 | 61.00 | 33.00 | 9006570030000 |
| 0.1201 | | 31 | 3.050 | 65.00 | 36.00 | 9006570030500 |
| 0.1220 | | | 3.100 | 65.00 | 36.00 | 9006570031000 |
| 0.1248 | 1/8 | | 3.170 | 65.00 | 36.00 | 9006570031700 |
| 0.1260 | | | 3.200 | 65.00 | 36.00 | 9006570032000 |
| 0.1283 | | 30 | 3.260 | 65.00 | 36.00 | 9006570032600 |
| 0.1299 | | | 3.300 | 65.00 | 36.00 | 9006570033000 |
| 0.1339 | | | 3.400 | 70.00 | 39.00 | 9006570034000 |
| 0.1378 | | | 3.500 | 70.00 | 39.00 | 9006570035000 |
| 0.1406 | 9/64 | 28 | 3.570 | 70.00 | 39.00 | 9006570035700 |
| 0.1417 | | | 3.600 | 70.00 | 39.00 | 9006570036000 |
| 0.1457 | | | 3.700 | 70.00 | 39.00 | 9006570037000 |
| 0.1496 | | 25 | 3.800 | 75.00 | 43.00 | 9006570038000 |
| 0.1535 | | | 3.900 | 75.00 | 43.00 | 9006570039000 |
| 0.1563 | 5/32 | | 3.970 | 75.00 | 43.00 | 9006570039700 |
| 0.1575 | | | 4.000 | 75.00 | 43.00 | 9006570040000 |
| 0.1614 | | | 4.100 | 75.00 | 43.00 | 9006570041000 |
| 0.1654 | | | 4.200 | 75.00 | 43.00 | 9006570042000 |
| 0.1673 | | | 4.250 | 75.00 | 43.00 | 9006570042500 |
| 0.1693 | | 18 | 4.300 | 80.00 | 47.00 | 9006570043000 |
| 0.1713 | | | 4.350 | 80.00 | 47.00 | 9006570043500 |
| 0.1720 | 11/64 | | 4.370 | 80.00 | 47.00 | 9006570043700 |
| 0.1732 | | | 4.400 | 80.00 | 47.00 | 9006570044000 |
| 0.1772 | | 16 | 4.500 | 80.00 | 47.00 | 9006570045000 |
| 0.1811 | | | 4.600 | 80.00 | 47.00 | 9006570046000 |
| 0.1850 | | 13 | 4.700 | 80.00 | 47.00 | 9006570047000 |
| 0.1874 | 3/16 | | 4.760 | 86.00 | 52.00 | 9006570047600 |
| 0.1890 | | 12 | 4.800 | 86.00 | 52.00 | 9006570048000 |
| 0.1929 | | | 4.900 | 86.00 | 52.00 | 9006570049000 |
| 0.1969 | | | 5.000 | 86.00 | 52.00 | 9006570050000 |
| 0.2008 | | | 5.100 | 86.00 | 52.00 | 9006570051000 |
| 0.2012 | | 7 | 5.110 | 86.00 | 52.00 | 9006570051100 |
| 0.2031 | 13/64 | | 5.160 | 86.00 | 52.00 | 9006570051600 |
| 0.2047 | | | 5.200 | 86.00 | 52.00 | 9006570052000 |
| 0.2087 | | | 5.300 | 86.00 | 52.00 | 9006570053000 |
| 0.2126 | | | 5.400 | 93.00 | 57.00 | 9006570054000 |
| 0.2165 | | | 5.500 | 93.00 | 57.00 | 9006570055000 |
| 0.2189 | 7/32 | | 5.560 | 93.00 | 57.00 | 9006570055600 |
| 0.2205 | | | 5.600 | 93.00 | 57.00 | 9006570056000 |
| 0.2209 | | 2 | 5.610 | 93.00 | 57.00 | 9006570056100 |
| 0.2244 | | | 5.700 | 93.00 | 57.00 | 9006570057000 |
| 0.2283 | | | 5.800 | 93.00 | 57.00 | 9006570058000 |
| 0.2323 | | | 5.900 | 93.00 | 57.00 | 9006570059000 |
| 0.2343 | 15/64 | | 5.950 | 93.00 | 57.00 | 9006570059500 |
| 0.2362 | | | 6.000 | 93.00 | 57.00 | 9006570060000 |

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

Series 657

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| Dec. inch | Diameter (d1) | | l1 mm | l2 mm | EDP # | |
|--------------|----------------|------------------|----------|----------|-------|---------------|
| | Fract. inch | Wire / letter | | | | |
| 0.2402 | | | 6.100 | 101.00 | 63.00 | 9006570061000 |
| 0.2441 | | | 6.200 | 101.00 | 63.00 | 9006570062000 |
| 0.2480 | | | 6.300 | 101.00 | 63.00 | 9006570063000 |
| 0.2500 | 1/4 | E | 6.350 | 101.00 | 63.00 | 9006570063500 |
| 0.2520 | | | 6.400 | 101.00 | 63.00 | 9006570064000 |
| 0.2559 | | | 6.500 | 101.00 | 63.00 | 9006570065000 |
| 0.2598 | | | 6.600 | 101.00 | 63.00 | 9006570066000 |
| 0.2638 | | | 6.700 | 101.00 | 63.00 | 9006570067000 |
| 0.2657 | 17/64 | H | 6.750 | 109.00 | 69.00 | 9006570067500 |
| 0.2677 | | | 6.800 | 109.00 | 69.00 | 9006570068000 |
| 0.2717 | | I | 6.900 | 109.00 | 69.00 | 9006570069000 |
| 0.2756 | | | 7.000 | 109.00 | 69.00 | 9006570070000 |
| 0.2795 | | | 7.100 | 109.00 | 69.00 | 9006570071000 |
| 0.2811 | 9/32 | K | 7.140 | 109.00 | 69.00 | 9006570071400 |
| 0.2835 | | | 7.200 | 109.00 | 69.00 | 9006570072000 |
| 0.2874 | | | 7.300 | 109.00 | 69.00 | 9006570073000 |
| 0.2913 | | | 7.400 | 109.00 | 69.00 | 9006570074000 |
| 0.2953 | | | 7.500 | 109.00 | 69.00 | 9006570075000 |
| 0.2969 | 19/64 | | 7.540 | 117.00 | 75.00 | 9006570075400 |
| 0.2992 | | | 7.600 | 117.00 | 75.00 | 9006570076000 |
| 0.3031 | | | 7.700 | 117.00 | 75.00 | 9006570077000 |
| 0.3071 | | | 7.800 | 117.00 | 75.00 | 9006570078000 |
| 0.3110 | | | 7.900 | 117.00 | 75.00 | 9006570079000 |
| 0.3126 | 5/16 | | 7.940 | 117.00 | 75.00 | 9006570079400 |
| 0.3150 | | | 8.000 | 117.00 | 75.00 | 9006570080000 |
| 0.3189 | | | 8.100 | 117.00 | 75.00 | 9006570081000 |
| 0.3228 | | P | 8.200 | 117.00 | 75.00 | 9006570082000 |
| 0.3268 | | | 8.300 | 117.00 | 75.00 | 9006570083000 |
| 0.3307 | | | 8.400 | 117.00 | 75.00 | 9006570084000 |
| 0.3346 | | | 8.500 | 117.00 | 75.00 | 9006570085000 |
| 0.3366 | | | 8.550 | 125.00 | 81.00 | 9006570085500 |
| 0.3386 | | | 8.600 | 125.00 | 81.00 | 9006570086000 |
| 0.3425 | | | 8.700 | 125.00 | 81.00 | 9006570087000 |
| 0.3437 | 11/32 | | 8.730 | 125.00 | 81.00 | 9006570087300 |

| Dec. inch | Diameter (d1) | | l1 mm | l2 mm | EDP # | |
|--------------|----------------|------------------|----------|----------|--------|---------------|
| | Fract. inch | Wire / letter | | | | |
| 0.3465 | | | 8.800 | 125.00 | 81.00 | 9006570088000 |
| 0.3504 | | | 8.900 | 125.00 | 81.00 | 9006570089000 |
| 0.3543 | | | 9.000 | 125.00 | 81.00 | 9006570090000 |
| 0.3583 | | | 9.100 | 125.00 | 81.00 | 9006570091000 |
| 0.3594 | 23/64 | | 9.130 | 125.00 | 81.00 | 9006570091300 |
| 0.3622 | | | 9.200 | 125.00 | 81.00 | 9006570092000 |
| 0.3701 | | | 9.400 | 125.00 | 81.00 | 9006570094000 |
| 0.3740 | | | 9.500 | 125.00 | 81.00 | 9006570095000 |
| 0.3748 | 3/8 | | 9.520 | 133.00 | 87.00 | 9006570095200 |
| 0.3780 | | | 9.600 | 133.00 | 87.00 | 9006570096000 |
| 0.3819 | | | 9.700 | 133.00 | 87.00 | 9006570097000 |
| 0.3858 | | W | 9.800 | 133.00 | 87.00 | 9006570098000 |
| 0.3906 | 25/64 | | 9.920 | 133.00 | 87.00 | 9006570099200 |
| 0.3937 | | | 10.000 | 133.00 | 87.00 | 9006570100000 |
| 0.4016 | | | 10.200 | 133.00 | 87.00 | 9006570102000 |
| 0.4063 | 13/32 | | 10.320 | 133.00 | 87.00 | 9006570103200 |
| 0.4134 | | | 10.500 | 133.00 | 87.00 | 9006570105000 |
| 0.4252 | | | 10.800 | 142.00 | 94.00 | 9006570108000 |
| 0.4331 | | | 11.000 | 142.00 | 94.00 | 9006570110000 |
| 0.4374 | 7/16 | | 11.110 | 142.00 | 94.00 | 9006570111100 |
| 0.4409 | | | 11.200 | 142.00 | 94.00 | 9006570112000 |
| 0.4528 | | | 11.500 | 142.00 | 94.00 | 9006570115000 |
| 0.4724 | | | 12.000 | 151.00 | 101.00 | 9006570120000 |
| 0.4921 | | | 12.500 | 151.00 | 101.00 | 9006570125000 |
| 0.5000 | 1/2 | | 12.700 | 151.00 | 101.00 | 9006570127000 |
| 0.5118 | | | 13.000 | 151.00 | 101.00 | 9006570130000 |

Alternative Drill Series:

- #605 Cobalt, Ti, 5xD, 130 pt., Bright
- #2458, Cobalt, Ti, 5xD, 130 pt., FIREX®
- #530 PM cobalt, GT500, 5xD, 130 pt., FIREX®