CRAZYDRILL™ by Mikron Tool SST-Inox

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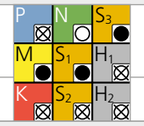
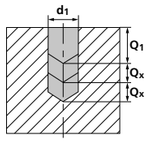
DRILLING TOOLS
CRAZYDRILL SST-INOX

# Type IN 8 x d / 12 x d

RECOMMENDATION FOR USE
● Excellent | ◐ Good | ○ Acceptable | ⊠ Not recommended




## DRILLING WITH EXTERNAL COOLING | CUTTING DATA OVERVIEW




| Materials group | Material | Mat. no. | DIN | AISI/ASTM/UNS | $v_c$ [m/min] Mid | $v_c$ [m/min] High | $Q_1$ | $Q_x$ | f [mm/rev] Ød1 0.2–0.5 mm 1/64" f | 0.6–0.8 mm 1/32" f | 0.9–1.1 mm f | 1.2–1.4 mm f | 1.5–1.7 mm 1/16" f | 1.8–2.0 mm f |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P | Unalloyed carbon steel Rm < 800 N/mm² | 1.0301 | C10 | AISI 1010 | | | | | | | | | | |
| | | 1.0401 | C15 | AISI 1015 | | | | | | | | | | |
| | | 1.1191 | C45E/CK45 | AISI 1045 | | | | | | | | | | |
| | | 1.0044 | S275JR | AISI 1020 | | | | | | | | | | |
| | | 1.0715 | 11SMn30 | AISI 1215 | | | | | | | | | | |
| | Low alloyed steel Rm > 900 N/mm² | 1.5752 | 15NiCr13 | ASTM 3415 / AISI 3310 | | | | | | | | | | |
| | | 1.7131 | 16MnCr5 | AISI 5115 | | | | | | | | | | |
| | | 1.3505 | 100Cr6 | AISI 52100 | | | | | | | | | | |
| | | 1.7225 | 42CrMo4 | AISI 4140 | | | | | | | | | | |
| | | 1.2842 | 90MnCrV8 | AISI O2 | | | | | | | | | | |
| | High alloyed tool steel Rm < 1200 N/mm² | 1.2379 | X153CrMoV12 | AISI D2 | | | | | | | | | | |
| | | 1.2436 | X210CrW12 | AISI D4/D6 | | | | | | | | | | |
| | | 1.3343 | HS6-5-2C | AISI M2 / UNS T11302 | | | | | | | | | | |
| | | 1.3355 | HS18-0-1 | AISI T1 / UNS T12001 | | | | | | | | | | |
| M | Stainless steel ferritic | 1.4016 | X6Cr17 | AISI 430 / UNS S43000 | 30 | 40 | 0.5xd1–1xd1 | 0.5xd1 | 0.010–0.015 | 0.015–0.025 | 0.025–0.030 | 0.030–0.040 | 0.040–0.050 | 0.050–0.060 |
| | | 1.4105 | X6CrMoS17 | AISI 430F | | | | | | | | | | |
| | Stainless steel martensitic | 1.4034 | X46Cr13 | AISI 420C | 30 | 40 | 0.5xd1–1xd1 | 0.5xd1 | 0.015–0.020 | 0.020–0.025 | 0.030–0.035 | 0.040–0.050 | 0.050–0.060 | 0.060–0.070 |
| | | 1.4112 | X90CrMoV18 | AISI 440B | | | | | | | | | | |
| | Stainless steel martensitic – PH | 1.4542 | X5CrNiCuNb 16-4 | AISI 630 / ASTM 17-4 PH | 30 | 40 | 0.5xd1–1xd1 | 0.5xd1 | 0.010–0.015 | 0.015–0.020 | 0.020–0.030 | 0.030–0.040 | 0.040–0.050 | 0.050–0.060 |
| | | 1.4545 | X5CrNiCuNb 15-5 | ASTM 15-5 PH | | | | | | | | | | |
| | Stainless steel austenitic | 1.4301 | X5CrNi 18-10 | AISI 304 | 25 | 30 | 0.5xd1–1xd1 | 0.5xd1 | 0.010–0.015 | 0.015–0.020 | 0.020–0.030 | 0.030–0.040 | 0.040–0.045 | 0.040–0.060 |
| | | 1.4435 | X2CrNiMo 18-14-3 | AISI 316L | | | | | | | | | | |
| | | 1.4441 | X2CrNiMo 18-15-3 | AISI 316LM | | | | | | | | | | |
| | | 1.4539 | X1NiCrMoCu 25-20-5 | AISI 904L | | | | | | | | | | |
| K | Cast iron | 0.6020 | GG20 | ASTM 30 | | | | | | | | | | |
| | | 0.6030 | GG30 | ASTM 40B | | | | | | | | | | |
| | | 0.7040 | GGG40 | ASTM 60-40-18 | | | | | | | | | | |
| | | 0.7060 | GGG60 | ASTM 80-60-03 | | | | | | | | | | |
| N | Aluminium alloy wrought | 3.2315 | AlMgSi1 | ASTM 6351 | | | | | | | | | | |
| | | 3.4365 | AlZnMgCu1.5 | ASTM 7075 | | | | | | | | | | |
| | Aluminium alloy cast | 3.2163 | GD-AlSi9Cu3 | ASTM A380 | | | | | | | | | | |
| | | 3.2381 | GD-AlSi10Mg | UNS A03590 | | | | | | | | | | |
| | Copper | 2.004 | Cu-OF / CW008A | UNS C10100 | 30 | 100 | 2xd1–4xd1 | 2xd1 | 0.030–0.060 | 0.040–0.080 | 0.050–0.100 | 0.060–0.120 | 0.070–0.150 | 0.080–0.180 |
| | | 2.0065 | Cu-ETP / CW004A | UNS C11000 | | | | | | | | | | |
| | Brass lead free | 2.0321 | CuZn37 CW508L | UNS C27400 | 30 | 100 | 1xd1–4xd1 | 1xd1–2xd1 | 0.030–0.060 | 0.040–0.080 | 0.050–0.100 | 0.060–0.120 | 0.070–0.150 | 0.080–0.180 |
| | | 2.036 | CuZn40 CW509L | UNS C28000 | | | | | | | | | | |
| | Brass, Bronze Rm < 400 N/mm² | 2.0401 | CuZn39Pb3 / CW614N | UNS C38500 | | | | | | | | | | |
| | | 2.102 | CuSn6 | UNS C51900 | | | | | | | | | | |
| | Bronze Rm < 600 N/mm² | 2.0966 | CuAl10Ni5Fe4 | UNS C63000 | | | | | | | | | | |
| | | 2.096 | CuAl9Mn2 | UNS C63200 | | | | | | | | | | |
| $S_1$ | Super alloys | 2.4856 | | Inconel 625 | 15 | 25 | 0.25xd1–0.5xd1 | 0.25xd1 | 0.005–0.010 | 0.010 –0.015 | 0.015–0.020 | 0.020–0.025 | 0.030–0.035 | 0.030–0.040 |
| | | 2.4668 | | Inconel 718 | | | | | | | | | | |
| | | 2.4617 | NiMo28 | Hastelloy B-2 | | | | | | | | | | |
| | | 2.4665 | NiCr22Fe18Mo | Hastelloy X | | | | | | | | | | |
| $S_2$ | Titanium pure | 3.7035 | Gr.2 | ASTM B348 / F67 | | | | | | | | | | |
| | | 3.7065 | Gr.4 | ASTM B348 / F68 | | | | | | | | | | |
| | Titanium alloys | 3.7165 | TiAl6V4 | ASTM B348 / F136 | | | | | | | | | | |
| | | 9.9367 | TiAl6Nb7 | ASTM F1295 | | | | | | | | | | |
| $S_3$ | CrCo alloys | 2.4964 | CoCr20W15Ni | Haynes 25 | 25 | 35 | 0.5xd1–1xd1 | 0.5xd1 | 0.015–0.025 | 0.025–0.035 | 0.040–0.050 | 0.050–0.060 | 0.060–0.070 | 0.070–0.080 |
| | | | CrCoMo28 | ASTM F1537 | | | | | | | | | | |
| $H_1$ | Hardened steel < 55 HRC | 1.2510 | 100MnCrMoW4 | AISI O1 | | | | | | | | | | |
| $H_2$ | Hardened steel ≥ 55 HRC | 1.2379 | X153CrMoV12 | AISI D2 | | | | | | | | | | |