

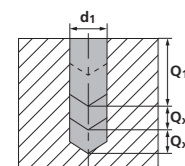
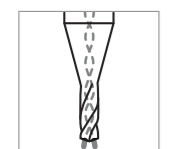
# CrazyDrill Cool 6 x d - non revêtu

RECOMMANDATION D'UTILISATION

● Parfaitement recommandé | ● Recommandé | ○ Peu recommandé | ☒ Non recommandé

|   |                |                |
|---|----------------|----------------|
| P | N              | S <sub>3</sub> |
| M | S <sub>1</sub> | H <sub>1</sub> |
| K | S <sub>2</sub> | H <sub>2</sub> |

## PERÇAGE AVEC REFROIDISSEMENT INTERNE | VUE D'ENSEMBLE DES DONNÉES DE COUPE



| Groupe matériaux                                   | Matériau                                   | Mat. no.                              | DIN                  | AISI/ASTM/UNS           | v <sub>c</sub><br>[m/min] | Q <sub>1</sub> | Q <sub>x</sub> | f [mm/tour] |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|---------------------------------------|----------------------|-------------------------|---------------------------|----------------|----------------|-------------|-------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |  |                                       |                      |                         |                           |                |                | Ød1         |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |                                       |                      |                         |                           |                |                | 0.8 mm<br>f | 1.0 mm<br>f | 1.25 mm<br>f | 1.5 mm<br>f | 2.0 mm<br>f | 2.5 mm<br>f | 3.0 mm<br>f | 4.0 mm<br>f | 5.0 mm<br>f | 6.0 mm<br>f |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| P  | Aciers non alliés<br>Rm < 800 N/mm²        | 1.0301                                | C10                  | AISI 1010               | 60                        | 6xd1           | -              | 0.040       | 0.060       | 0.090        | 0.120       | 0.160       | 0.180       | 0.220       | 0.260       | 0.280       | 0.300       |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1.0401                                | C15                  | AISI 1015               |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1.1191                                | C45E/CK45            | AISI 1045               |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1.0044                                | S275JR               | AISI 1020               |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1.0715                                | 11SMn30              | AISI 1215               |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1.5752                                | 15NiCr13             | ASTM 3415 / AISI 3310   |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Aciers faiblement alliés<br>Rm > 900 N/mm² | 1.7131                                | 16MnCr5              | AISI 5115               | 60                        | 6xd1           | -              | 0.030       | 0.050       | 0.080        | 0.100       | 0.140       | 0.160       | 0.180       | 0.200       | 0.220       | 0.240       |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1.3505                                | 100Cr6               | AISI 52100              |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1.7225                                | 42CrMo4              | AISI 4140               |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1.2842                                | 90MnCrV8             | AISI O2                 |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1.2379                                | X153CrMoV12          | AISI D2                 |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1.2436                                | X210CrW12            | AISI D4/D6              |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Aciers à outil fortement alliés<br>Rm < 1200 N/mm² | 1.3343                                     | HS6-5-2C                              | AISI M2 / UNS T11302 | 40                      | 6xd1                      | -              | 0.020          | 0.040       | 0.060       | 0.080        | 0.100       | 0.120       | 0.140       | 0.160       | 0.180       | 0.200       |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 1.3355                                     | HS18-0-1                              | AISI T1 / UNS T12001 |                         |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | M  | Aciers inoxydables ferritiques        | 1.4016               |                         |                           |                |                |             |             |              |             |             |             |             |             |             | X6Cr17      | AISI 430 / UNS S43000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |                                       | 1.4105               |                         |                           |                |                |             |             |              |             |             |             |             |             |             | X6CrMoS17   | AISI 430F             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |                                       | 1.4034               |                         |                           |                |                |             |             |              |             |             |             |             |             |             | X46Cr13     | AISI 420C             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |                                       | 1.4112               |                         |                           |                |                |             |             |              |             |             |             |             |             |             | X90CrMoV18  | AISI 440B             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Aciers inoxydables martensitiques                  |  | 1.4542                                | X5CrNiCuNb 16-4      | AISI 630 / ASTM 17-4 PH |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1.4545                                | X5CrNiCuNb 15-5      | ASTM 15-5 PH            |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1.4301                                | X5CrNi 18-10         | AISI 304                |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1.4435                                | X2CrNiMo 18-14-3     | AISI 316L               |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Aciers inoxydables austénitiques                   |  | 1.4441                                | X2CrNiMo 18-15-3     | AISI 316LM              |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1.4539                                | X1NiCrMoCu 25-20-5   | AISI 904L               |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | K                                     | Fonte grise          | 0.6020                  | GG20                      | ASTM 30        |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |                                       |                      | 0.6030                  | GG30                      | ASTM 40B       |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0.7040   | GGG40                                      |                                       |                      | ASTM 60-40-18           |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0.7060   | GGG60                                      |                                       |                      | ASTM 80-60-03           |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Recommandé : CrazyDrill Cool - revêtu              |  |                                       |                      |                         |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| N  | Alliages d'aluminium corroyés              | 3.2315                                | AlMgSi1              | ASTM 6351               | 300                       | 6xd1           | -              | 0.050       | 0.060       | 0.070        | 0.080       | 0.090       | 0.110       | 0.130       | 0.150       | 0.180       | 0.220       |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 3.4365                                | AlZnMgCu1.5          | ASTM 7075               |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Fonte d'aluminium                          | 3.2163                                | GD-AISi9Cu3          | ASTM A380               | 200                       | 6xd1           | -              | 0.070       | 0.080       | 0.090        | 0.110       | 0.130       | 0.160       | 0.180       | 0.210       | 0.240       | 0.260       |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 3.2381                                | GD-AISi10Mg          | UNS A03590              |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Cuivre                                     | 2.004                                 | Cu-OF / CW008A       | UNS C10100              | 100                       | 1.5xd1         | 1xd1           | 0.055       | 0.065       | 0.080        | 0.090       | 0.100       | 0.110       | 0.130       | 0.140       | 0.170       | 0.200       |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 2.0065                                | Cu-ETP / CW004A      | UNS C11000              |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Laiton sans plomb                          | 2.0321                                | CuZn37 CW508L        | UNS C27400              | 140                       | 1xd1           | 0.5xd1         | 0.055       | 0.065       | 0.080        | 0.090       | 0.100       | 0.110       | 0.130       | 0.140       | 0.170       | 0.200       |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 2.036                                 | CuZn40 CW509L        | UNS C28000              |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Laiton, Bronze<br>Rm < 400 N/mm²           | 2.0401                                | CuZn39Pb3 / CW614N   | UNS C38500              | 120                       | 2xd1           | 1xd1           | 0.080       | 0.100       | 0.110        | 0.130       | 0.150       | 0.170       | 0.190       | 0.200       | 0.210       | 0.230       |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 2.102                                 | CuSn6                | UNS C51900              |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bronze<br>Rm < 600 N/mm²                           | 2.0966                                     | CuAl10Ni5Fe4                          | UNS C63000           | 120                     | 6xd1                      | -              | 0.020          | 0.030       | 0.040       | 0.055        | 0.070       | 0.090       | 0.110       | 0.130       | 0.150       | 0.200       |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 2.096                                      | CuAl9Mn2                              | UNS C63200           |                         |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S <sub>1</sub>                                     | Super alliages                             | 2.4856                                |                      | Inconel 625             |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 2.4668                                |                      | Inconel 718             |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 2.4617                                | NiMo28               | Hastelloy B-2           |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 2.4665                                | NiCr22Fe18Mo         | Hastelloy X             |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S <sub>2</sub>                                     | Titane pur                                 | 3.7035                                | Gr.2                 | ASTM B348 / F67         | 20                        | 0.5xd1         | 0.25xd1        | 0.020       | 0.030       | 0.045        | 0.060       | 0.075       | 0.090       | 0.100       | 0.110       | 0.130       | 0.150       |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 3.7065                                | Gr.4                 | ASTM B348 / F68         |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S <sub>2</sub>                                     | Alliages de titane                         | 3.7165                                | TiAl6V4              | ASTM B348 / F136        | 20                        | 0.5xd1         | 0.25xd1        | 0.020       | 0.030       | 0.045        | 0.060       | 0.075       | 0.090       | 0.100       | 0.110       | 0.130       | 0.150       |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 9.9367                                | TiAl6Nb7             | ASTM F1295              |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S <sub>3</sub>                                     | Alliages CrCo                              | 2.4964                                | CoCr20W15Ni          | Haynes 25               |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |                                       | CrCoMo28             | ASTM F1537              |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| H <sub>1</sub>                                     | Aciers trempés < 55 HRC                    | 1.2510                                | 100MnCrMoW4          | AISI O1                 |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Recommandé : CrazyDrill Cool - revêtu |                      |                         |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| H <sub>2</sub>                                     | Aciers trempés ≥ 55 HRC                    | 1.2379                                | X153CrMoV12          | AISI D2                 |                           |                |                |             |             |              |             |             |             |             |             |             |             |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |