

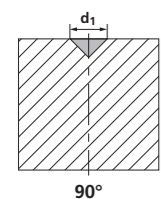
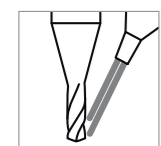
# MiquDrill Centro 90° / 120° - unbeschichtet

ANWENDUNGSEMPFEHLUNG

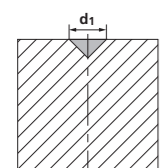
● Sehr gut geeignet | ● Gut geeignet | ○ bedingt geeignet | ☒ Nicht empfohlen



## ZENTRIEREN MIT AUSSENKÜHLUNG | SCHNITTDATENÜBERSICHT



90°



120°

| Werkstoffgruppe          | Werkstoff  | Wr.Nr.             | DIN                  | AISI/ASTM/UNS           | v <sub>c</sub><br>[m/min] | f [mm/U]    |             |             |       |       |       |             |
|--------------------------|--|--------------------|----------------------|-------------------------|---------------------------|-------------|-------------|-------------|-------|-------|-------|-------------|
|                          |  |                    |                      |                         |                           | 0.5 mm<br>f | 1.0 mm<br>f | 2.0 mm<br>f | Ød1   |       |       | 6.0 mm<br>f |
|                          |  |                    |                      |                         |                           | 3.0 mm<br>f | 4.0 mm<br>f | 5.0 mm<br>f |       |       |       |             |
| P                        | Stähle unlegiert<br>Rm < 800 N/mm²               | 1.0301             | C10                  | AISI 1010               | 20 - 50                   | 0.030       | 0.050       | 0.060       | 0.080 | 0.100 | 0.150 | 0.150       |
|                          |  | 1.0401             | C15                  | AISI 1015               |                           |             |             |             |       |       |       |             |
|                          |  | 1.1191             | C45E/CK45            | AISI 1045               |                           |             |             |             |       |       |       |             |
|                          |  | 1.0044             | S275JR               | AISI 1020               |                           |             |             |             |       |       |       |             |
|                          |  | 1.0715             | 11SMn30              | AISI 1215               |                           |             |             |             |       |       |       |             |
|                          | Stähle niedriglegiert<br>Rm > 900 N/mm²          | 1.5752             | 15NiCr13             | ASTM 3415 / AISI 3310   | 20 - 50                   | 0.030       | 0.050       | 0.060       | 0.080 | 0.100 | 0.150 | 0.150       |
|                          |  | 1.7131             | 16MnCr5              | AISI 5115               |                           |             |             |             |       |       |       |             |
|                          |  | 1.3505             | 100Cr6               | AISI 52100              |                           |             |             |             |       |       |       |             |
|                          |  | 1.7225             | 42CrMo4              | AISI 4140               |                           |             |             |             |       |       |       |             |
|                          |  | 1.2842             | 90MnCrV8             | AISI O2                 |                           |             |             |             |       |       |       |             |
|                          | Werkzeugstähle<br>hochlegiert<br>Rm < 1200 N/mm² | 1.2379             | X153CrMoV12          | AISI D2                 | 20 - 40                   | 0.020       | 0.030       | 0.040       | 0.060 | 0.080 | 0.120 | 0.130       |
|                          |  | 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                        | Rostfreie Stähle-<br>ferritisch                  | 1.4016             | X6Cr17               | AISI 430 / UNS S43000   | 20 - 50                   | 0.030       | 0.050       | 0.060       | 0.080 | 0.100 | 0.150 | 0.150       |
|                          |  | 1.4105             | X6CrMoS17            | AISI 430F               |                           |             |             |             |       |       |       |             |
|                          | Rostfreie Stähle-<br>martensitisch               | 1.4034             | X46Cr13              | AISI 420C               | 20 - 40                   | 0.020       | 0.030       | 0.040       | 0.060 | 0.080 | 0.120 | 0.130       |
|                          |  | 1.4112             | X90CrMoV18           | AISI 440B               |                           |             |             |             |       |       |       |             |
|                          | Rostfreie Stähle-<br>martensitisch - PH          | 1.4542             | X5CrNiCuNb 16-4      | AISI 630 / ASTM 17-4 PH | 15 - 25                   | 0.020       | 0.030       | 0.030       | 0.040 | 0.060 | 0.080 | 0.080       |
|                          |  | 1.4545             | X5CrNiCuNb 15-5      | ASTM 15-5 PH            |                           |             |             |             |       |       |       |             |
|                          | Rostfreie Stähle-<br>austenitisch                | 1.4301             | X5CrNi 18-10         | AISI 304                | 15 - 25                   | 0.020       | 0.030       | 0.030       | 0.040 | 0.060 | 0.080 | 0.080       |
|                          |  | 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                        | Gusseisen  | 0.6020             | GG20                 | ASTM 30                 | 20 - 50                   | 0.030       | 0.050       | 0.060       | 0.080 | 0.100 | 0.150 | 0.150       |
|                          |  | 0.6030             | GG30                 | ASTM 40B                |                           |             |             |             |       |       |       |             |
|                          |  | 0.7040             | GGG40                | ASTM 60-40-18           |                           |             |             |             |       |       |       |             |
|                          |  | 0.7060             | GGG60                | ASTM 80-60-03           |                           |             |             |             |       |       |       |             |
| N                        | Aluminium<br>Knetlegierungen                     | 3.2315             | AlMgSi1              | ASTM 6351               | 40 - 80                   | 0.030       | 0.050       | 0.060       | 0.080 | 0.100 | 0.150 | 0.150       |
|                          |  | 3.4365             | AlZnMgCu1.5          | ASTM 7075               |                           |             |             |             |       |       |       |             |
|                          | Aluminium<br>Druckgusslegierungen                | 3.2163             | GD-AlSi9Cu3          | ASTM A380               | 40 - 80                   | 0.030       | 0.050       | 0.060       | 0.080 | 0.100 | 0.150 | 0.150       |
|                          |  | 3.2381             | GD-AlSi10Mg          | UNS A03590              |                           |             |             |             |       |       |       |             |
|                          | Kupfer   | 2.0040             | Cu-OF / CW008A       | UNS C10100              | 40 - 80                   | 0.030       | 0.050       | 0.060       | 0.080 | 0.100 | 0.150 | 0.150       |
|                          |  | 2.0065             | Cu-ETP / CW004A      | UNS C11000              |                           |             |             |             |       |       |       |             |
|                          | Messing bleifrei                                 | 2.0321             | CuZn37 CW508L        | UNS C27400              | 40 - 80                   | 0.030       | 0.050       | 0.060       | 0.080 | 0.100 | 0.150 | 0.150       |
|                          |  | 2.0360             | CuZn40 CW509L        | UNS C28000              |                           |             |             |             |       |       |       |             |
|                          | Messing, Bronze<br>Rm < 400 N/mm²                | 2.0401             | CuZn39Pb3 / CW614N   | UNS C38500              | 40 - 80                   | 0.030       | 0.050       | 0.060       | 0.080 | 0.100 | 0.150 | 0.150       |
|                          |  | 2.1020             | CuSn6                | UNS C51900              |                           |             |             |             |       |       |       |             |
| Bronze<br>Rm < 600 N/mm² | 2.0966   | CuAl10Ni5Fe4       | UNS C63000           | 40 - 80                 | 0.030                     | 0.050       | 0.060       | 0.080       | 0.100 | 0.150 | 0.150 |             |
|                          | 2.0960   | CuAl9Mn2           | UNS C63200           |                         |                           |             |             |             |       |       |       |             |
| S <sub>1</sub>           | Hitzebeständige<br>Stähle                        | 2.4856             |                      | Inconel 625             | 15 - 25                   | 0.020       | 0.030       | 0.030       | 0.040 | 0.060 | 0.080 | 0.080       |
|                          |  | 2.4668             |                      | Inconel 718             |                           |             |             |             |       |       |       |             |
|                          |  | 2.4617             | NiMo28               | Hastelloy B-2           |                           |             |             |             |       |       |       |             |
|                          |  | 2.4665             | NiCr22Fe18Mo         | Hastelloy X             |                           |             |             |             |       |       |       |             |
| S <sub>2</sub>           | Titan rein                                       | 3.7035             | Gr.2                 | ASTM B348 / F67         | 15 - 25                   | 0.020       | 0.030       | 0.030       | 0.040 | 0.060 | 0.080 | 0.080       |
|                          |  | 3.7065             | Gr.4                 | ASTM B348 / F68         |                           |             |             |             |       |       |       |             |
| S <sub>3</sub>           | Titan Legierungen                                | 3.7165             | TiAl6V4              | ASTM B348 / F136        | 15 - 25                   | 0.020       | 0.030       | 0.030       | 0.040 | 0.060 | 0.080 | 0.080       |
|                          |  | 9.9367             | TiAl6Nb7             | ASTM F1295              |                           |             |             |             |       |       |       |             |
| H <sub>1</sub>           | Stähle gehärtet<br>< 55 HRC                      | 2.4964             | CoCr20W15Ni          | Haynes 25               |                           |             |             |             |       |       |       |             |
|                          |  |                    | CrCoMo28             | ASTM F1537              |                           |             |             |             |       |       |       |             |
| H <sub>2</sub>           | Stähle gehärtet<br>≥ 55 HRC                      | 1.2510             | 100MnCrMoW4          | AISI O1                 |                           |             |             |             |       |       |       |             |
|                          |  | 1.2379             | X153CrMoV12          | AISI D2                 |                           |             |             |             |       |       |       |             |

Empfohlen: MiquDrill Centro 90° / 120° - beschichtet