

boehlerit

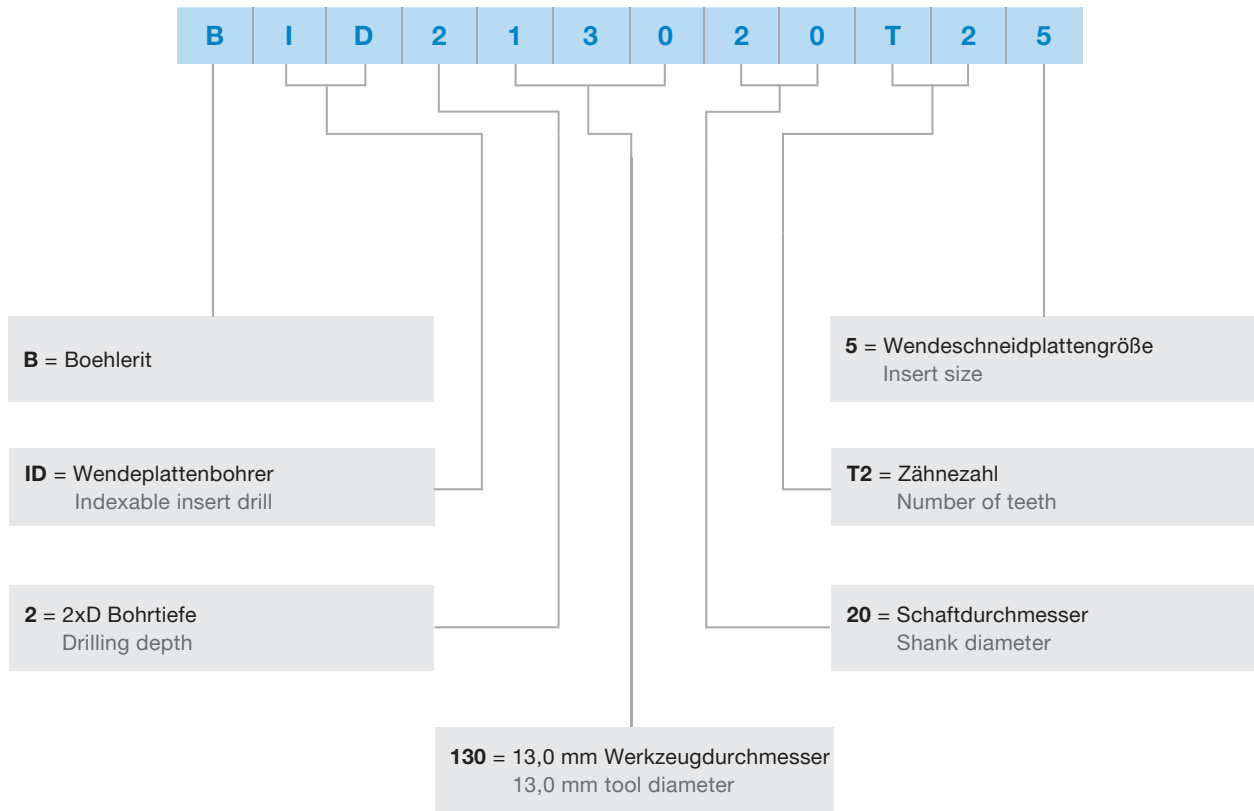
Drilltec

Wendeplattenbohrer

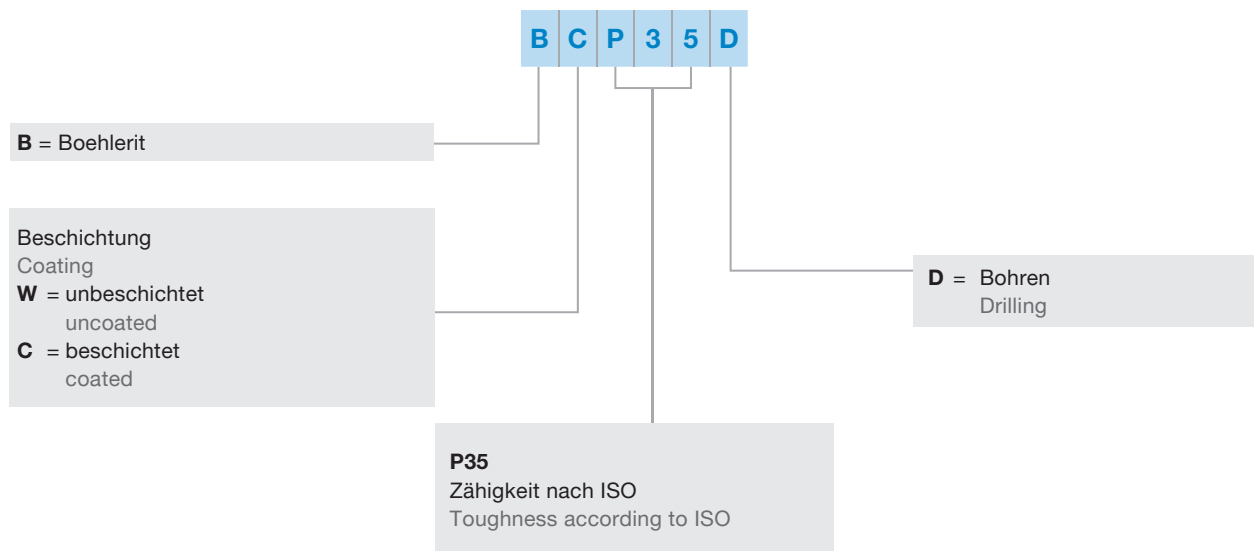
Indexable insert drill



Werkzeugbezeichnung Wendeplattenbohrer
Tool designation indexable insert drill



Schneidstoffsorten, Bezeichnung für Wendeschnidplatten
Cutting materials, designation system for inserts



Entscheidungshilfe und Symbolerklärung für Bohroperationen
Decision aid and symbol explanation for drilling operations

| Bohroperation Drilling operation | | 2xD | 3xD | 4xD | 5xD |
|-------------------------------------|--|-----|-----|-----|-----|
| | Vollbohren Solid drilling | ● | ● | ● | ● |
| | Grundloch Blind hole | ● | ● | ● | ● |
| | Schmiede-/Gusshaut, Nahtstelle Forged/cast skin, Juncture | ● | ● | ◐ | ◐ |
| | Schräg an-/ausbohren, Schnittunterbrechung Beveling/drilling at an angle, cutting interruption | ● | ● | ◐ | ◐ |
| | Ballig anbohren Spherical drilling | ● | ● | ● | ● |
| | Querbohrung Cross-hole drilling | ● | ● | ● | ● |
| | Auskesseln Springing | ● | ● | ◐ | ◐ |
| | Paketbohren Bundle drilling | ● | ● | ◐ | ◐ |
| | Aufbohren Drilling | ● | ● | ◐ | ◐ |
| | Spitze anbohren Tip drilling | ● | ● | ◐ | ◐ |
| | Stegbohren Rack drilling | ● | ● | ◐ | ◐ |

● Geeignet Suitable

◐ Bedingt geeignet Partially suitable

Anwendungsbeispiele für Bohroperationen
Application examples for drilling operations



Auskesseln
Springing



Vollbohren
Solid drilling



Ballig anbohren
Spherical drilling



Paketbohren
Bundle drilling



Stegbohren
Rack drilling



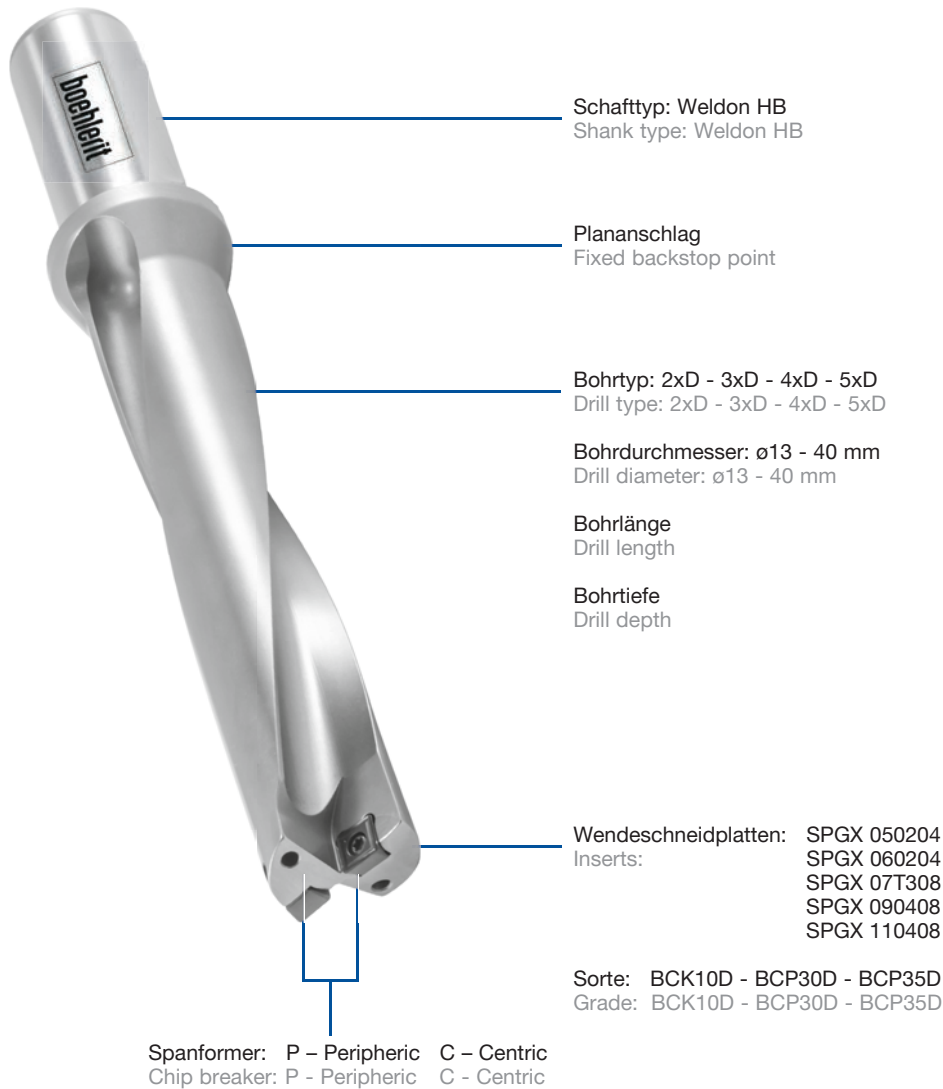
Spitze anbohren
Tip drilling



Schräg an-/aufbohren,
Schnittunterbrechung
Beveling/drilling at an angle,
cutting interruption



Querbohrung
Cross-hole drilling



Schafttyp: Weldon HB
Shank type: Weldon HB

Plananschlag
Fixed backstop point

Bohrtyp: 2xD - 3xD - 4xD - 5xD
Drill type: 2xD - 3xD - 4xD - 5xD

Bohrdurchmesser: ø13 - 40 mm
Drill diameter: ø13 - 40 mm

Bohrlänge
Drill length

Bohrtiefe
Drill depth

Wendeschneidplatten: SPGX 050204
Inserts: SPGX 060204
SPGX 07T308
SPGX 090408
SPGX 110408

Sorte: BCK10D - BCP30D - BCP35D
Grade: BCK10D - BCP30D - BCP35D

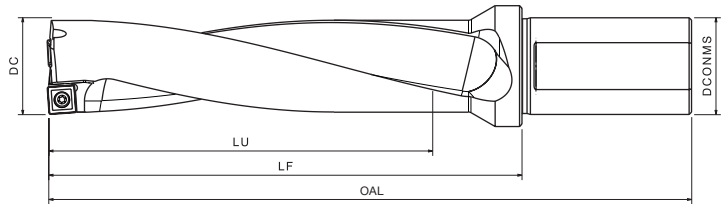
Spanformer: P - Peripheric C - Centric
Chip breaker: P - Peripheric C - Centric

Technische Vorteile:

- Hohe Schnittgeschwindigkeit und Vorschubgeschwindigkeit
- Hohes Zerspanungsvolumen und Produktivität
- Wirtschaftliche Wendeschneidplatten mit 4 Schneidkanten
- Verfügbarkeit für eine breite Palette von Materialien
- Optimaler Späneabfuhrkanal für einfachen Spänetransport
- Oberflächenqualität und Bohrungspräzision
- Verschiedene Sorten für weiches und hartes Material
- Hohe Dauerfestigkeit der Trägerwerkzeuge
- Hohe Prozesssicherheit
- Bis zu 5xD Bohrtiefe möglich
- Unterschiedliche Hartmetallsorten für höhere Standzeiten

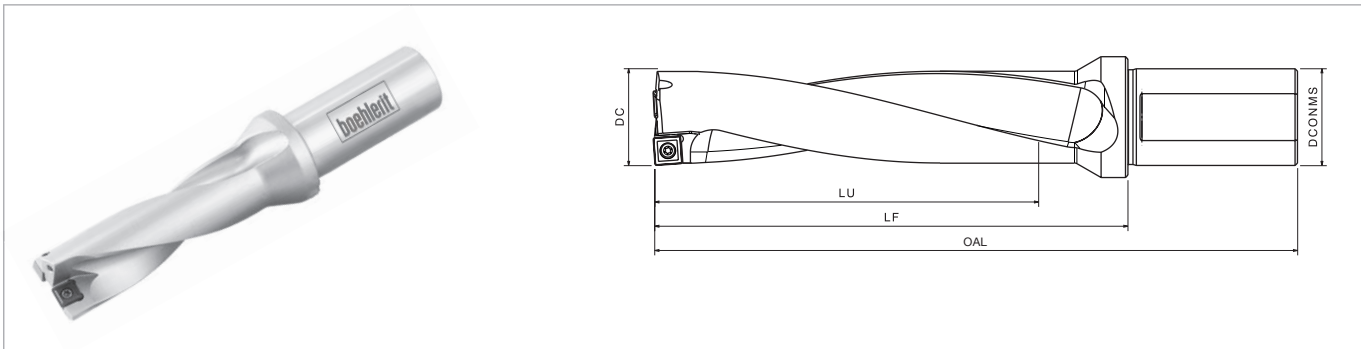
Technical Advantages:











- High cutting speed and feed rate
- High chip volume and productivity
- Economic indexable inserts with 4 cutting edges
- Availability for a wide range of materials
- Optimum chip removal channel for easy chip transport
- Surface quality and bore precision
- Different grades for soft and hard materials
- High tool durability
- High process security
- Up to 5xD drilling depth possible
- Different carbide grades for longer tool life

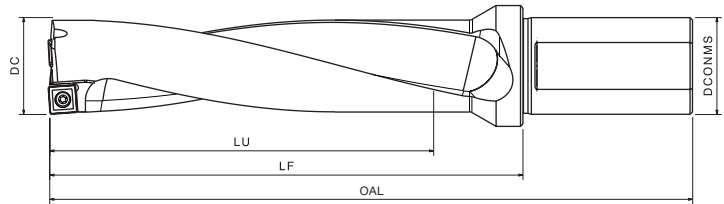


| Ausführung Execution | Artikelbezeichnung Item code | Abmessungen [mm] Dimensions in [mm] | | | | | Bestell-Nr. Ordering No. | Verfügbarkeit Availability | Geeignete Wendeschneid- platte Suitable insert | Ersatzteile Spare parts |
|-------------------------|---------------------------------|--|--------|-----|-----|---------|-----------------------------|-------------------------------|---|----------------------------|
| | | DC | DCONMS | LU | LF | OAL | | | | |
| 2xD | BID 2130-20T2-05 | 13,0 | 20 | 26 | 48 | 98 | 5216855 | ○ | SPGX 050204 | |
| | BID 2135-20T2-05 | 13,5 | 20 | 26 | 48 | 98 | 5217356 | ○ | | |
| | BID 2140-20T2-05 | 14,0 | 20 | 28 | 50 | 100 | 5217357 | ○ | | |
| | BID 2145-20T2-05 | 14,5 | 20 | 28 | 50 | 100 | 5217358 | ○ | | |
| | BID 2150-20T2-05 | 15,0 | 20 | 30 | 52 | 105 | 5217360 | ○ | | |
| | BID 2155-20T2-05 | 15,5 | 20 | 30 | 52 | 102 | 5217361 | ○ | | |
| | BID 2160-25T2-06 | 16,0 | 25 | 32 | 54 | 110 | 5217362 | ○ | SPGX 060204 | |
| | BID 2165-25T2-06 | 16,5 | 25 | 32 | 54 | 110 | 5217363 | ○ | | |
| | BID 2170-25T2-06 | 17,0 | 25 | 34 | 56 | 112 | 5217364 | ○ | | |
| | BID 2175-25T2-06 | 17,5 | 25 | 34 | 56 | 112 | 5217365 | ○ | | |
| | BID 2180-25T2-06 | 18,0 | 25 | 36 | 58 | 114 | 5217366 | ○ | | |
| | BID 2185-25T2-06 | 18,5 | 25 | 36 | 58 | 114 | 5217368 | ○ | | |
| | BID 2190-25T2-06 | 19,0 | 25 | 38 | 60 | 116 | 5217369 | ○ | | |
| | BID 2195-25T2-06 | 19,5 | 25 | 38 | 60 | 116 | 5217370 | ○ | | |
| | BID 2200-25T2-06 | 20,0 | 25 | 40 | 62 | 118 | 5217374 | ○ | | |
| | BID 2205-25T2-06 | 20,5 | 25 | 40 | 62 | 118 | 5217376 | ○ | | |
| | BID 2210-25T2-06 | 21,0 | 25 | 42 | 64 | 120 | 5217379 | ○ | | |
| | BID 2220-25T2-07 | 22,0 | 25 | 44 | 66 | 122 | 5217380 | ○ | SPGX 07T308 | |
| | BID 2230-25T2-07 | 23,0 | 25 | 46 | 68 | 124 | 5217381 | ○ | | |
| | BID 2235-25T2-07 | 23,5 | 25 | 47 | 68 | 124 | 5217382 | ○ | | |
| | BID 2240-25T2-07 | 24,0 | 25 | 48 | 70 | 126 | 5217384 | ○ | | |
| | BID 2245-25T2-07 | 24,5 | 25 | 49 | 70 | 126 | 5217386 | ○ | | |
| | BID 2250-25T2-07 | 25,0 | 25 | 50 | 72 | 128 | 5217387 | ○ | | |
| | BID 2260-25T2-07 | 26,0 | 25 | 52 | 74 | 130 | 5217388 | ○ | | |
| | BID 2265-25T2-07 | 26,5 | 25 | 53 | 74 | 130 | 5217389 | ○ | | |
| | BID 2270-25T2-07 | 27,0 | 25 | 54 | 76 | 132 | 5217390 | ○ | | |
| | BID 2280-25T2-09 | 28,0 | 25 | 56 | 78 | 134 | 5217418 | ○ | SPGX 090408 | |
| | BID 2285-25T2-09 | 28,5 | 25 | 57 | 79 | 135 | 5217419 | ○ | | |
| BID 2290-25T2-09 | 29,0 | 25 | 58 | 80 | 136 | 5217420 | ○ | | | |
| BID 2300-32T2-09 | 30,0 | 32 | 60 | 87 | 147 | 5217423 | ○ | | | |
| BID 2310-32T2-09 | 31,0 | 32 | 62 | 89 | 149 | 5217425 | ○ | | | |
| BID 2320-32T2-09 | 32,0 | 32 | 64 | 91 | 151 | 5217428 | ○ | | | |
| BID 2330-32T2-09 | 33,0 | 32 | 66 | 93 | 153 | 5217431 | ○ | | | |
| BID 2340-32T2-11 | 34,0 | 32 | 68 | 95 | 155 | 5217432 | ○ | SPGX 110408 | | |
| BID 2350-32T2-11 | 35,0 | 32 | 70 | 97 | 157 | 5217436 | ○ | | | |
| BID 2360-32T2-11 | 36,0 | 32 | 72 | 99 | 159 | 5217437 | ○ | | | |
| BID 2370-32T2-11 | 37,0 | 32 | 74 | 101 | 161 | 5217439 | ○ | | | |
| BID 2380-32T2-11 | 38,0 | 32 | 76 | 103 | 163 | 5217440 | ○ | | | |
| BID 2390-32T2-11 | 39,0 | 32 | 78 | 105 | 165 | 5217441 | ○ | | | |
| BID 2395-32T2-11 | 39,5 | 32 | 79 | 105 | 165 | 5217442 | ○ | | | |
| BID 2400-32T2-11 | 40,0 | 32 | 80 | 107 | 167 | 5217443 | ○ | | | |

○ Kurzfristig lieferbar Shortly available

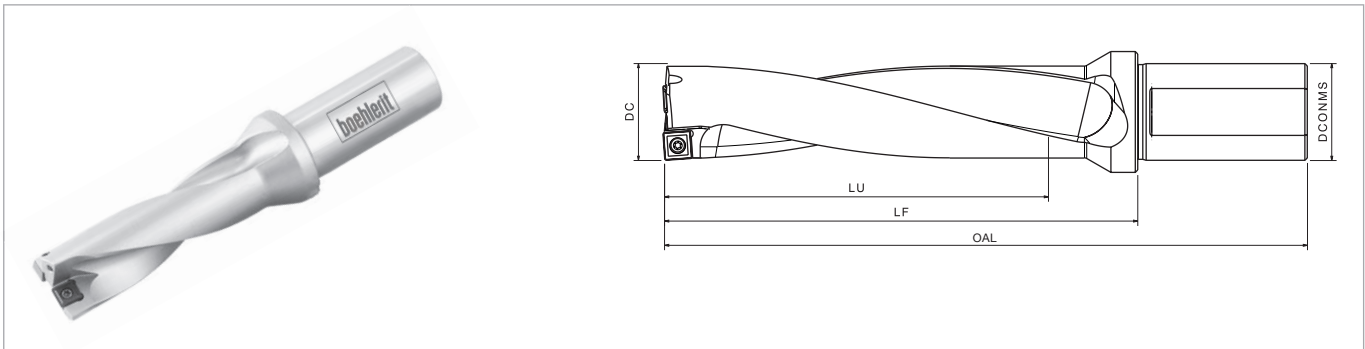












| Ausführung Execution | Artikelbezeichnung Item code | Abmessungen [mm] Dimensions in [mm] | | | | | Bestell-Nr. Ordering No. | Verfügbarkeit Availability | Geeignete Wendeschneid- platte Suitable insert | Ersatzteile Spare parts |
|-------------------------|---------------------------------|--|--------|-----|-----|---------|-----------------------------|-------------------------------|---|---|
| | | DC | DCONMS | LU | LF | OAL | | | | |
| 3xD | BID 3130-20T2-05 | 13,0 | 20 | 39 | 61 | 111 | 5217444 | ○ | SPGX 050204 |  A02-20040 5217880  T-06 5118122 |
| | BID 3135-20T2-05 | 13,5 | 20 | 39 | 61 | 111 | 5217445 | ○ | | |
| | BID 3140-20T2-05 | 14,0 | 20 | 42 | 64 | 114 | 5217464 | ○ | | |
| | BID 3145-20T2-05 | 14,5 | 20 | 42 | 64 | 114 | 5217465 | ○ | | |
| | BID 3150-20T2-05 | 15,0 | 20 | 45 | 67 | 117 | 5217466 | ○ | | |
| | BID 3155-20T2-05 | 15,5 | 20 | 45 | 67 | 117 | 5217467 | ○ | | |
| | BID 3160-25T2-06 | 16,0 | 25 | 48 | 70 | 126 | 5217468 | ○ | SPGX 060204 |  A02-22046 5217882  T-07 5121167 |
| | BID 3165-25T2-06 | 16,5 | 25 | 50 | 70 | 126 | 5217469 | ○ | | |
| | BID 3170-25T2-06 | 17,0 | 25 | 51 | 73 | 129 | 5217470 | ○ | | |
| | BID 3175-25T2-06 | 17,5 | 25 | 51 | 73 | 129 | 5217471 | ○ | | |
| | BID 3180-25T2-06 | 18,0 | 25 | 54 | 76 | 132 | 5217473 | ○ | | |
| | BID 3185-25T2-06 | 18,5 | 25 | 54 | 76 | 132 | 5217474 | ○ | | |
| | BID 3190-25T2-06 | 19,0 | 25 | 57 | 79 | 135 | 5217475 | ○ | | |
| | BID 3195-25T2-06 | 19,5 | 25 | 57 | 79 | 135 | 5217476 | ○ | | |
| | BID 3200-25T2-06 | 20,0 | 25 | 60 | 82 | 138 | 5217477 | ○ | | |
| | BID 3205-25T2-06 | 20,5 | 25 | 60 | 82 | 138 | 5217478 | ○ | | |
| | BID 3210-25T2-06 | 21,0 | 25 | 63 | 85 | 141 | 5217479 | ○ | | |
| | BID 3220-25T2-07 | 22,0 | 25 | 66 | 88 | 144 | 5217480 | ○ | SPGX 07T308 |  A17-25060 5217883  T-08 5217892 |
| | BID 3225-25T2-07 | 22,5 | 25 | 66 | 88 | 144 | 5217483 | ○ | | |
| | BID 3230-25T2-07 | 23,0 | 25 | 69 | 91 | 147 | 5217485 | ○ | | |
| | BID 3235-25T2-07 | 23,5 | 25 | 71 | 91 | 147 | 5217486 | ○ | | |
| | BID 3240-25T2-07 | 24,0 | 25 | 72 | 94 | 150 | 5217487 | ○ | | |
| | BID 3245-25T2-07 | 24,5 | 25 | 72 | 94 | 150 | 5217488 | ○ | | |
| | BID 3250-25T2-07 | 25,0 | 25 | 75 | 97 | 153 | 5217489 | ○ | | |
| | BID 3260-25T2-07 | 26,0 | 25 | 78 | 100 | 156 | 5217490 | ○ | | |
| | BID 3265-25T2-07 | 26,5 | 25 | 78 | 100 | 156 | 5217491 | ○ | | |
| | BID 3270-25T2-07 | 27,0 | 25 | 81 | 103 | 159 | 5217492 | ○ | | |
| | BID 3280-25T2-09 | 28,0 | 25 | 84 | 106 | 162 | 5217493 | ○ | SPGX 090408 |  A02-35090 5217884  T-15 5217893 |
| | BID 3290-25T2-09 | 29,0 | 25 | 87 | 109 | 165 | 5217496 | ○ | | |
| | BID 3295-25T2-09 | 29,5 | 25 | 87 | 109 | 169 | 5217497 | ○ | | |
| BID 3300-32T2-09 | 30,0 | 32 | 90 | 117 | 177 | 5217498 | ○ | | | |
| BID 3310-32T2-09 | 31,0 | 32 | 93 | 120 | 180 | 5217499 | ○ | | | |
| BID 3320-32T2-09 | 32,0 | 32 | 96 | 123 | 183 | 5217501 | ○ | | | |
| BID 3330-32T2-09 | 33,0 | 32 | 99 | 126 | 186 | 5217503 | ○ | | | |
| BID 3340-32T2-11 | 34,0 | 32 | 102 | 129 | 189 | 5217508 | ○ | SPGX 110408 |  A17-40110 5217890  T-15 5217893 | |
| BID 3350-32T2-11 | 35,0 | 32 | 105 | 132 | 192 | 5217511 | ○ | | | |
| BID 3360-32T2-11 | 36,0 | 32 | 108 | 135 | 195 | 5217512 | ○ | | | |
| BID 3370-32T2-11 | 37,0 | 32 | 111 | 138 | 198 | 5217517 | ○ | | | |
| BID 3380-32T2-11 | 38,0 | 32 | 114 | 141 | 201 | 5217519 | ○ | | | |
| BID 3390-32T2-11 | 39,0 | 32 | 117 | 144 | 204 | 5217520 | ○ | | | |
| BID 3395-32T2-11 | 39,5 | 32 | 117 | 144 | 204 | 5217521 | ○ | | | |
| BID 3400-32T2-11 | 40,0 | 32 | 120 | 147 | 207 | 5217523 | ○ | | | |



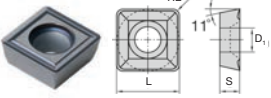
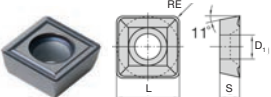
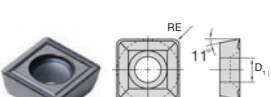
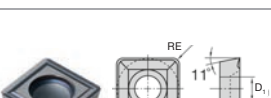
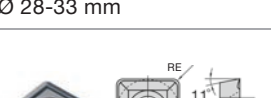
| Ausführung Execution | Artikelbezeichnung Item code | Abmessungen [mm] Dimensions in [mm] | | | | | Bestell-Nr. Ordering No. | Verfügbarkeit Availability | Geeignete Wendeschneid- platte Suitable insert | Ersatzteile Spare parts |
|-------------------------|---------------------------------|--|--------|-----|-----|---------|-----------------------------|-------------------------------|---|----------------------------|
| | | DC | DCONMS | LU | LF | OAL | | | | |
| 4xD | BID 4130-20T2-05 | 13,0 | 20 | 52 | 74 | 124 | 5217532 | ○ | SPGX 050204 | |
| | BID 4135-20T2-05 | 13,5 | 20 | 52 | 74 | 124 | 5217539 | ○ | | |
| | BID 4140-20T2-05 | 14,0 | 20 | 56 | 78 | 128 | 5217540 | ○ | | |
| | BID 4145-20T2-05 | 14,5 | 20 | 56 | 78 | 128 | 5217543 | ○ | | |
| | BID 4150-20T2-05 | 15,0 | 20 | 60 | 82 | 132 | 5217545 | ○ | | |
| | BID 4155-20T2-05 | 15,5 | 20 | 60 | 82 | 132 | 5217546 | ○ | | |
| | BID 4160-25T2-06 | 16,0 | 25 | 64 | 86 | 142 | 5217547 | ○ | SPGX 060204 | |
| | BID 4165-25T2-06 | 16,5 | 25 | 64 | 86 | 142 | 5217552 | ○ | | |
| | BID 4170-25T2-06 | 17,0 | 25 | 68 | 89 | 145 | 5217553 | ○ | | |
| | BID 4175-25T2-06 | 17,5 | 25 | 68 | 89 | 145 | 5217554 | ○ | | |
| | BID 4180-25T2-06 | 18,0 | 25 | 72 | 94 | 150 | 5217555 | ○ | | |
| | BID 4185-25T2-06 | 18,5 | 25 | 72 | 94 | 150 | 5217556 | ○ | | |
| | BID 4190-25T2-06 | 19,0 | 25 | 76 | 98 | 154 | 5217557 | ○ | | |
| | BID 4195-25T2-06 | 19,5 | 25 | 76 | 98 | 154 | 5217558 | ○ | | |
| | BID 4200-25T2-06 | 20,0 | 25 | 80 | 102 | 158 | 5217559 | ○ | | |
| | BID 4205-25T2-06 | 20,5 | 25 | 80 | 102 | 158 | 5217560 | ○ | | |
| | BID 4210-25T2-06 | 21,0 | 25 | 84 | 106 | 162 | 5217561 | ○ | | |
| | BID 4220-25T2-07 | 22,0 | 25 | 88 | 110 | 166 | 5217562 | ○ | SPGX 07T308 | |
| | BID 4225-25T2-07 | 22,5 | 25 | 88 | 110 | 166 | 5217563 | ○ | | |
| | BID 4230-25T2-07 | 23,0 | 25 | 92 | 114 | 170 | 5217579 | ○ | | |
| | BID 4235-25T2-07 | 23,5 | 25 | 92 | 114 | 170 | 5217580 | ○ | | |
| | BID 4240-25T2-07 | 24,0 | 25 | 96 | 118 | 174 | 5217581 | ○ | | |
| | BID 4245-25T2-07 | 24,5 | 25 | 96 | 118 | 174 | 5217582 | ○ | | |
| | BID 4250-25T2-07 | 25,0 | 25 | 100 | 122 | 178 | 5217583 | ○ | | |
| | BID 4260-25T2-07 | 26,0 | 25 | 104 | 126 | 182 | 5217584 | ○ | | |
| | BID 4265-25T2-07 | 26,5 | 25 | 104 | 126 | 182 | 5217587 | ○ | | |
| | BID 4270-25T2-07 | 27,0 | 25 | 108 | 130 | 186 | 5217588 | ○ | | |
| | BID 4280-25T2-09 | 28,0 | 25 | 112 | 134 | 190 | 5217589 | ○ | SPGX 090408 | |
| BID 4290-25T2-09 | 29,0 | 25 | 116 | 138 | 194 | 5217591 | ○ | | | |
| BID 4295-25T2-09 | 29,5 | 25 | 116 | 138 | 194 | 5217592 | ○ | | | |
| BID 4300-32T2-09 | 30,0 | 32 | 120 | 147 | 207 | 5217597 | ○ | | | |
| BID 4310-32T2-09 | 31,0 | 32 | 124 | 151 | 211 | 5217599 | ○ | | | |
| BID 4320-32T2-09 | 32,0 | 32 | 128 | 155 | 215 | 5217600 | ○ | | | |
| BID 4330-32T2-09 | 33,0 | 32 | 132 | 159 | 219 | 5217601 | ○ | | | |
| BID 4340-32T2-11 | 34,0 | 32 | 136 | 163 | 223 | 5217602 | ○ | SPGX 110408 | | |
| BID 4350-32T2-11 | 35,0 | 32 | 140 | 167 | 227 | 5217603 | ○ | | | |
| BID 4360-32T2-11 | 36,0 | 32 | 144 | 171 | 231 | 5217604 | ○ | | | |
| BID 4370-32T2-11 | 37,0 | 32 | 148 | 175 | 235 | 5217606 | ○ | | | |
| BID 4380-32T2-11 | 38,0 | 32 | 152 | 179 | 239 | 5217607 | ○ | | | |
| BID 4390-32T2-11 | 39,0 | 32 | 156 | 183 | 243 | 5217609 | ○ | | | |
| BID 4395-32T2-11 | 39,5 | 32 | 156 | 183 | 243 | 5217610 | ○ | | | |
| BID 4400-32T2-11 | 40,0 | 32 | 160 | 187 | 247 | 5217611 | ○ | | | |

○ Kurzfristig lieferbar Shortly available



| Ausführung Execution | Artikelbezeichnung Item code | Abmessungen [mm] Dimensions in [mm] | | | | | Bestell-Nr. Ordering No. | Verfügbarkeit Availability | Geeignete Wendeschneid- platte Suitable insert | Ersatzteile Spare parts |
|-------------------------|---------------------------------|--|--------|-----|-----|---------|-----------------------------|-------------------------------|---|---|
| | | DC | DCONMS | LU | LF | OAL | | | | |
| 5xD | BID 5140-20T2-05 | 14,0 | 20 | 70 | 92 | 142 | 5217614 | ☉ | SPGX 050204 |  A02-20040 5217880  T-06 5118122 |
| | BID 5145-20T2-05 | 14,5 | 20 | 70 | 92 | 142 | 5217616 | ☉ | | |
| | BID 5150-20T2-05 | 15,0 | 20 | 75 | 97 | 147 | 5217618 | ☉ | | |
| | BID 5155-20T2-05 | 15,5 | 20 | 75 | 97 | 147 | 5217619 | ☉ | | |
| | BID 5160-25T2-06 | 16,0 | 25 | 80 | 102 | 158 | 5217623 | ☉ | SPGX 060204 |  A02-22046 5217882  T-07 5121167 |
| | BID 5165-25T2-06 | 16,5 | 25 | 80 | 102 | 158 | 5217624 | ☉ | | |
| | BID 5170-25T2-06 | 17,0 | 25 | 85 | 107 | 163 | 5217625 | ☉ | | |
| | BID 5175-25T2-06 | 17,5 | 25 | 85 | 107 | 163 | 5217626 | ☉ | | |
| | BID 5180-25T2-06 | 18,0 | 25 | 90 | 112 | 168 | 5217627 | ☉ | | |
| | BID 5185-25T2-06 | 18,5 | 25 | 90 | 112 | 168 | 5217628 | ☉ | | |
| | BID 5190-25T2-06 | 19,0 | 25 | 95 | 117 | 173 | 5217629 | ☉ | | |
| | BID 5195-25T2-06 | 19,5 | 25 | 95 | 117 | 173 | 5217632 | ☉ | | |
| | BID 5200-25T2-06 | 20,0 | 25 | 100 | 122 | 178 | 5217633 | ☉ | | |
| | BID 5205-25T2-06 | 20,5 | 25 | 100 | 122 | 178 | 5217634 | ☉ | | |
| | BID 5210-25T2-06 | 21,0 | 25 | 105 | 127 | 183 | 5217635 | ☉ | | |
| | BID 5220-32T2-07 | 22,0 | 32 | 110 | 137 | 197 | 5217636 | ☉ | SPGX 07T308 |  A17-25060 5217883  T-08 5217892 |
| | BID 5225-32T2-07 | 22,5 | 32 | 110 | 137 | 197 | 5217641 | ☉ | | |
| | BID 5230-32T2-07 | 23,0 | 32 | 115 | 142 | 202 | 5217652 | ☉ | | |
| | BID 5235-32T2-07 | 23,5 | 32 | 115 | 142 | 202 | 5217653 | ☉ | | |
| | BID 5240-32T2-07 | 24,0 | 32 | 120 | 147 | 207 | 5217654 | ☉ | | |
| | BID 5245-32T2-07 | 24,5 | 32 | 120 | 147 | 207 | 5217655 | ☉ | | |
| | BID 5250-32T2-07 | 25,0 | 32 | 125 | 152 | 212 | 5217656 | ☉ | | |
| | BID 5260-32T2-07 | 26,0 | 32 | 130 | 157 | 217 | 5217658 | ☉ | | |
| | BID 5265-32T2-07 | 26,5 | 32 | 130 | 157 | 217 | 5217660 | ☉ | | |
| BID 5270-32T2-07 | 27,0 | 32 | 135 | 162 | 222 | 5217662 | ☉ | | | |
| BID 5280-32T2-09 | 28,0 | 32 | 140 | 167 | 227 | 5217691 | ☉ | SPGX 090408 |  A02-35090 5217884  T-15 5217893 | |
| BID 5290-32T2-09 | 29,0 | 32 | 145 | 172 | 232 | 5217695 | ☉ | | | |
| BID 5295-32T2-09 | 29,5 | 32 | 145 | 172 | 232 | 5217696 | ☉ | | | |
| BID 5300-32T2-09 | 30,0 | 32 | 150 | 177 | 237 | 5217697 | ☉ | | | |
| BID 5310-32T2-09 | 31,0 | 32 | 155 | 182 | 242 | 5217698 | ☉ | | | |
| BID 5320-32T2-09 | 32,0 | 32 | 160 | 187 | 247 | 5217699 | ☉ | | | |
| BID 5330-32T2-09 | 33,0 | 32 | 165 | 192 | 252 | 5217700 | ☉ | | | |
| BID 5340-32T2-11 | 34,0 | 32 | 170 | 197 | 257 | 5217701 | ☉ | SPGX 110408 |  A17-40110 5217890  T-15 5217893 | |
| BID 5350-32T2-11 | 35,0 | 32 | 175 | 202 | 262 | 5217702 | ☉ | | | |
| BID 5360-32T2-11 | 36,0 | 32 | 180 | 207 | 267 | 5217704 | ☉ | | | |
| BID 5370-32T2-11 | 37,0 | 32 | 185 | 212 | 272 | 5217705 | ☉ | | | |
| BID 5380-32T2-11 | 38,0 | 32 | 190 | 217 | 277 | 5217706 | ☉ | | | |
| BID 5390-32T2-11 | 39,0 | 32 | 195 | 222 | 282 | 5217707 | ☉ | | | |
| BID 5395-32T2-11 | 39,5 | 32 | 195 | 222 | 282 | 5217708 | ☉ | | | |
| BID 5400-32T2-11 | 40,0 | 32 | 200 | 227 | 287 | 5217709 | ☉ | | | |

☉ Kurzfristig lieferbar Shortly available

| | Artikelbezeichnung Item code | Sorte Grade | Bestell-Nr. Ordering No. | Verfügbarkeit Availability | Abmessungen [mm] Dimensions [mm] | | | |
|---|---------------------------------|----------------|-----------------------------|-------------------------------|-------------------------------------|------|----------------|-----|
| | | | | | L | S | D ₁ | RE |
|  Ø 13-15,5 mm | SPGX 050204-C | BCP35D | 5217712 | ● | 5,00 | 2,38 | 3,00 | 0,4 |
| | SPGX 050204-P | BCP30D | 5217714 | ● | 5,00 | 2,38 | 3,00 | 0,4 |
| | SPGX 050204-P | BCK10D | 5217715 | ● | 5,00 | 2,38 | 3,00 | 0,4 |
|  Ø 16-21 mm | SPGX 060204-C | BCP35D | 5217718 | ● | 6,00 | 2,38 | 3,60 | 0,4 |
| | SPGX 060204-P | BCP30D | 5217719 | ● | 6,00 | 2,38 | 3,60 | 0,4 |
| | SPGX 060204-P | BCK10D | 5217723 | ● | 6,00 | 2,38 | 3,60 | 0,4 |
|  Ø 22-27 mm | SPGX 07T308-C | BCP35D | 5217725 | ● | 7,94 | 3,97 | 4,10 | 0,8 |
| | SPGX 07T308-P | BCP30D | 5217726 | ● | 7,94 | 3,97 | 4,10 | 0,8 |
| | SPGX 07T308-P | BCK10D | 5217728 | ● | 7,94 | 3,97 | 4,10 | 0,8 |
|  Ø 28-33 mm | SPGX 090408-C | BCP35D | 5217729 | ● | 9,80 | 4,76 | 5,85 | 0,8 |
| | SPGX 090408-P | BCP30D | 5217730 | ● | 9,80 | 4,76 | 5,85 | 0,8 |
| | SPGX 090408-P | BCK10D | 5217756 | ● | 9,80 | 4,76 | 5,85 | 0,8 |
|  Ø 34-40 mm | SPGX 110408-C | BCP35D | 5217759 | ● | 11,50 | 4,76 | 6,30 | 0,8 |
| | SPGX 110408-P | BCP30D | 5217760 | ● | 11,50 | 4,76 | 6,30 | 0,8 |
| | SPGX 110408-P | BCK10D | 5217761 | ● | 11,50 | 4,76 | 6,30 | 0,8 |

● Verfügbar ab Lager Available from stock

● BCP35D

Hochverschleißfeste Feinkornsorte mit einer PVD-AlTiN - Beschichtung für die Bearbeitung von Stahl, niedrig- und hochlegierte rostfreie Stähle und Gusseisen. Durch den Nanolagenaufbau eignet sich diese Sorte ideal für anspruchsvolle Materialien und erhöht gleichzeitig die Prozesssicherheit, sowie Produktivität unter schwierigen Arbeitsbedingungen. Die Schichtstruktur in Kombination mit dem Kobaltanteil gewährleistet eine optimale Balance zwischen Eigenspannung, Härte und Bruchzähigkeit und verhindert dadurch die Ausbreitung von Rissen bei mittleren bis hohen Schnittgeschwindigkeiten.

Highly wear-resistant PVD-AlTiN coating for machining steel, low and high-alloy stainless steels and cast iron. The nanolayer structure makes this grade ideal for demanding materials and at the same time increases process reliability and productivity under difficult working conditions. The layer structure in combination with the cobalt content ensures an optimum balance between residual stress, hardness and fracture toughness, thereby preventing the propagation of cracks at medium to high cutting speeds.

● BCP30D

Hochverschleißfeste Feinkornsorte mit einer PVD-AlTiN - Beschichtung für die Bearbeitung von Stahl, niedrig- und hochlegierte rostfreie Stähle und Gusseisen. Diese Sorte bietet optimale Abrasions- und Oxidationsbeständigkeit durch eine sehr glatte Schichtoberfläche. Perfekt für Minimalmengenschmierung bei höheren Schnittgeschwindigkeiten.

Highly wear-resistant PVD-AlTiN coating for machining steel, low and high-alloy stainless steels and cast iron. This grade offers optimum abrasion and oxidation resistance thanks to a very smooth coating surface. Perfect for minimum quantity lubrication at higher cutting speeds.

● BCK10D

Hochverschleißfeste PVD-AlTiN - beschichtete Sorte mit hoher Schneidkantenstabilität für die Bearbeitung von Gusseisenmaterialien. Zusätzlich bietet die Sorte hervorragende Eigenschaften bei der Feinbearbeitung von legierten und unlegierten Werkzeugstählen, hochfesten Werkstoffen und Nichteisenmetallen bei hohen Schnittgeschwindigkeiten.

Highly wear-resistant PVD-AlTiN-coated grade with high cutting edge stability for machining cast iron materials. The grade also offers outstanding properties for fine machining of alloyed and unalloyed tool steels, high-strength materials and non-ferrous metals at high cutting speeds.

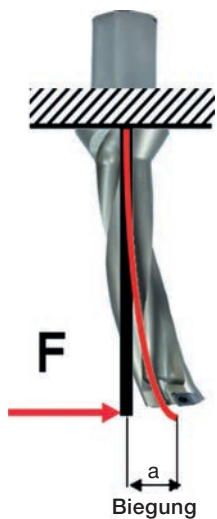
| Abhilfe Option | Problem Problem | | | | | | | |
|---|--|--|---|---|---------------------------|---|--|------------------------------------|
| | Bohrerspitze zerstört Destroyed drill tip | Verschleiß am Außendurchmesser Wear on the outer diameter | Bohrerübermaß/-untermaß Drill oversize/undersize | Spanstau in den Spankanälen Chip congestion in the chip channels | Vibrationen Vibrations | Kleine Schneidkantenausbrüche Small cutting edge breakouts | Unsymmetrische Bohrung Asymmetrical bore hole | Geringe Standzeit Low tool life |
| Bohrerausrichtung Drill alignment | ↔ | ↔ | ↔ | | | ↔ | | |
| Kühlmittelezufuhr Coolant supply | | | | ↑ | | | | ↑ |
| Filter Filter | | | | ↔ | | | | ↔ |
| Kühlkanal Cooling channel | | | | ↔ | | | | ↔ |
| Vorschub Feed rate | | | ↓ | ↓ | ↓ | | ↓ | |
| Einspannung Clamping | ↔ | ↔ | | ↔ | ↔ | | ↔ | ↔ |
| Auskraglänge Overhang length | ↓ | ↓ | | ↓ | ↓ | | ↓ | ↓ |
| Schnittgeschwindigkeit/ Vorschubrichtlinien Cutting speed/feed guidelines | ↔ | ↔ | ↔ | ↔ | ↔ | | ↔ | ↔ |
| Hartmetallsorte Carbide grade | ↔ | ↔ | ↔ | | | ↔ | | ↔ |
| Schnittgeschwindigkeit Cutting speed | | | | ↑ | | ↑ | | |

↑ erhöhen, vergrößern
increase

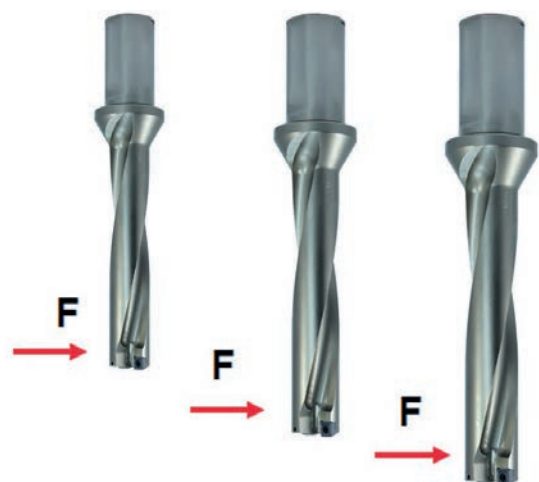
 ↓ vermindern, verkleinern
reduce

 ↔ optimieren, kontrollieren
optimize

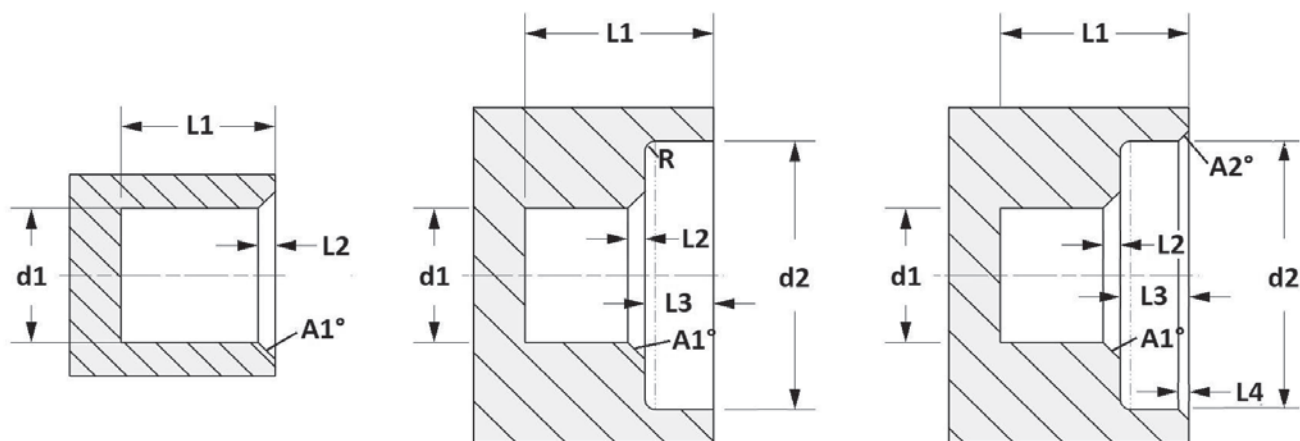
Gleichgewicht
Balance



| Länge Length | Biegung Bending |
|-----------------|--------------------|
| 2xD | 1a |
| 3xD | 4a |
| 4xD | 8a |
| 5xD | 16a |



- Bei instabilen Verhältnissen sind bei langen Bohrertypen größere Lochtoleranzen zu erwarten.
- In unstable conditions, larger hole tolerances are to be expected with long drill types.



Typ A
Type A

Typ B
Type B

Typ C
Type C

| | | | |
|---|-------------------------------------|------------------------------------|-------------------------------------|
| Maschinenbezeichnung/Modell Machine name/model | Interne Kühlung Internal coolant | <input type="checkbox"/> Ja Yes | <input type="checkbox"/> Nein No |
| Haltertyp Holder typer | Kühlmitteldruck Coolant pressure | bar | |

| | |
|---|--|
| Zu bearbeitendes Material Material to be cut | Werkzeugstandzeit Tool hangout length |
|---|--|

Benötigte Maße Necessary dimensions

d1 =

d2 =

L1 =

L2 =

L3 =

L4 =

R =

A1° =

A2° =

Spezielle Anforderungen Special Requests

Bitte fügen Sie diesem Abschnitt die technische Zeichnung des zu bearbeitenden Werkstücks bei.
Please attach the technical drawing of the section that will be machined to this file.

| Zugfestigkeit Rm Tensile strength Rm [N/mm ²] | Vickers- härte Vickers hardness [HV] | Brinell- härte Brinell hardness HB | Rockwell- härte Rockwell hardness HRC |
|---|--|--|---|
| 255 | 80 | 76 | |
| 270 | 85 | 80,7 | |
| 285 | 90 | 85,5 | |
| 305 | 95 | 90,2 | |
| 320 | 100 | 95 | |
| 335 | 105 | 99,8 | |
| 350 | 110 | 105 | |
| 370 | 115 | 109 | |
| 385 | 120 | 114 | |
| 400 | 125 | 119 | |
| 415 | 130 | 124 | |
| 430 | 135 | 128 | |
| 450 | 140 | 133 | |
| 465 | 145 | 138 | |
| 480 | 150 | 143 | |
| 495 | 155 | 147 | |
| 510 | 160 | 152 | |
| 530 | 165 | 156 | |
| 545 | 170 | 162 | |
| 560 | 175 | 166 | |
| 575 | 180 | 171 | |
| 595 | 185 | 176 | |
| 610 | 190 | 181 | |
| 625 | 195 | 185 | |
| 640 | 200 | 190 | |
| 660 | 205 | 195 | |
| 675 | 210 | 199 | |
| 690 | 215 | 204 | |
| 705 | 220 | 209 | |
| 720 | 225 | 214 | |
| 740 | 230 | 219 | |
| 755 | 235 | 223 | |
| 770 | 240 | 228 | 20,3 |
| 785 | 245 | 233 | 21,3 |
| 800 | 250 | 238 | 22,2 |
| 820 | 255 | 242 | 23,1 |
| 835 | 260 | 247 | 24 |
| 850 | 265 | 252 | 24,8 |
| 865 | 270 | 257 | 25,6 |
| 880 | 275 | 261 | 26,4 |
| 900 | 280 | 266 | 27,1 |
| 915 | 285 | 271 | 27,8 |
| 930 | 290 | 276 | 28,5 |
| 950 | 295 | 280 | 29,2 |
| 965 | 300 | 285 | 29,8 |
| 995 | 310 | 295 | 31 |
| 1030 | 320 | 304 | 32,2 |
| 1060 | 330 | 314 | 33,3 |
| 1095 | 340 | 323 | 34,4 |

| Zugfestigkeit Rm Tensile strength Rm [N/mm ²] | Vickers- härte Vickers hardness [HV] | Brinell- härte Brinell hardness HB | Rockwell- härte Rockwell hardness HRC |
|---|--|--|---|
| 1125 | 350 | 333 | 35,5 |
| 1155 | 360 | 342 | 36,6 |
| 1190 | 370 | 352 | 37,7 |
| 1220 | 380 | 361 | 38,8 |
| 1155 | 390 | 371 | 39,8 |
| 1290 | 400 | 380 | 40,8 |
| 1320 | 410 | 390 | 41,8 |
| 1350 | 420 | 399 | 42,7 |
| 1385 | 430 | 409 | 43,6 |
| 1420 | 440 | 418 | 44,5 |
| 1455 | 450 | 428 | 45,3 |
| 1485 | 460 | 437 | 46,1 |
| 1520 | 470 | 447 | 46,9 |
| 1555 | 480 | (456) | 47,7 |
| 1595 | 490 | (466) | 48,4 |
| 1630 | 500 | (475) | 49,1 |
| 1665 | 510 | (485) | 49,8 |
| 1700 | 520 | (494) | 50,5 |
| 1740 | 530 | (504) | 51,1 |
| 1775 | 540 | (513) | 51,7 |
| 1810 | 550 | (523) | 52,3 |
| 1845 | 560 | (532) | 53,0 |
| 1880 | 570 | (542) | 53,6 |
| 1920 | 580 | (551) | 54,1 |
| 1955 | 590 | (561) | 54,7 |
| 1995 | 600 | (570) | 55,2 |
| 2030 | 610 | (580) | 55,7 |
| 2070 | 620 | (589) | 56,3 |
| 2105 | 630 | (599) | 56,8 |
| 2145 | 640 | (608) | 57,3 |
| 2180 | 650 | (618) | 57,8 |
| | 660 | | 58,3 |
| | 670 | | 58,8 |
| | 680 | | 59,2 |
| | 690 | | 59,7 |
| | 700 | | 60,1 |
| | 720 | | 61 |
| | 740 | | 61,8 |
| | 760 | | 62,5 |
| | 780 | | 63,3 |
| | 800 | | 64 |
| | 820 | | 64,7 |
| | 840 | | 65,3 |
| | 860 | | 65,9 |
| | 880 | | 66,4 |
| | 900 | | 67 |
| | 920 | | 67,5 |
| | 940 | | 68 |

| | | |
|---|--|-----|
| Zugfestigkeit Tensile strength | N/mm ² | Rm |
| Vickershärte Vickers hardness | Diamantpyramide 136 , Prüfkraft F ≥ 98 N Diamond pyramid 136 , Test force F ≥ 98 N | HV |
| Brinellhärte Brinell hardness | 0,102 x F/D2 = 30 N/mm ² | HB |
| Kalkuliert mit: Calculated from: HB = 0,95 x HV | F = Prüfkraft in N, D = Kegeldurchmesser in mm F = Test force in N, D = Cone diameter in mm | |
| Härte Rockwell C Hardness Rockwell C | Diamantkegel 120°, Gesamtprüfkraft 1471 ± 9 N Diamond cone 120°, Total test force 1471 ± 9 N | HRC |

| ISO 513 | Gruppe Group | Bezeichnung Application | Schnittgeschwindigkeit vc [m/min] Cutting speed vc [m/min] | Vorschub fn [mm/U] Feed rate fn [mm/U] | | | | |
|---|-----------------|--|---|---|--------------------|--------------------|--------------------|--------------------|
| | | | | Ø 13,0 - Ø 15,0 | Ø 15,5 - Ø 21,5 | Ø 22,0 - Ø 27,5 | Ø 28,0 - Ø 33,0 | Ø 34,0 - Ø 41,0 |
| P - Stahl / P - steel | P.1 | Magnetweicheisen Mild / magnetic steel | 100 - 200 | | | | | |
| | P.2 | Baustahl, Einsatzstahl Construction steel, case hardening steel | 100 - 200 | 0,05-0,08 | 0,06-0,10 | 0,06-0,12 | 0,07-0,13 | 0,08-0,15 |
| | P.3 | Kohlenstoffstahl / unlegierter Gussstahl Carbon steel | 100 - 200 | | | | | |
| | P.4 | Legierter Stahl / Vergütungsstahl Alloyed steel / tempered steel | 80 - 180 | 0,08-0,15 | 0,08-0,15 | 0,10-0,18 | 0,12-0,22 | 0,12-0,24 |
| | P.5 | Legierter Stahl / Vergütungsstahl Alloyed steel / tempered steel | 80 - 180 | | | | | |
| | P.6 | Legierter Stahl mit erhöhter Festigkeit Alloyed steel / high strength steel | 70 - 160 | 0,06-0,12 | 0,08-0,14 | 0,10-0,10 | 0,12-0,22 | 0,12-0,23 |
| | P.7 | Rostfreier Stahl ferritisch, martensitisch Ferritic stainless steel, martensitic stainless steel, precipitation hardening | 70 - 160 | 0,06-0,10 | 0,08-0,15 | 0,10-0,20 | 0,12-0,23 | 0,12-0,24 |
| M - Rostfreier Stahl / M - stainless steel | M.1 | Rostfreier Stahl austenitisch Austenitic stainless steel | 60 - 100 | | | | | |
| | M.2 | Rostfreier Stahl ferritisch + martensitisch (Duplex) Ferritic + austenitic (Duplex) | 60 - 100 | 0,06-0,12 | 0,08-0,15 | 0,08-0,15 | 0,09-0,16 | 0,10-0,17 |
| K - Gusswerkstoffe / K - cast iron materials | K.1 | Grauguss Grey cast iron | 80 - 100 | | | | | |
| | K.2 | Kugelgraphitguss, Temperguss Nodular cast iron, malleable cast iron, tempered cast iron | 60 - 130 | 0,06-0,12 | 0,08-0,16 | 0,12-0,20 | 0,15-0,25 | 0,16-0,18 |
| | K.3 | ADI (austenitisch-ferritisches Gusseisen mit Kugelgraphit) Austempered ductile iron (ADI) | 50 - 100 | 0,06-0,10 | 0,08-0,15 | 0,10-0,18 | 0,12-0,20 | 0,15-0,23 |

| ISO 513 | BZG | Deutschland Germany | Deutschland Germany | Europa Europe | Europa Europe | Italien Italy | |
|-----------------------|----------|------------------------|------------------------|------------------|------------------|----------------------|--|
| | | W-Nr. Mat.-No. | DIN | W.-Nr. EN | DIN EN | UNI | |
| P - Stahl / P - steel | P1 | | St 37-2 | | S25GT | Fe360B | |
| | | | St 44-2 | | S 235 JR | Fe430B | |
| | | | St 50-2 | | E 295 | Fe490 | |
| | | | St 60-2 | | E 335 | Fe590 | |
| | | | C10 | | C10 | C10 | |
| | | | C 15 | | C15 | C15, C16, 1C15 | |
| | | | C 22 | | C22 | C20, C21 | |
| | | | C25 | | | C25 | |
| | | | GS-38 | | | | |
| | | | C 35 | | C35 | C35, 1C35 | |
| | | | C 45 | | C45 | C45, 1C45 | |
| | | | C40 | | | C40 | |
| | | | C30 | | | C30 | |
| | | | C 55 | | C55 | C55, 1C55 | |
| | | | C50 | | | C50 | |
| | | | St 52-3 | | S 355 JR G3 | Fe510B | |
| | | | C 60 | | C60 | C60, 1C60 | |
| | | | 9S20 | | 10S20 | 9S20 | |
| | | | 9 SMn 28 | | 11SMn30 | 9SMn28 | |
| | | | 9 SMnPb 28 | | 11SMnPb30 | CF9SMnPb28 | |
| | | | 10 SPb 20 | | 10SPb20 | CF10SPb20 | |
| | | | 35 S 20 | | 35S20 | 35S20 | |
| | | | 9 SMn 36 | | 11SMn37 | 9SMn36, CF9SMn36 | |
| | | | 9 SMnPb 36 | | 11SMnPb37 | 9SMnPb36, CF9SMnPb36 | |
| | | | RFe100 | | | | |
| | | | RFe80 | | | | |
| | | | RFe60 | | | | |
| | | | Ck 15 | | C15E | C16 | |
| | | | 40 Mn 4 | | 40Mn4 | | |
| | | | Ck 25 | | C25E | | |
| | | | 36 Mn 5 | | 36Mn5 | | |
| | | | 28 Mn 6 | | 28Mn6 | C28Mn | |
| | | | Cf 35 | | C35G | C36, C38 | |
| | | | Ck 45 | | C45E | C45 | |
| | | | Ck 55 | | C55E | C50 | |
| | | | Cf 53 | | C53G | C53 | |
| | | | Ck 60 | | C60E | C60 | |
| | | | Ck67 | | | C67 | |
| | | | Ck75 | | | C75 | |
| | | | Cf70 | | | | |
| | | | Ck 101 | | C101E, C100S | C100 | |
| | | | C 105 W 1 | | C105U | C100KU | |
| | C 125 W | | C125W, C125U | | | | |
| | 100 Cr 6 | | 99Cr6, 102Cr6 | | | | |
| | P2 | | | | | | |
| | | 55 Si 7 | | 56Si7 | | | |

| Spanien Spain | Frankreich France | USA U.S.A. | Herstellerbezeichnung Brand Name |
|---|---|---|-------------------------------------|
| UNE | AFNOR | AISI/SAE | AISI / SAE |
| | E 24-2 | 1013 | |
| | E 28-2 | 1021 | |
| | A 50-2 | A 570 (50) | |
| | A 60-2 | A 572 (65) | |
| | C10 | 1010 | |
| F.111 | C18RR, XC18 | J 409 Grade 1015 | |
| 1C22, F112 | AF42C20, XC25, 1C22 | 1020 | |
| | AF 50 C 30 | 1025 | |
| | | A 27 | |
| F.113 | C35,1C35,AF55,C35 | 1035 | |
| F.114 | 1C45, AF 65 C 45 | 1045 | |
| | AF 60 C 40 | 1040 | |
| | | 1030 | |
| F.115 | C54, 1C55, AF 70 C 55 | 1055 | |
| | | 1050 | |
| | | 1024 | |
| F.115 | C60, 1C60, AF70C55 | 1060 | |
| | | 1212 | |
| F.2111 - 11SMn28 | S250 | 1213 | |
| F.2112 - 11SMnPb28 | S250Pb | 12L13, 12L14, J 403 Grade 12L14, J 1397 Grade 12L14 | |
| 10SPb20 | 10PbF2 | | |
| F.210G | 35MF6 | J 403 Grade 1141 | |
| F.2113 - 12 SMn 35 | S300 | J 403 Grade 1213, J 403 Grade 1215, J 1392 Grade 1213 | |
| F.2114 - 12 SMnPb 35 | S300Pb | J 403 Grade 12L14, J 1397 Grade 12L14 | |
| | | | |
| | | | |
| F.1511 - C 16 k, F.1110 - C 15 k | XC12 | 1015 | |
| | 35M5 | 1035, 1041 | |
| F.1120 - C 25 k, C25K (F1120) | 2C25 | 1025 | |
| F.1203 - 36 Mn5 | 40M5 | 1335 | |
| 28Mn6 | 20M5 | 1027 | |
| 0 | XC38H1TS | 1035 | |
| F1140-C45k, F1142-C48k | C45RR, XC42H1, XC45, 2C45, XC48, XC48H1 | 1045 | |
| F.1150 - C 55 k | XC55H1, 2C55, XC54 | 1055 | |
| | XC48H1TS | 1050, 1055 | |
| F.511, F.512 | C60RR, XC60, 2C60 | 1060 | |
| | XC 68 | 1070 | |
| | | 1074 | |
| | | | |
| | C100RR, C100, XC100, E 100 | 1095 | |
| F515, F516 | C105E2U, Y1105 | W110 | |
| F.5123 C120 | Y2120 | W112 | |
| F.5230 100 Cr6, F.1310 - 100 Cr6, F.131 | 100Cr6RR, 100C6, Y100C6 | L3, 52100, L1 | |
| F.1440 - 56 Si 7 | 55S7 | 9255 | |

| ISO 513 | BZG | Deutschland Germany | Deutschland Germany | Europa Europe | Europa Europe | Italien Italy | | |
|---|-----|------------------------|------------------------|------------------|------------------|---------------------------|------------------|------------------------------|
| | | W-Nr. Mat.-No. | DIN | W.-Nr. EN | DIN EN | UNI | | |
| P - Stahl / P - steel Magnetweicheisen, Baustahl, Stahlguss, Einsatzsthl, Nitierstahl, Automatenstahl, Vergütungsstahl, Kugellagerstahl, Federstahl, Werkzeugstahl, Rostfreierstahl ferritisch/ martenisitisch Magnetic steel, construction steel, steel castings, cementation steel, nirtiding steel, heat treatable steel, bearing steel, spring steel, alloyed steel, stainless steel ferritic/ martenitic | P2 | 1.2080 | X 210 Cr 12 | | X210Cr12 | X205Cr12KU | | |
| | | 1.2311 | 40CrMnMo7 | | 40CrMnNiMo8-6 | | | |
| | | 1.2312 | 40CrMnMoS8-6 | | 40CrMnNiMoS8-6-4 | | | |
| | | 1.2365 | 32CrMoV12-28 | | | 30CrMoV12-27 KU | | |
| | | 1.2419 | 105 WCr 6 | | | 107WCr5, 105WCr6, 100WCr6 | 107WCr5KU | |
| | | 1.2542 | 45 WCrV 7 | | | 45WCrV8, 45WCrV7 | 45WCrV8KU | |
| | | 1.2714 | 56NiCrMoV7 | | | 55NiCrMoV7 | | |
| | | 1.2738 | 40CrMnNiMo8-6-4 | | | | | |
| | | 1.2767 | 45NiCrMo16 | | | | 40NiCrMoV16 KU | |
| | | 1.2833 | 100 V 1 | | | 100V1 | 102V2KU | |
| | | 1.3505 | 100 Cr 6 | | | 100Cr6 | 100Cr6 | |
| | | 1.3536 | 100CrMo7-3 | | | | | |
| | | 1.5415 | 15 Mo 3 | | | 16Mo3 | 16Mo3 (KG KW) | |
| | | 1.5423 | 16 Mo 5 | | | 16Mo5 | 16Mo5KG, 16Mo5KW | |
| | | 1.5622 | 14 Ni 6 | | | 14Ni6 | 14Ni6KG, 14Ni6KT | |
| | | 1.5662 | X 8 Ni 9 | | | X8Ni9 | X10Ni9, X12Ni09 | |
| | | 1.5680 | 12 Ni 19 | | | X12Ni5, 12Ni19 | | |
| | | 1.5710 | 36 NiCr 6 | | | 36NiCr6 | | |
| | | 1.5732 | 14 NiCr 10 | | | 14NiCr10 | 16NiCr11 | |
| | | 1.5752 | 14 NiCr 14 | | | 15NiCr13 | | |
| | | 1.5919 | 15CrNi6 | | | 15CrNi6 | 16CrNi4 | |
| | | 1.6511 | 36 CrNiMo 4 | | | 36CrNiMo4 | 38NiCrMo7 (KB) | |
| | | 1.6523 | 21NiCrMo2, 20NiCrMo2-2 | | | 21NiCrMo2 | 20NiCrMo2 | |
| | | 1.6546 | 40 NiCrMo 22 | | | 40NiCrMo2-2, 40NiCrMo2KD | 40NiCrMo2 (KB) | |
| | | 1.6580 | 30CrNiMo8 | | | 30CrNiMo8 | 30CrNiMo8 | |
| | | 1.6582 | 34 CrNiMo 6 | | | 34CrNiMo6 | 35NiCrMo6KB | |
| | | 1.6587 | 18CrNiMo7-6 | | | 17CrNiMo6, 18CrNiMo7-6 | 18NiCrMo7 | |
| | | 1.6657 | 14 NiCrMo 134 | | | 14NiCrMo13-4 | 15NiCrMo13 | |
| | | 1.6773 | 36NiCrMo16 | | | | 36NiCrMo16 | |
| | | 1.7005 | 45Cr2 | | | | 45Cr2 | |
| | | 1.7015 | 15 Cr 3 | | | | 15Cr2KD | |
| | | 1.7033 | 34 Cr 4 | | | | 34Cr4 | 34Cr4(KB) |
| | | 1.7034 | 37Cr4 | | | | | 36CrMn4 |
| | | 1.7035 | 41 Cr 4 | | | | 41Cr4 | 41Cr4, 41Cr4KB |
| | | 1.7043 | 38Cr4 | | | | | 38Cr4 |
| | | 1.7045 | 42 Cr 4 | | | | 42Cr4 | 41Cr4 |
| | | 1.7108 | 60SiCr7 | | | | | 60SiCr8 |
| | | 1.7131 | 16 MnCr 5 | | | | 16MnCr5 | 16MnCr5 |
| | | 1.7147 | 20MnCr5 | | | | | 20MnCr5 |
| | | 1.7176 | 55 Cr 3 | | | | 55Cr3 | 55Cr3 |
| | | 1.7218 | 25 CrMo 4 | | | | 25CrMo4 | 25CrMo4 (KB) |
| | | 1.7220 | 34 CrMo 4 | | | | 34CrMo4 | 34CrMo4KB, 35CrMo4, 35CrMo4F |

| Spanien Spain | Frankreich France | USA U.S.A. | Herstellerbezeichnung Brand Name |
|---|----------------------------------|-----------------------------------|-------------------------------------|
| UNE | AFNOR | AISI/SAE | AISI / SAE |
| F.5212 X210 Cr12 | X200Cr12, Z200Cr12 | D3 | |
| | | | M200 |
| | 32CDV12-28 | H10 | W320 |
| F.5233 105 WCr5, F.523 | 105WC13 | | |
| F.5241 45 WCrSi 8, F.524, F524145WCrSi 8 | 45WCrV8, 45WCrV20 | S1 | |
| | | | W500 |
| | | | M238 |
| | Y35NCD16 | | |
| | C105E2UV1, Y1105V, 100V2 | W210 | |
| F.5230 100 Cr6, F.1310-100 Cr 6, F.131 | Y100C6, 100C6, 100Cr6 | L3, 52100 | |
| F.2601-16 Mo 3 | 15D3, 15Mo3 | ASTM A20, GR | |
| F.2602-16Mo5 | | 4520 | |
| F.2641-15Ni6 | 16N6, 15N6, 15Ni6 | ASTM A350 LF5 | |
| F.2645-X8 Ni09 | Z8N9, 9Ni490 | ASTM A353 | |
| | Z18N5, 5Ni390 | 2515, 2517 | |
| | 35NC6 | 3135 | |
| F.1540-15NiCr11 | 14NC11 | 3415 | |
| | 14NC11, 12NC15, 14NC12, 13NiCr14 | 3310, 3415, 9314 | |
| | 16 NC 6 | 4320 | |
| F.1280-35NiCrMo4 | 40NCD3, 36CrNiMo4, 35NCD5 | 9840 | |
| F1552-20NiCrMo2, F1534-20NiCrMo3 | 20NCD2, 22NCD2 | J 1268 Grade 8620H, 8620 | |
| F1204-40NiCrMo2, F1205- 40NiCrMo2DF | 40NCD2 | 8740 | |
| | 30CrNiMo8, 30NCD8 | | |
| F1272-40NiCrMo7, 34CrNiMo6 | 35NCD6, 34CrNiMo6, 34CrNiMo8 | 4340 | |
| F.1560-14 NiCrMo13, F.156 | 18NCD6 | 4320 | |
| F1560-14NiCrMo13, F.1569- 14NiCrMo131 | 16NCD13 | | |
| | | | |
| | 12C3, 15Cr2, 18C3 | 5132 | |
| F.8221-35 Cr 4, F.224 | 32C4, 34Cr4 | 5132 | |
| | 38 4 | 5135 | |
| 38Cr4, 38Cr41, 42Cr4, F.1202-42Cr4 | 42C4, 41Cr4 | 5140 | |
| | | | |
| F1201, F1202, F1206, F.1202-42Cr4 | 42C4, 42C4TS | 5140, 5140H | |
| | #NV | 9262 | |
| F.1515-16 MnCr5, F.151 | 16MC5, 16MC4, 16MnCr5 | J 1268 Grade 4118H, C5115 | |
| | 20 MC 5 | 5120 | |
| F.1431-55 Cr3, F.143 | 55Cr3, 55C3 | 5155 | |
| F8372-AM26CrMo4, F8330- AM25CrMo4, F1256-30CrMo4-1, F.222 | 25CD4, 25CrMo4 | 4130 | |
| F8331-AM34CrMo4, F8231-34CrMo4, F1250-35CrMo4, F1254-35CrMo4DF, F.125 | 35CD4, 34CrMo4, 35CD4 / 34CrMo5 | 4135, 4137, J 1268 Grade 4135H | |

| ISO 513 | BZG | Deutschland Germany | Deutschland Germany | Europa Europe | Europa Europe | Italien Italy | |
|--|--------|------------------------|------------------------|------------------|------------------------|-------------------------------|--|
| | | W.-Nr. Mat.-No. | DIN | W.-Nr. EN | DIN EN | UNI | |
| P - Stahl / P - steel Magnetweicheisen, Baustahl, Stahlguss, Einsatzstahl, Nitterstahl, Automatenstahl, Vergütungsstahl, Kugellagerstahl, Federstahl, Werkzeugstahl, Rostfreierstahl ferritisch/ martensitisch Magnetic steel, construction steel, steel castings, cementation steel, nitriding steel, free cutting steel, heat treatable steel, bearing steel, spring steel, alloyed steel, stainless steel ferritic/ martensitic | P2 | 1.7223 | 41 CrMo 4 | | 41CrMo4 | 41CrMo4 | |
| | | 1.7225 | 42 CrMo 4 | | 42CrMo4 | 38CrMo4KB, 42CrMo4, G40CrMo4 | |
| | | 1.7228 | 50CrMo4 | | 50CrMo4 | 50CrMo4 | |
| | | 1.7243 | 18CrMo4 | | | 18CrMo4 | |
| | | 1.7262 | 15 CrMo 5 | | 15CrMo5 | | |
| | | 1.7335 | 13 CrMo 4 4 | | 13CrMo4-5 | 14CrMo3, 16CrMo3 | |
| | | 1.7361 | 32 CrMo 12 | | 32CrMo12 | 32CrMo12 | |
| | | 1.7380 | 10 CrMo 9 10 | | 10CrMo9-10 | 12CrMo9 (KW KG), G14CrMo9, 10 | |
| | | 1.7715 | 14 MoV 6 3 | | 14MoV6-3 | | |
| | | 1.8159 | 50 CrV 4, 51CrV4 | | | 50CrV4 | |
| | | 1.8507 | 34CrAlMo5 | | 34CrAlMo5-10 | 34CrAlMo7 | |
| | | 1.8509 | 41 CrAlMo 7 | | 41CrAlMo7 | 41CrAlMo7 | |
| | | 1.8515 | 31CrMo12 | | 31CrMo12 | 31CrMo12 | |
| | | 1.8519 | 31CrMoV9 | | 31CrMoV9 | 31CrMoV10 | |
| | | 1.8523 | 39 CrMoV 13 9 | | 39CrMoV13-9 | | |
| | P3 | 1.1269 | Ck85 | | | C85 | |
| | | 1.2085 | X33CrS16 | | | 35CrMo8 KU | |
| | | 1.2316 | X36CrMo17 | | | X37CrMoV5-1 KU | |
| | | 1.2343 | X38CrMoV5-1 | | | X37CrMoV5-1 KU | |
| | | 1.2344 | X 40 CrMoV 5 1 | | X40CrMoV5-1 | X40CrMoV511KU | |
| | | 1.2363 | X 100 CrMoV 5 1 | | X100CrMoV5-1 | X100CrMoV51KU | |
| | | 1.2379 | X153CrMoV12 | | | | |
| | | 1.2436 | X 210 CrW 12 | | X210CrW12-1, X210CrW12 | X215CrW121KU | |
| | | 1.2567 | X30WCrV5-3 | | X30WCrV5-3 | X30WCrV5-3 KU | |
| | | 1.2581 | X 30 WCrV 9 3 | | X30WCrV9-3 | X30WCrV9-3 KU | |
| | | 1.2601 | X 165 CrMoV 12 | | X165CrMoV12 | X165CrMoW12KU | |
| | | 1.3243 | S 6-5-2-5 | | HS6-5-2-5 | HS6-5-2-5 | |
| | | 1.3255 | S 18-1-2-5 | | HS18-1-2-5 | HS18-1-1-5 | |
| | | 1.3343 | S 6-5-2 | | HS6-5-2 | HS6-5-2-5 | |
| | | 1.3348 | S 2-9-2 | | HS2-9-2 | HS2-9-2 | |
| | | 1.3355 | S 18-0-1 | | HS18-0-1 | HS18-0-1 | |
| | | 1.3401 | X 120 Mn 12 | | X120Mn12 | G-X120Mn12 | |
| | | 1.5021 | 48Si7 | | | 48Si7 | |
| | 1.5026 | 55Si7 | | | 55Si7 | | |
| | 1.5027 | 60Si7 | | | 60Si7 | | |
| | 1.7701 | 51CrMoV4 | | | 51CrMoV4 | | |
| | P4 | 1.4000 | X 7 Cr 13 | | X6Cr13 | X6Cr13 | |
| | | 1.4001 | X 7 Cr 14 | | X7Cr14 | X6Cr13 | |
| | | 1.4002 | X6CrAl13 | | X6CrAl13 | X6CrAl13 | |
| | | 1.4005 | X12CrS13 | | | X12CrS13 | |
| | | 1.4006 | X 10 Cr 13, X 12 Cr 13 | | X12Cr13, X10Cr13 | X12Cr13, X10Cr13 | |
| | | 1.4016 | X6Cr17 | | X6Cr17 | X8Cr17 | |

| Spanien Spain | Frankreich France | USA U.S.A. | Herstellerbezeichnung Brand Name |
|---|--|--|-------------------------------------|
| UNE | AFNOR | AISI/SAE | AISI / SAE |
| F8332-AM42CrMo4, F8232-42CrMo4, F1252-40CrMo4 | 42CD4TS | 4140 | |
| F8332-AM42CrMo4, F8232-42CrMo4, F1252-40CrMo4 | 42CD4, 42CrMo4 | 4140 | |
| | 50CrMo4 | 4150 | |
| F.1551-12CrMo4 | 12CD4 | | |
| F.2631-14CrMo45 | 15CD3.05, 15CD4.05 | A387 Grade 12Cl2, ASTM A182 | |
| F.124.A | 30CD12 | | |
| TU.H | 12CD9.10, 10CrMo9-10, 10CrMo9-11 | A387 Grade 22, A387 Grade 22Cl2, ASTM A182 | |
| F.2621-13 MoCrV6 | | | |
| F.1430-51CrV4 | 50CV4, 51CrV4, 50CrV4 | 6150 | |
| | 30 CAD 6.12 | A355Cl-D | |
| F.1740-41CrAlMo7 | 40CAD6.12 | Nitralloy 135 | |
| | 30 CD 12 | A/B | |
| | - | | |
| | 40CDV12 | | |
| | C90 | 1086 | |
| | | | M314 |
| | | | M303, M303HH |
| | Z38CDV5 | H11 | W300 |
| F.5318 X40 CrMoV5 | X40CrMoV5, Z40CDV5 | H13, P20 | |
| F.5227 X100 CrMoV5 | X100CrMoV5, Z100CDV5 | A2, D2 | |
| | | D2 | K110 |
| F.5213 X210 CrW12, F.521 | X210CrW12-1, Z210CW12-01, Z 210 CW 12 | D6 | |
| | Z32WCV5 | H14 | |
| F.5323 X30 WCrV9 | X30WCrV9, Z30WCV9 | O1, H21 | |
| F.5211 X160 CrMoV12 | | | |
| F.5613 6-5-2-5 | Z85WDKCV06- 05-05-04-02, Z90WDKCV06- 05-05-04-02 | S7, M35 | |
| F.5530 18-1-1-5 | Z80WKCV18- 05-04-01 | T4 | |
| F.5603 6-5-2 | Z85WDCV06- 05-04-02 | M2 | |
| F.5607 2-9-2 | Z100DCWV09- 04-02-02 | M7 | |
| F.5520 18-0-1 | Z80WCV18-04-01 | T1 | |
| F.82551-AM-X 120 Mn 12 | Z120M12, Z120Mn12 | | |
| | 55S7, 56SC7 | 9255 | |
| | 60Si7 | 9260 | |
| F.3110-X6 Cr13 | Z6013, Z6Cr13, Z8C12 | 403, 13/6 | |
| F.8401-AM-X12 Cr13 | Z3014, Z8C13FF | 403, 410S, 429 | |
| | Z 8 CA 12 | 405 | |
| | Z 11 CF 13 | 416 | |
| F.3401-X12 Cr13 | Z12C13, Z12Cr13, Z10C13 | 410 | N100 |
| F.3113-X8 Cr17 | Z8C17, Z6Cr17 | 430 | N200 |

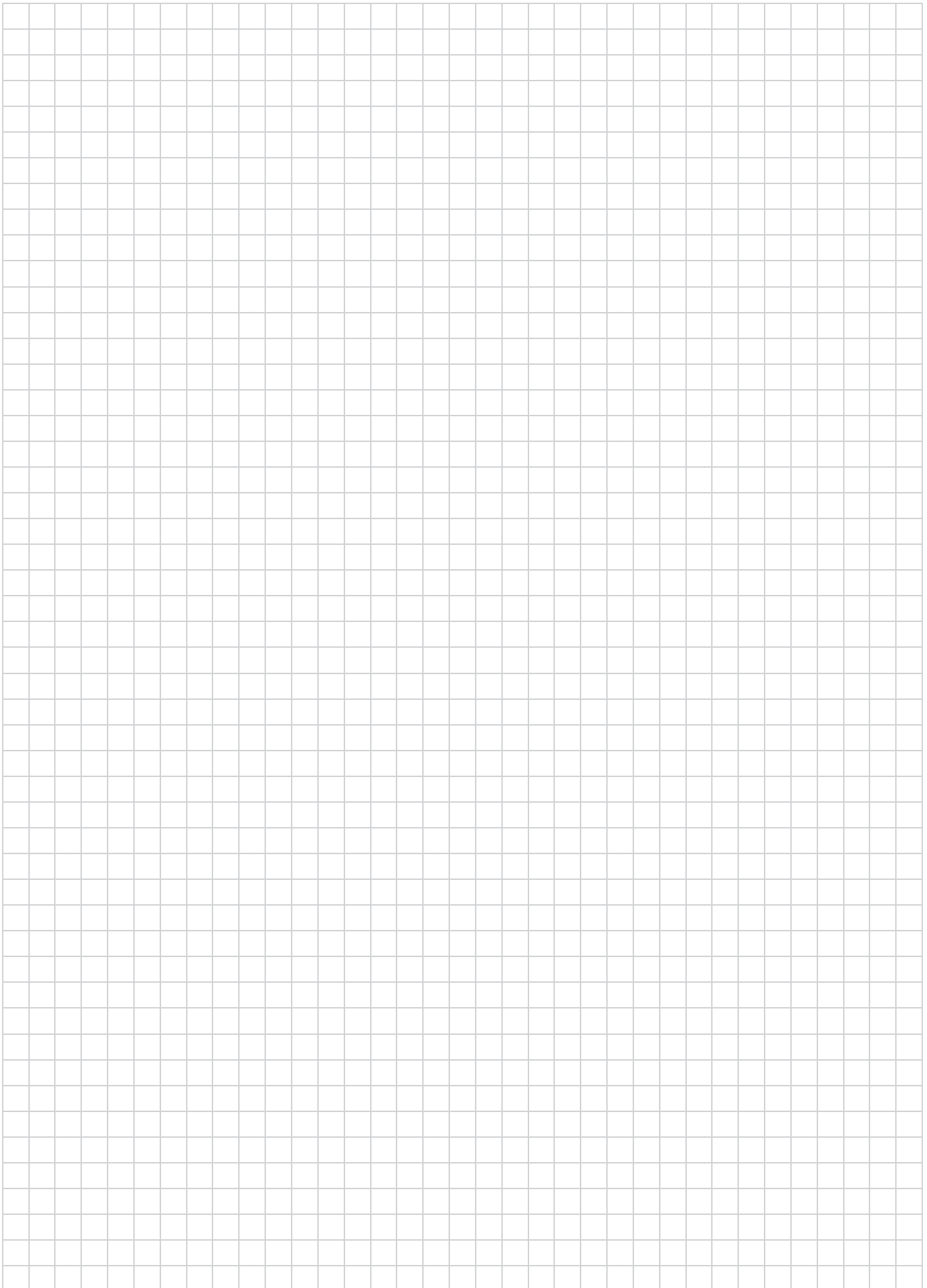
| ISO 513 | BZG | Deutschland Germany | Deutschland Germany | Europa Europe | Europa Europe | Italien Italy | | |
|-----------------------|-----|------------------------|---------------------------------|------------------|-----------------------------|------------------|--|--|
| | | W.-Nr. Mat.-No. | DIN | W.-Nr. EN | DIN EN | UNI | | |
| P - Stahl / P - steel | P4 | | X20Cr13 | | | X20Cr13 | | |
| | | | X30Cr13 | | X20Cr13 | X30Cr13 | | |
| | | | X 46 Cr 13 | | X46Cr13 | X40Cr14 | | |
| | | | X 20 CrNi 17 2 | | X19CrNi17-2, X17CrNi16-2 | X16CrNi16 | | |
| | | | X 12 CrMoS 17 | | X14CrMoS17 | X10CrS17 | | |
| | | | X 6 CrMo 17 1 | | X6CrMo17-1 | X8CrMo17 | | |
| | | | X105CrMo17 | | X105CrMo17 | #NV | | |
| | | | X 4 CrNi 13 4 | | X3CrNiMo13-4 | GX6CrNi13 04 | | |
| | | | X3CrTi17 | | | | | |
| | | | X2CrTi12 | | X5CrTi12 | X6CrTi12 | | |
| | | | X5CrNiCuNb16-4 | | | | | |
| | | | X5CrNiCu15-5 | | | | | |
| | | | X7CrNiAl17-7 | | | | | |
| | | | X 45 CrSi 9 3 | | X45CrSi9-3-1 | X45CrSi8 | | |
| | | | X 10 CrAl 13, X 10 CrAlSi 13 | | X10CrAlSi13, X10CrAl13 | X10CrAl12 | | |
| | | | X 10 CrAl 18, X 10 CrAlSi 18 | | X10CrAl18, X10CrAlSi18 | X8Cr17 | | |
| | | | X 80 CrNiSi 20 | | X80CrNiSi20 | | | |
| | | | X 10 CrAl 24, X 10 CrAlSi 25 | | X10CrAl24, X10CrAlSi25 | X16Cr26 | | |
| | | P5 | 1.1118 | GS-24Mn6 | | | | |
| | | | 1.1120 | GS-20Mn5 | | | | |
| | | | 1.4027 | G-X 20 Cr 14 | | GX20Cr14 | | |
| | | | 1.5419 | GS-22Mo4 | | | | |
| | | | 1.5633 | GS-24Ni8 | | | | |
| | | | 1.5681 | GS-10Ni19 | | | | |
| | | | 1.6309 | GS-20MnMoNi5-5 | | | | |
| | | | 1.6571 | GS-34CrNiMo6 | | | | |
| | | | 1.6748 | GS-40NiCrMo6-5-6 | | | | |
| | | | 1.6750 | GS-20NiCrMo3-7 | | | | |
| | | 1.6760 | GS-22NiMoCr5-6 | | | | | |
| | | 1.7231 | G42CrMo4 | | | | | |
| | | 1.7357 | GS-17CrMo5-5 | | | | | |
| | | 1.7379 | GS-18CrMo9-10 | | | | | |

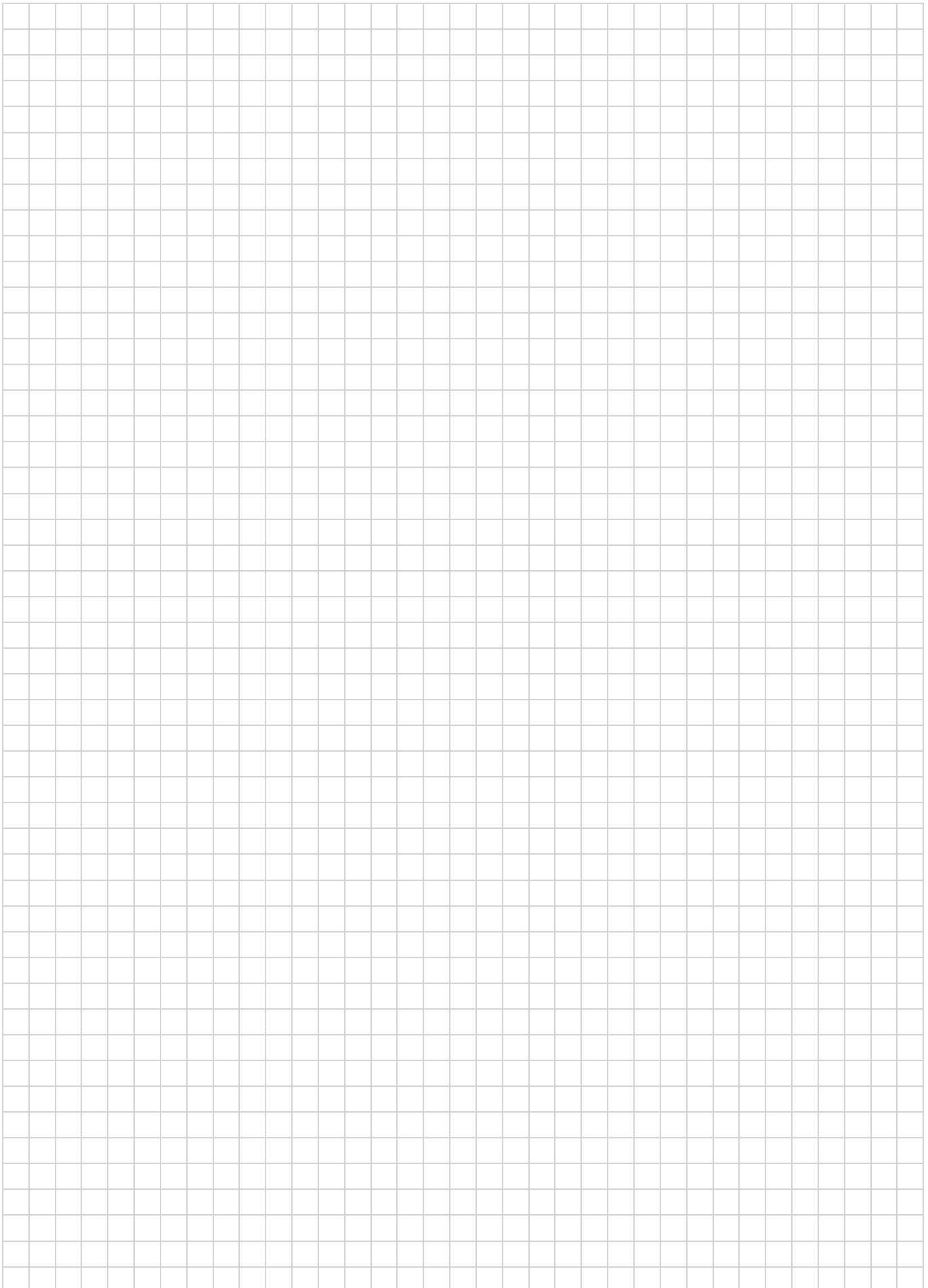
| Spanien Spain | Frankreich France | USA U.S.A. | Herstellerbezeichnung Brand Name |
|--|---|-------------------------|-------------------------------------|
| UNE | AFNOR | AISI/SAE | AISI / SAE |
| | Z 20 C 13 | 420 | N320 |
| | Z 20 C 13 | 420 | |
| F.3405-X46 Cr13 | Z40C14, Z40Cr14, Z38C13M, Z44C14 | 420 | T651 |
| F.3427-X15 CrNi16, F.313, F3427-X19CrNi172 | Z15CN16.02 | 431 | N350 |
| F3117-X10CrS17, F3413-X14CrMoS17 | Z10CF17 | 430F, J 405 Grade 51435 | N310 |
| F3116-X6CrMo171 | Z8CD17.01 | 434 | |
| | Z 100 CD 17 | 440C | N695 |
| | Z5CN13.4, Z4CND13.4M, Z6CN13-4, Z8CD17-01 | CA6. 13/4 | |
| | Z 3 CT 12 | 409 | |
| | Z 7 CNU 15-05 | 630 | N700 |
| | | | N701 |
| F.3220-X 4 ScrSi 09-03 | Z45CS9 | HNV3 | H700 |
| F.13152-X 10 CrAl13 | Z10C13, Z13C13 | 405 | |
| F.3153-X 10 CrAl 18 | Z10CAS18, Z12CAS18 | 430 | |
| F.3222-X 80CrSiNi20-02 | Z80CSN20.02 | HNV6 | |
| F.3154-X 10 CrAl24 | Z10CAS24, Z12CAS25 | 446 | H100 |
| | | | |
| | Z 20 C13M | | , |
| | | | |
| | | A757 | |
| | | | |
| | | | |
| | | | |
| | | A 217 | |

| ISO 513 | BZG | Deutschland Germany | Deutschland Germany | Europa Europe | Europa Europe | Italien Italy | | | | |
|--|---|------------------------|------------------------|---|-------------------------|--|---|--|------------------------|--|
| | | W.-Nr. Mat.-No. | DIN | W.-Nr. EN Mat.-No. EN | DIN EN | UNI | | | | |
| M - Rostfreier Stahl / M - stainless steel | Austenitisch, ferritisch + austenitisch Austenitic stainless steel, ferritic + austenitic steel (duplex) | M1 | 1.4301 | X 5 CrNi 18 10 | | X5CrNi18-10+F3:F21A3F3: F23F3:F24A3F3:F23F3: FF3:F24 | X5CrNi18 10 | | | |
| | | | 1.4303 | X4CrNi18-12 | | | X8CrNi1812 | | | |
| | | | 1.4305 | X 10 CrNiS 18 9 | | | X8CrNiS18-9 | X10CrNiS 18.09 | | |
| | | | 1.4306 | X 2 CrNi 19 11 | | | X2CrNi19-11 | "X3CrNi18 11, X2CrNi18 11, GX2CrNi19 10" | | |
| | | | 1.4308 | G-X 6 CrNi 18 9 | | | GX5CrNi19-10 | | | |
| | | | 1.4311 | X 2 CrNiN 18 10 | | | X2CrNiN18-10 | X2CrNiN18 11 | | |
| | | | 1.4319 | X3CrNiN17-8 | | | | X10CrNi1809 | | |
| | | | 1.4401 | X 5 CrNiMo 17 12 2 | | | X5CrNiMo17-12-2, X4CrNiMo17-12-2, X5CrNiMo18-10 | X5CrNiMo17 12 | | |
| | | | 1.4404 | X2CrNiMo17-12-2 | | | X3CrNiMo17-12-2 | X2CrNiMo1712 | | |
| | | | 1.4408 | G-X 6 CrNiMo 18 10 | | | GX5CrNiMo19-11-2 | | | |
| | | | 1.4429 | X 2 CrNiMoN 17 13 3 | | | X2CrNiMoN17-13-3 | X2CrNiMoN17 13 | | |
| | | | 1.4435 | X 2 CrNiMo 18 14 3, X 2 CrNiMo 18 12 | | | X2CrNiMo18-14-3 | X2CrNiMo17 13 | | |
| | | | 1.4438 | X 2 CrNiMo 18 16 4 | | | X2CrNiMo18-15-4 | X2CrNiMo18 16 | | |
| | | | 1.4460 | X 4 CrNiMoN 27 5 2 | | | X3CrNiMoN27-5-2 | X 3 CrNiMo 27 5 2 | | |
| | | | 1.4541 | X 6 CrNiTi 18 10 | | | X6CrNiTi18-10 | X6CrNiTi18 11 | | |
| | | | 1.4550 | X 6 CrNiNb 18 10 | | | X6CrNiNb18-10 | X6CrNiNb18 11 | | |
| | | | 1.4558 | X 2 NiCrAlTi 32 20 | | | X2NiCrAlTi32-20 | | | |
| | | | 1.4563 | X 1 NiCrMoCu 31 27 4 | | | X1NiCrMoCu31-27-4 | | | |
| | | | 1.4571 | X 6 CrNiMoTi 17 12 2 | | | X6CrNiMoTi17-12-2 | X6CrNiMoTi1712 | | |
| | | | 1.4565, 1.4581 | G-X 5 CrNiMiNb 18 10 | | | | | | |
| | | | 1.4583 | X 10 CrNiMoNb 18 12 | | | X10CrNiMoNb18-12 | X6CrNiMoNb | | |
| | | | 1.4828 | X 15 CrNiSi 20 12 | | | X15CrNiSi20-12 | X16CrNi23 14 | | |
| | | | 1.4841 | X15CrNiSi25-20 | | | | X22CrNiSi2520 | | |
| | | | 1.4878 | X 12 CrNiTi 18 9 | | | X12CrNiTi18-9, X10CrNiTi18-10 | X6CrNiTi1811 | | |
| | | | 1.4864 | X 12 NiCrSi 36 16 | | | X12NiCrSi36-16, X12NiCrSi35-16 | | | |
| | | | 1.4958 | X 5 NiCrAlTi31-20 | | | X5NiCrAlTi31-20 | | | |
| | | | 1.4977 | | | | X 40 CoCrNi 20 20 | | | |
| | | | M2 | 1.4362 | X2CrNiN23-4 (Ally 2304) | | | | | |
| | | | | 1.4462 | X2CrNiMoN22-5-3 | | | X2CrNiMoN22-5-3 | X2CrNiMoN22-5-3 | |
| | | | | 1.4501 | X2CrNiMoCuWN25-7-4 | | | | X2CrNiMoCu WN25-7-4 | |
| | | | | 1.4871 | X 53 CrMnNiN 21 9 | | | X53CrMnNiN21-9 | X53CrMnNiN21 9 | |
| | | | | 1.4310 | X 12 CrNi 17 7 | | | X9CrNi18-8, X10CrNi18-8 | X12CrNi17 07 | |

| Spanien Spain | Frankreich France | USA U.S.A. | Herstellerbezeichnung Brand Name |
|--|--|--------------------|-------------------------------------|
| UNE | AFNOR | AISI/SAE | AISI / SAE |
| F.3451-X5 CrNi18-10, F.314, F.3504-X6CrNi19 10, F3504-X5CrNi1810" | Z6CN18.09 | 304 | A500 |
| | | 305 | |
| F.3508-X10CrNiS18-09 | Z10CNF18.09 | 303 | A506 |
| F.3503-X 2CrNi19-10, F3503-X 2CrNi18-10 | Z1CN18-12, Z2CN18-10, Z3CN19.10M, Z3CN18-10, Z3CN19-11, Z3CN19-11FF | 304L | A600 |
| | Z6CN18.10M | --- | |
| F3541-X2CrNiN1810 | Z2CN18.10 | 304LN | |
| | | 302 | |
| F.3543-X5CrNiMo17-12, F.3543-X6 CrNiMo17- 12-03, F3543-X5CrNiMo17-122" | Z6CND17.11 | 316 | A120 |
| | | | A200 |
| F.8414-AM-X7 CrNiMo20 10 | | | |
| F3543- X2CrNiMoN17133 | Z2CND17.13 | 316LN | |
| F.3533-X2 CrNiMo 17- 12-03, F.3534-X6 CrNiMo 17- 12-03" | Z2CND17.13, Z3CND17-12-03, Z3CND18-14-03 | | A220 |
| F3539-X2CrNiMo18164 | Z2CND19.15 | 317L | |
| F3309-X8CrNiMo27-05, F3552-X8CrNiMo266 | Z3CND25-07Az, Z5CND27-05Az | S32900 | |
| F.3553-X7 CrNiTi 18-11, F.3523-X 6 CrNiTi 18-11, 09 Ch 18N10T, F3523-X6CrNiTi1810 | Z6CNT18.10 | 321 | |
| F.3552-X 7 CrNiNb 18-11, F.3524-X 67 CrNiNb 18-11, F3524-X6CrNiNb1810 | Z6CNNb18.10 | 347 | |
| | | N08800 Incoloy 800 | |
| | | N08028 Alloy 28 | |
| F.3552-X 6 CrNiMoTi17-12-03, F3535- X6CrNiMoTi17122 | Z6NDT17.12 | 316Ti | A300 |
| | | | |
| | Z6CNDNb | 318 | |
| F3312-X15CrNiSi20-12 | Z15CNS20.12 | 309 | |
| | | | H525 |
| F.3523-X 6CrNiTi 18 11 | Z6CNT18.12B | 321 | |
| F.3313-X12 CrNi 36-16 | Z12NCS35.16 | 330 | |
| | | | |
| | Z 42 CNKDOWNb | | |
| | | S32304 | Duplex |
| | Z 2 CND 22.05 Az | S31803 | Duplex, A903 |
| | | | Super Duplex |
| F.3217-X53 CrMnNiN 21-09 | Z52CMN21.09 | EV8 | |
| F.3517-X12CrNi17 07 | Z12CN17.07, Z12CN18.07, Z11CN17-08, Z11CN18-08, Z12CN18-09 | 301 | |

| ISO 513 | BZG | Deutschland Germany | Deutschland Germany | Europa Europe | Europa Europe | Italien Italy | | |
|---|-----------|------------------------|------------------------|--------------------------|------------------|-----------------------------|----------|--|
| | | W.-Nr. Mat.-No. | DIN | W.-Nr. EN Mat.-No. EN | DIN EN | UNI | | |
| K - Gusswerkstoffe / K - cast iron materials | K1 | 0.6010 | GG-10, GG 10 | EN-JL 1010 | EN-GJL-100 | G10 | | |
| | | 0.6015 | GG-15, GG 15 | EN-JL 1020 | EN-GJL-150 | G15 | | |
| | | 0.6020 | GG-20, GG 20 | EN-JL 1030 | EN-GJL-200 | G20 | | |
| | | 0.6025 | GG-25, GG 25 | EN-JL 1040 | EN-GJL-250 | G25 | | |
| | | 0.6030 | GG-30, GG 30 | EN-JL 1050 | EN-GJL-300 | G30 | | |
| | | 0.6035 | GG-35, GG 35 | EN-JL 1060 | EN-GJL-350 | G35 | | |
| | | 0.6040 | GG-40, GG 40 | | EN-GJL-400 | | | |
| | | 0.6660 | GGL-NiCr 20 2 | | | | | |
| | K2 | | | GGV 45 | | EN-GJV-450 | | |
| | | 0.7040 | GGG-40 | | EN-JS 1040 | EN-GJS-400-15 | GS400-12 | |
| | | 0.7050 | GGG-50 | | EN-JS 1050 | EN-GJS-500-7 | GS500-7 | |
| | | 0.7060 | GGG-60 | | EN-JS 1060 | EN-GJS-600-3, EN-GJS-600-3U | GS600-3 | |
| | | 0.7070 | GGG-70 | | EN-JS 1070 | EN-GJS-700-2, EN-GJS-700-2U | GS700-2 | |
| | | 0.7080 | GGG-80 | | EN-JS 1080 | EN-GJS-800-2 | | |
| | | 5.3400 | ADI 800 | | | EN-GJS-800-10 | | |
| | | 0.7090 | GGG90 | | EN-JS1090 | | | |
| | | 5.3403 | ADI 1000 | | | EN-GJS-1050-6 | | |
| | | 5.3404 | ADI 1200 | | | EN-GJS-1200-3 | | |
| | | 5.3405 | ADI 1400 | | | EN-GJS-1400-1 | | |
| | K3 | 0.8035 | GTW-35, GTW-35-04 | | EN-GJMW-350-4 | GTW-35-04, EN-GJMW-350-4 | | |
| | | 0.8040 | GTW-40-05, GTW-40 | | | EN-GJMW-400-5, GTW-40-05 | | |
| | | 0.8045 | GTW-45-07, GTW-45 | | | EN-GJMW-450-7 | | |
| | | 0.8135 | GTS-35-10, GTS-35 | | | EN-GJMB 350-10 | | |
| | | 0.8145 | GTS-45-06, GTS-45 | | | EN-GJMB 450-6, GTS-45-06 | | |
| | | 0.8155 | GTS-55-04, GTS-55 | | | EN-GJMB 550-4, GTS-55-04 | | |
| | | 0.8165 | GTS 65-02, GTS-65 | | | EN-GJMB 650-2, GTS-65-02 | | |
| | | 0.8170 | GTS 70-02, GTS-70 | | | EN-GJMB 700-2, GTS-70-02 | | |
| | | --- | GJV-300 | | --- | --- | | |
| | | --- | GJV-400 | | --- | --- | | |
| | | --- | GJV-500 | | --- | --- | | |





Boehlerit GmbH & Co. KG
Werk VI-Straße 100
8605 Kapfenberg
Österreich/Austria
Telefon +43 3862 300 - 0
Telefax +43 3862 300 - 793
sales-at@boehlerit.com
www.boehlerit.com

boehlerit

Vertriebstöchter und Repräsentanten *Subsidiaries and representatives*

Brasilien/Brazil

Boehlerit Brasil Ferramentas Ltda.
Rua Capricórnio 72
Alpha Conde I Comercial
06473-005 - Barueri -
São Paulo
Tel. +55 11 554 60 755
Fax +55 11 554 60 476
info@boehlerit.com.br
www.boehlerit.com.br

Deutschland/Germany

(Verschleiß/Wear parts)
Boehlerit GmbH & Co. KG
Heidenheimer Straße 108
D-73447 Oberkochen
Telefon +49 7364 950-700
bld@boehlerit.de
www.boehlerit.de

Indien/India

Boehlerit India
Otto Bilz Private Limited
No.5A-5B/6A,
KIADB Industrial Area
Doddaballapur-561 203
Bangalore District, Karnataka
Tel. +91-080-22638700
Fax +91-080-22638702
www.boehlerit.com

Italien/Italy

Boehlerit Italy S.r.l.
Via Papa Giovanni XXIII, Nr. 45
20090 Rodano (MI)
Tel. +39 02 269 49 71
Fax +39 02 218 72 456
info@boehlerit.it
www.boehlerit.it

Mexiko/Mexico

Boehlerit S.A. de C.V.
Av. Acueducto No. 15
Parque Industrial Bernardo Quintana
El Marqués, Querétaro
México. C.P. 76246
Tel. +52 442 296 6804
info@boehlerit.com.mx
www.boehlerit.com.mx

Österreich/Austria

Boehlerit GmbH & Co. KG
Werk VI-Straße 100
8605 Kapfenberg
Österreich/Austria
Telefon +43 3862 300 - 0
Telefax +43 3862 300 - 793
sales-at@boehlerit.com
www.boehlerit.com

Polen/Poland

Boehlerit Polska sp.z.o.o.
Złotniki, ul. Kobaltowa 6
62-002 Suchy Las
Złotniki
Tel. +48 61 659 38 00
Fax +48 61 623 20 14
info@boehlerit.pl
www.boehlerit.pl

Slowakei/Slovakia

Kancelár Boehlerit
Kancelář Zlín
Santraziny 753
760 01 Zlín
Tel. +420 577 214 989
Fax +420 577 219 061
boehlerit@boehlerit.com
www.boehlerit.com

Spanien/Spain

Boehlerit Spain S.L.
C/. Narcis Monturiol 11-15
08339 Vilassar de Dalt Barcelona
Tel. +34 93 750 7907
Fax +34 93 750 7925
info@boehlerit.es
www.boehlerit.es

Tschechien/Czech Republic

Kancelár Boehlerit
Kancelář Zlín
Santraziny 753
760 01 Zlín
Tel. +420 577 214 989
Fax +420 577 219 061
boehlerit@boehlerit.com
www.boehlerit.com

Türkei/Turkey

Boehlerit
Sert Metal ve Takım San. ve Tic. A.Ş.
Gosb 1600. Sok.No: 1602
41480 Gebze - Kocaeli
Tel. +90 262 677 17 37
Fax +90 262 677 17 46
info@boehlerit.com.tr
www.boehlerit.com.tr

Ungarn/Hungary

Boehlerit Hungária Kft.
2036 Érdliget Pf. 32
2030-Érd, Kis-Duna u.6.
Tel. +36 23 521 910
Fax +36 23 521 919
info@boehlerit.hu
www.boehlerit.hu

USA

Kanada/ Canada

Boehlerit USA
Bilz USA
1140 No.Main St.
Lombard IL 60148
Tel. +1 847 734 9390
Fax +1 847 734 9391
boehlerit@bilzusa.com
www.boehlerit.com