

CARBIDE



Being the best through innovation



NC-SPOTTING DRILLS


NC-ANBOHRER

- CENTERING and CHAMFERING
- Zentrier & Abfasen

SELECTION GUIDE

SOLID CARBIDE NC-SPOTTING DRILLS

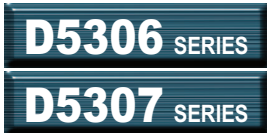
For General materials, Cast steels, Cast iron, Non-ferrous materials

| ITEM | MODEL | DESCRIPTION | SIZE | | PAGE |
|------------------------------|---|---|------|-------|-----------|
| | | | MIN | MAX | |
| D5306 D5307 |  | CARBIDE, NC-SPOTTING DRILLS VOLLHARTMETALL NC-ANBOHRER | D6.0 | D20.0 | 96 |
| | | RECOMMENDED CUTTING CONDITIONS EMPFOHLENE SCHNEIDKONDITIONEN | | | 97 |

SOLID CARBIDE NC-SPOTTING DRILLS

◎ : Excellent
○ : Good

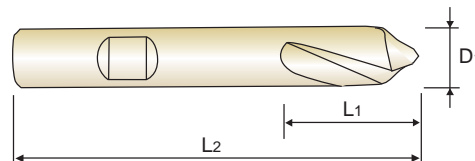
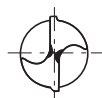
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels | | Cast Iron | Aluminum | Stainless Steels | Titanium | Mild Steels | Copper | Bronze |
|---------------|--------------|--------------------|-----------------|--------|-----------|----------|------------------|----------|-------------|--------|--------|
| | | | HRc45~55 | HRc55~ | | | | | | | |
| ~HB225 | HB225~325 | HRc30~45 | HRc45~55 | HRc55~ | | | | | | | |
| ◎ | ◎ | ◎ | | | ○ | ○ | ○ | ○ | ○ | | |



CARBIDE, NC-SPOTTING DRILLS VOLLHARTMETALL NC-ANBOHRER

► **Application** : For more precise centering work on NC/CNC Machines.
The large diameter of the tool permits chamfering work after centering continuously.

► **Verwendung** : Auf NC-Maschinen, Lehrenbohrwerken u.a. kapitalintensiven Bohrwerken, zum Zentrieren und Anfasen von Gewindebohrungen in einem Arbeitsgang. Besonders geeignet zum Anbohren von hochfesten Stählen, Stahlguß, Grauguß, Hartguß, Mangan-Hartstahl, CrNi-Stählen, Bronze, Leicht- und Buntmetallen.



NC-Spotting drills 90° NC-Anbohrer 90°

| EDP No. | Drill Diameter | Flute Length | Overall Length |
|----------|----------------|--------------|----------------|
| | D1 | L1 | L2 |
| D5306060 | 6.0 | 13 | 50 |
| D5306080 | 8.0 | 23 | 60 |
| D5306100 | 10.0 | 24 | 70 |
| D5306120 | 12.0 | 24 | 70 |
| D5306160 | 16.0 | 29 | 75 |
| D5306200 | 20.0 | 35 | 100 |

NC-Spotting drills 120° NC-Anbohrer 120°

Unit : mm

| EDP No. | Drill Diameter | Flute Length | Overall Length |
|----------|----------------|--------------|----------------|
| | D1 | L1 | L2 |
| D5307060 | 6.0 | 13 | 50 |
| D5307080 | 8.0 | 23 | 60 |
| D5307100 | 10.0 | 24 | 70 |
| D5307120 | 12.0 | 24 | 70 |
| D5307160 | 16.0 | 29 | 75 |
| D5307200 | 20.0 | 35 | 100 |

► TiN(D6407), TiCN(DG407) and TiAlN(DH407) are available on your request.

◎ : Excellent ○ : Good

| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels | | Cast Iron | Aluminum | Stainless Steels | Titanium | Mild Steels | Copper | Bronze |
|---------------|--------------|--------------------|-----------------|--------|-----------|----------|------------------|----------|-------------|--------|--------|
| ~HB225 | HB225~325 | HRc30~45 | HRc45~55 | HRc55~ | | | | | | | |
| ◎ | ◎ | ◎ | | | ○ | ○ | ○ | ○ | ○ | | |

CARBIDE NC - SPOTTING DRILLS 90°, 120° with FLATTED SHANK
VOLLHARTMETALL NC-ANBOHRER 90°, 120° mit MITNAHME FLÄCHE
D5306, D5307 SERIES

Unit : mm

| WORK MATERIAL | NON-ALLOY STEELS | | ALLOY STEELS | | SOFT GREY CAST IRON | | HARD GREY CAST IRON | | STAINLESS STEELS | | Al-Si ALLOYS, Si<10% | | Al-Si ALLOYS, Si>10% | | Ti, Ni ALLOY STEELS | |
|---------------|-------------------------|------|--------------------------|------|---------------------|------|---------------------|------|------------------|------|----------------------|------|----------------------|------|---------------------|------|
| | < 700 N/mm ² | | < 1000 N/mm ² | | < HB240, GG25 | | < HB300, GG40 | | | | | | | | | |
| STRENGTH | | | | | | | | | | | | | | | | |
| DIAMETER | N | S | N | S | N | S | N | S | N | S | N | S | N | S | N | S |
| 6 | 3900 | 0.08 | 2850 | 0.08 | 5200 | 0.09 | 3800 | 0.09 | 2000 | 0.07 | 8800 | 0.11 | 7100 | 0.11 | 1950 | 0.07 |
| 8 | 2900 | 0.10 | 2150 | 0.10 | 3900 | 0.12 | 2850 | 0.12 | 1500 | 0.09 | 6600 | 0.15 | 5350 | 0.15 | 1450 | 0.09 |
| 10 | 2350 | 0.12 | 1700 | 0.12 | 3100 | 0.16 | 2300 | 0.16 | 1200 | 0.11 | 5300 | 0.19 | 4250 | 0.19 | 1200 | 0.11 |
| 12 | 1950 | 0.14 | 1450 | 0.14 | 2600 | 0.20 | 1900 | 0.20 | 1000 | 0.13 | 4450 | 0.23 | 3550 | 0.23 | 980 | 0.13 |
| 16 | 1450 | 0.17 | 1100 | 0.17 | 1950 | 0.24 | 1450 | 0.24 | 755 | 0.17 | 3300 | 0.27 | 2650 | 0.27 | 735 | 0.17 |
| 20 | 1150 | 0.19 | 850 | 0.19 | 1550 | 0.28 | 1150 | 0.28 | 590 | 0.20 | 2650 | 0.31 | 2150 | 0.31 | 590 | 0.20 |

N = R.P.M

S = Feed per Revolution (mm/rev.)