

YG GENERAL CARBIDE DRILLS

D5407 SERIES

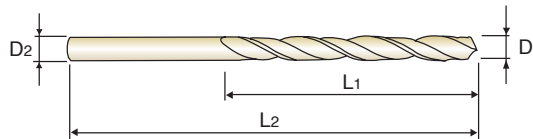
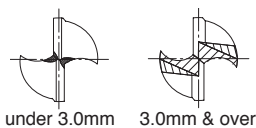
CARBIDE DRILLS VOLLHARTMETALL-SPIRALBOHRER

JOBBER

KURZ

► **Application** : Drilling steels in general, cast steels, cast iron, chilled cast iron, malleable cast iron, non-ferrous heavy metals, non-ferrous light metals, abrasive plastics.

► **Verwendung** : Zum wirtschaftlichen Bohren von Stahl allgemein, Stahlguß, Hart-und Temperguß, Nichteisen Leichtmetallen, abrasiven Kunststoffen.



DIN 338
MG
N 30°
h6
h7
118°
P.120

D₁=D₂

Unit : mm

| EDP No. | Drill Diameter | Flute Length | Overall Length | EDP No. | Drill Diameter | Flute Length | Overall Length |
|----------|----------------|----------------|----------------|----------|----------------|----------------|----------------|
| | D ₁ | L ₁ | L ₂ | | D ₁ | L ₁ | L ₂ |
| D5407010 | 1.0 | 12 | 34 | D5407032 | 3.2 | 36 | 65 |
| D5407011 | 1.1 | 14 | 36 | D5407033 | 3.3 | 36 | 65 |
| D5407012 | 1.2 | 16 | 38 | D5407034 | 3.4 | 39 | 70 |
| D5407013 | 1.3 | 16 | 38 | D5407035 | 3.5 | 39 | 70 |
| D5407014 | 1.4 | 18 | 40 | D5407036 | 3.6 | 39 | 70 |
| D5407015 | 1.5 | 18 | 40 | D5407037 | 3.7 | 39 | 70 |
| D5407016 | 1.6 | 20 | 43 | D5407038 | 3.8 | 43 | 75 |
| D5407017 | 1.7 | 20 | 43 | D5407039 | 3.9 | 43 | 75 |
| D5407018 | 1.8 | 22 | 46 | D5407040 | 4.0 | 43 | 75 |
| D5407019 | 1.9 | 22 | 46 | D5407041 | 4.1 | 43 | 75 |
| D5407020 | 2.0 | 24 | 49 | D5407042 | 4.2 | 43 | 75 |
| D5407021 | 2.1 | 24 | 49 | D5407043 | 4.3 | 47 | 80 |
| D5407022 | 2.2 | 27 | 53 | D5407044 | 4.4 | 47 | 80 |
| D5407023 | 2.3 | 27 | 53 | D5407045 | 4.5 | 47 | 80 |
| D5407024 | 2.4 | 30 | 57 | D5407046 | 4.6 | 47 | 80 |
| D5407025 | 2.5 | 30 | 57 | D5407047 | 4.7 | 47 | 80 |
| D5407026 | 2.6 | 30 | 57 | D5407048 | 4.8 | 52 | 86 |
| D5407027 | 2.7 | 33 | 61 | D5407049 | 4.9 | 52 | 86 |
| D5407028 | 2.8 | 33 | 61 | D5407050 | 5.0 | 52 | 86 |
| D5407029 | 2.9 | 33 | 61 | D5407051 | 5.1 | 52 | 86 |
| D5407030 | 3.0 | 33 | 61 | D5407052 | 5.2 | 52 | 86 |
| D5407031 | 3.1 | 36 | 65 | D5407053 | 5.3 | 52 | 86 |

► 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 | CFRP |
|---------------|--------------|--------------------|-----------------|--------|-----------|----------|------------------|----------|-------------|--------|--------|------|
| ~HB225 | HB225~325 | HRc30~45 | HRc45~55 | HRc55~ | | | | | | | | |
| ◎ | ◎ | | | | ○ | ○ | ○ | ○ | ◎ | | | |



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D5407 SERIES

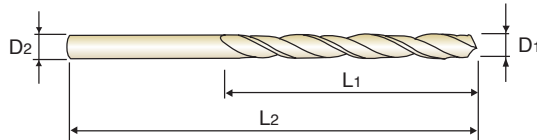
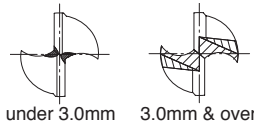
CARBIDE DRILLS VOLLHARTMETALL-SPIRALBOHRER

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DIN 338
MG
N 30°
h6
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118°
P.120

D₁=D₂

Unit : mm

| EDP No. | Drill Diameter D ₁ | Flute Length L ₁ | Overall Length L ₂ | EDP No. | Drill Diameter D ₁ | Flute Length L ₁ | Overall Length L ₂ |
|----------|----------------------------------|--------------------------------|----------------------------------|----------|----------------------------------|--------------------------------|----------------------------------|
| D5407054 | 5.4 | 57 | 93 | D5407070 | 7.0 | 69 | 109 |
| D5407055 | 5.5 | 57 | 93 | D5407075 | 7.5 | 69 | 109 |
| D5407056 | 5.6 | 57 | 93 | D5407080 | 8.0 | 75 | 117 |
| D5407057 | 5.7 | 57 | 93 | D5407085 | 8.5 | 75 | 117 |
| D5407058 | 5.8 | 57 | 93 | D5407090 | 9.0 | 81 | 125 |
| D5407059 | 5.9 | 57 | 93 | D5407095 | 9.5 | 81 | 125 |
| D5407060 | 6.0 | 57 | 93 | D5407100 | 10.0 | 87 | 133 |
| D5407061 | 6.1 | 63 | 101 | D5407102 | 10.2 | 87 | 133 |
| D5407062 | 6.2 | 63 | 101 | D5407105 | 10.5 | 87 | 133 |
| D5407063 | 6.3 | 63 | 101 | D5407110 | 11.0 | 94 | 142 |
| D5407064 | 6.4 | 63 | 101 | D5407115 | 11.5 | 94 | 142 |
| D5407065 | 6.5 | 63 | 101 | D5407120 | 12.0 | 101 | 151 |
| D5407068 | 6.8 | 69 | 109 | D5407130 | 13.0 | 101 | 151 |

► 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 | CFRP |
|---------------|--------------|--------------------|-----------------|--------|-----------|----------|------------------|----------|-------------|--------|--------|------|
| ~HB225 | HB225~325 | HRc30~45 | HRc45~55 | HRc55~ | | | | | | | | |
| ◎ | ◎ | | | | ○ | ○ | ○ | ○ | ◎ | | | |



**GENERAL
CARBIDE DRILLS**

**RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN**

**CARBIDE DRILLS, DIN6539, DIN338
VOLLHARTMETALL SPIRALBOHRER, DIN 6539, DIN 338**

D5405, D5407 SERIES

| WORK MATERIAL | NON-ALLOY STEELS | | ALLOY STEELS | | SOFT GREY CAST IRON | | HARD GREY CAST IRON | | STAINLESS STEELS | | AI-SI ALLOYS, Si<10% | | AI-SI ALLOYS, Si>10% | | Ti, Ni ALLOY STEELS | |
|----------------|------------------|-------|---------------|-------|---------------------|-------|---------------------|-------|------------------|-------|----------------------|-------|----------------------|-------|---------------------|-------|
| | STRENGTH | | STRENGTH | | STRENGTH | | STRENGTH | | STRENGTH | | STRENGTH | | STRENGTH | | STRENGTH | |
| DRILLING SPEED | 65 ~ 75 m/min | | 45 ~ 55 m/min | | 80 ~ 100 m/min | | 50 ~ 70 m/min | | 30 ~ 40 m/min | | 150 ~ 170 m/min | | 110 ~ 130 m/min | | 33 ~ 38 m/min | |
| DIAMETER | N | S | N | S | N | S | N | S | N | S | N | S | N | S | N | S |
| | 1.0 | 23000 | 0.03 | 17200 | 0.03 | 32000 | 0.04 | 23000 | 0.04 | 12000 | 0.04 | 54000 | 0.05 | 42000 | 0.05 | 11800 |
| 2.0 | 11500 | 0.04 | 8600 | 0.04 | 16000 | 0.05 | 11500 | 0.05 | 6000 | 0.03 | 27000 | 0.06 | 21000 | 0.06 | 5900 | 0.03 |
| 3.0 | 7800 | 0.05 | 5750 | 0.05 | 10500 | 0.06 | 7600 | 0.06 | 4000 | 0.04 | 18000 | 0.07 | 14000 | 0.07 | 3900 | 0.04 |
| 4.0 | 5800 | 0.06 | 4300 | 0.06 | 7800 | 0.07 | 5700 | 0.07 | 3000 | 0.05 | 13000 | 0.08 | 10500 | 0.08 | 2950 | 0.05 |
| 5.0 | 4700 | 0.07 | 3450 | 0.07 | 6200 | 0.08 | 4550 | 0.08 | 2400 | 0.06 | 10500 | 0.09 | 8500 | 0.09 | 2350 | 0.06 |
| 6.0 | 3900 | 0.08 | 2850 | 0.08 | 5200 | 0.09 | 3800 | 0.09 | 2000 | 0.07 | 8800 | 0.11 | 7100 | 0.11 | 1950 | 0.07 |
| 7.0 | 3350 | 0.09 | 2450 | 0.09 | 4500 | 0.10 | 3250 | 0.10 | 1700 | 0.08 | 7600 | 0.13 | 6100 | 0.13 | 1700 | 0.08 |
| 8.0 | 2900 | 0.10 | 2150 | 0.10 | 3900 | 0.12 | 2850 | 0.12 | 1500 | 0.09 | 6600 | 0.15 | 5350 | 0.15 | 1450 | 0.09 |
| 9.0 | 2600 | 0.11 | 1900 | 0.11 | 3450 | 0.14 | 2550 | 0.14 | 1350 | 0.10 | 5900 | 0.17 | 4750 | 0.17 | 1300 | 0.10 |
| 10.0 | 2350 | 0.12 | 1700 | 0.12 | 3100 | 0.16 | 2300 | 0.16 | 1200 | 0.11 | 5300 | 0.19 | 4250 | 0.19 | 1200 | 0.11 |
| 11.0 | 2150 | 0.13 | 1600 | 0.13 | 2850 | 0.18 | 2100 | 0.18 | 1100 | 0.12 | 4850 | 0.21 | 3900 | 0.21 | 1050 | 0.12 |
| 12.0 | 1950 | 0.14 | 1450 | 0.14 | 2600 | 0.20 | 1900 | 0.20 | 1000 | 0.13 | 4450 | 0.23 | 3550 | 0.23 | 980 | 0.13 |
| 13.0 | 1800 | 0.16 | 1350 | 0.16 | 2400 | 0.20 | 1750 | 0.20 | 950 | 0.13 | 4100 | 0.25 | 3300 | 0.25 | 905 | 0.13 |

N = R.P.M
S = Feed per Revolution (mm/rev.)