

# HSS



Being the best through innovation



# GOLD-P DRILLS

## GOLD-P BOHRER

- GOLD-P COATING, HSS & HSS-E
- TiN-teilbeschichtete Bohrer, HSS und HSS-E

# SELECTION GUIDE

## GOLD-P DRILLS (GOLD-P COATED)

Competitive price and same performance as full TiN coating

| ITEM                             | MODEL   | DESCRIPTION  | SIZE  |   | PAGE  |            |
|----------------------------------|---|--|---|---|-------|------------|
|                                  |   |  | MIN   | MAX   |       |            |
| <b>D1GP125</b>                   |    | HSS STRAIGHT SHANK DRILLS, GOLD-P COATED<br>HSS SPIRALBOHRER, GOLD-P BESCHICHTET   | <i>JOBBER</i><br><i>KURZ</i>  | D1.0  | D13.0 | <b>160</b> |
| <b>D1GP165</b>                   |    | HSS STRAIGHT SHANK DRILLS, GOLD-P COATED<br>HSS SPIRALBOHRER, GOLD-P BESCHICHTET   | <i>JOBBER</i><br><i>KURZ</i>  | D1.6  | D13.0 | <b>162</b> |
| <b>DLGP195</b>                   |    | HSS-E STRAIGHT SHANK DRILLS, GOLD-P COATED<br>HSS-E SPIRALBOHRER, GOLD-P BESCHICHTET   | <i>JOBBER</i><br><i>KURZ</i>  | D1.0  | D13.0 | <b>164</b> |
| <b>DLGP506</b>                   |    | HSS-E DH100 STRAIGHT SHANK DRILLS for DEEP HOLES, GOLD-P COATED<br>HSS-E DH100 SPIRALBOHRER, f r TIEFLOCH mit ZYLINDERSCHAFT, GOLD-P BESCHICHTET | <i>JOBBER</i><br><i>KURZ</i>  | D2.0  | D13.0 | <b>166</b> |
| <b>GOLD-P<br/>DRILL<br/>SETS</b> | 1.0mm ~ 10.0mm<br>× 0.5mm STEP<br>SET1(19PCS)<br> | 1.0mm ~ 13.0mm<br>× 0.5mm STEP<br>SET2(25PCS)<br>              | 1.0mm ~ 10.5mm<br>× 0.5mm STEP<br>+3.3 +4.2<br>+6.8 +10.2<br>SET3(24PCS)<br> | 1.0mm ~ 10.0mm<br>× 0.1mm STEP<br>SET4(91PCS)<br> |       | <b>168</b> |
|                                  | RECOMMENDED CUTTING CONDITIONS<br>EMPFOHLENE SCHNEIDKONDITIONEN   |  |   |   |       | <b>169</b> |

# HSS GOLD-P DRILLS

◎ : Excellent  
○ : Good

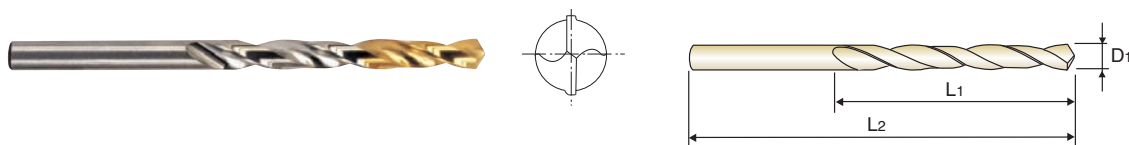
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |        | Cast Iron | Aluminum | Stainless Steels | Titanium | Mild Steels | Copper | Bronze | CFRP |
|---------------|--------------|--------------------|-----------------|--------|-----------|----------|------------------|----------|-------------|--------|--------|------|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

**HSS STRAIGHT SHANK DRILLS, GOLD-P COATED**  
**HSS SPIRALBOHRER, GOLD-P BESCHICHTET**

**JOBBER**  
**KURZ**

- ▶ **Flute Geometry** : Right hand helix
- ▶ **Point Angle** : 118°, Normal point
- ▶ **Surface treatment** : Bright body, TiN coating on working area
- ▶ **Application** : Drilling steels, Cast steels alloyed and Non-alloyed, Grey cast iron, Graphite, Malleable cast iron

- ▶ **Nutenform** : Rechtsspirale
- ▶ **Spitzenwinkel** : 118° Normalanschliff
- ▶ **Oberfläche** : Blank mit TiN-Beschichtung im Arbeitsbereich
- ▶ **Anwendung** : Stahl, legierter und unlegierter Stahlguss, Grauguss, Graphit, Temperguss



Unit : mm

| EDP No.    | Drill Diameter | Flute Length | Overall Length | EDP No.    | Drill Diameter | Flute Length | Overall Length |
|------------|----------------|--------------|----------------|------------|----------------|--------------|----------------|
|            | D1             | L1           | L2             |            | D1             | L1           | L2             |
| D1GP125010 | 1.0            | 12           | 34             | D1GP125041 | 4.1            | 43           | 75             |
| D1GP125011 | 1.1            | 14           | 36             | D1GP125042 | 4.2            | 43           | 75             |
| D1GP125012 | 1.2            | 16           | 38             | D1GP125043 | 4.3            | 47           | 80             |
| D1GP125013 | 1.3            | 16           | 38             | D1GP125044 | 4.4            | 47           | 80             |
| D1GP125014 | 1.4            | 18           | 40             | D1GP125045 | 4.5            | 47           | 80             |
| D1GP125015 | 1.5            | 18           | 40             | D1GP125046 | 4.6            | 47           | 80             |
| D1GP125016 | 1.6            | 20           | 43             | D1GP125047 | 4.7            | 47           | 80             |
| D1GP125017 | 1.7            | 20           | 43             | D1GP125048 | 4.8            | 52           | 86             |
| D1GP125018 | 1.8            | 22           | 46             | D1GP125049 | 4.9            | 52           | 86             |
| D1GP125019 | 1.9            | 22           | 46             | D1GP125050 | 5.0            | 52           | 86             |
| D1GP125020 | 2.0            | 24           | 49             | D1GP125051 | 5.1            | 52           | 86             |
| D1GP125021 | 2.1            | 24           | 49             | D1GP125052 | 5.2            | 52           | 86             |
| D1GP125022 | 2.2            | 27           | 53             | D1GP125053 | 5.3            | 52           | 86             |
| D1GP125023 | 2.3            | 27           | 53             | D1GP125054 | 5.4            | 57           | 93             |
| D1GP125024 | 2.4            | 30           | 57             | D1GP125055 | 5.5            | 57           | 93             |
| D1GP125025 | 2.5            | 30           | 57             | D1GP125056 | 5.6            | 57           | 93             |
| D1GP125026 | 2.6            | 30           | 57             | D1GP125057 | 5.7            | 57           | 93             |
| D1GP125027 | 2.7            | 33           | 61             | D1GP125058 | 5.8            | 57           | 93             |
| D1GP125028 | 2.8            | 33           | 61             | D1GP125059 | 5.9            | 57           | 93             |
| D1GP125029 | 2.9            | 33           | 61             | D1GP125060 | 6.0            | 57           | 93             |
| D1GP125030 | 3.0            | 33           | 61             | D1GP125061 | 6.1            | 63           | 101            |
| D1GP125031 | 3.1            | 36           | 65             | D1GP125062 | 6.2            | 63           | 101            |
| D1GP125032 | 3.2            | 36           | 65             | D1GP125063 | 6.3            | 63           | 101            |
| D1GP125033 | 3.3            | 36           | 65             | D1GP125064 | 6.4            | 63           | 101            |
| D1GP125034 | 3.4            | 39           | 70             | D1GP125065 | 6.5            | 63           | 101            |
| D1GP125035 | 3.5            | 39           | 70             | D1GP125066 | 6.6            | 63           | 101            |
| D1GP125036 | 3.6            | 39           | 70             | D1GP125067 | 6.7            | 63           | 101            |
| D1GP125037 | 3.7            | 39           | 70             | D1GP125068 | 6.8            | 69           | 109            |
| D1GP125038 | 3.8            | 43           | 75             | D1GP125069 | 6.9            | 69           | 109            |
| D1GP125039 | 3.9            | 43           | 75             | D1GP125070 | 7.0            | 69           | 109            |
| D1GP125040 | 4.0            | 43           | 75             | D1GP125071 | 7.1            | 69           | 109            |

◎ : 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~ |           |          |                  |          |             |        |        |      |
| ◎             | ◎            |                    |                 |        |           | ○        | ○                | ○        | ○           |        |        |      |



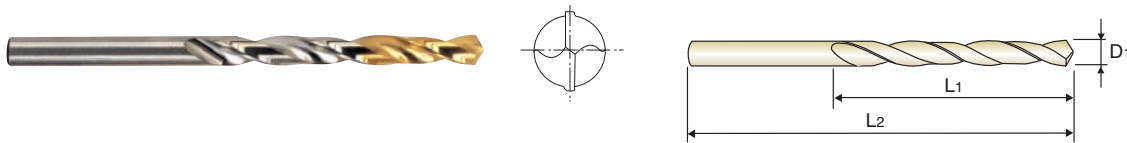
### HSS STRAIGHT SHANK DRILLS, GOLD-P COATED HSS SPIRALBOHRER, GOLD-P BESCHICHTET

JOBBER

KURZ

- ▶ **Flute Geometry** : Right hand helix
- ▶ **Point Angle** : 118°, Normal point
- ▶ **Surface treatment** : Bright body, TiN coating on working area
- ▶ **Application** : Drilling steels, Cast steels alloyed and Non-alloyed, Grey cast iron, Graphite, Malleable cast iron

- ▶ **Nutenform** : Rechtsspirale
- ▶ **Spitzenwinkel** : 118° Normalanschliff
- ▶ **Oberfläche** : Blank mit TiN-Beschichtung im Arbeitsbereich
- ▶ **Anwendung** : Stahl, legierter und unlegierter Stahlguss, Grauguss, Graphit, Temperguss



P.169

Unit : mm

| EDP No.    | Drill Diameter | Flute Length | Overall Length | EDP No.    | Drill Diameter | Flute Length | Overall Length |
|------------|----------------|--------------|----------------|------------|----------------|--------------|----------------|
|            | D1             | L1           | L2             |            | D1             | L1           | L2             |
| D1GP125072 | 7.2            | 69           | 109            | D1GP125102 | 10.2           | 87           | 133            |
| D1GP125073 | 7.3            | 69           | 109            | D1GP125103 | 10.3           | 87           | 133            |
| D1GP125074 | 7.4            | 69           | 109            | D1GP125104 | 10.4           | 87           | 133            |
| D1GP125075 | 7.5            | 69           | 109            | D1GP125105 | 10.5           | 87           | 133            |
| D1GP125076 | 7.6            | 75           | 117            | D1GP125106 | 10.6           | 87           | 133            |
| D1GP125077 | 7.7            | 75           | 117            | D1GP125107 | 10.7           | 94           | 142            |
| D1GP125078 | 7.8            | 75           | 117            | D1GP125108 | 10.8           | 94           | 142            |
| D1GP125079 | 7.9            | 75           | 117            | D1GP125109 | 10.9           | 94           | 142            |
| D1GP125080 | 8.0            | 75           | 117            | D1GP125110 | 11.0           | 94           | 142            |
| D1GP125081 | 8.1            | 75           | 117            | D1GP125111 | 11.1           | 94           | 142            |
| D1GP125082 | 8.2            | 75           | 117            | D1GP125112 | 11.2           | 94           | 142            |
| D1GP125083 | 8.3            | 75           | 117            | D1GP125113 | 11.3           | 94           | 142            |
| D1GP125084 | 8.4            | 75           | 117            | D1GP125114 | 11.4           | 94           | 142            |
| D1GP125085 | 8.5            | 75           | 117            | D1GP125115 | 11.5           | 94           | 142            |
| D1GP125086 | 8.6            | 81           | 125            | D1GP125116 | 11.6           | 94           | 142            |
| D1GP125087 | 8.7            | 81           | 125            | D1GP125117 | 11.7           | 94           | 142            |
| D1GP125088 | 8.8            | 81           | 125            | D1GP125118 | 11.8           | 94           | 142            |
| D1GP125089 | 8.9            | 81           | 125            | D1GP125119 | 11.9           | 101          | 151            |
| D1GP125090 | 9.0            | 81           | 125            | D1GP125120 | 12.0           | 101          | 151            |
| D1GP125091 | 9.1            | 81           | 125            | D1GP125121 | 12.1           | 101          | 151            |
| D1GP125092 | 9.2            | 81           | 125            | D1GP125122 | 12.2           | 101          | 151            |
| D1GP125093 | 9.3            | 81           | 125            | D1GP125123 | 12.3           | 101          | 151            |
| D1GP125094 | 9.4            | 81           | 125            | D1GP125124 | 12.4           | 101          | 151            |
| D1GP125095 | 9.5            | 81           | 125            | D1GP125125 | 12.5           | 101          | 151            |
| D1GP125096 | 9.6            | 87           | 133            | D1GP125126 | 12.6           | 101          | 151            |
| D1GP125097 | 9.7            | 87           | 133            | D1GP125127 | 12.7           | 101          | 151            |
| D1GP125098 | 9.8            | 87           | 133            | D1GP125128 | 12.8           | 101          | 151            |
| D1GP125099 | 9.9            | 87           | 133            | D1GP125129 | 12.9           | 101          | 151            |
| D1GP125100 | 10.0           | 87           | 133            | D1GP125130 | 13.0           | 101          | 151            |
| D1GP125101 | 10.1           | 87           | 133            |            |                |              |                |

◎ : Excellent ○ : Good

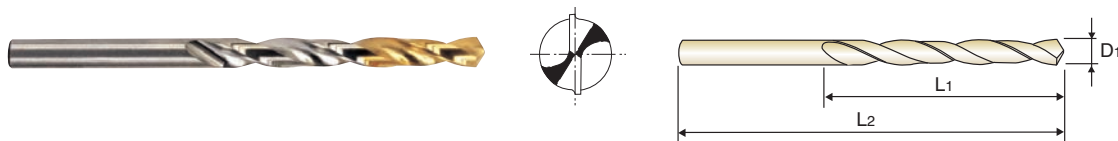
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |        | Cast Iron | Aluminum | Stainless Steels | Titanium | Mild Steels | Copper | Bronze | CFRP |
|---------------|--------------|--------------------|-----------------|--------|-----------|----------|------------------|----------|-------------|--------|--------|------|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

**HSS STRAIGHT SHANK DRILLS, GOLD-P COATED**  
**HSS SPIRALBOHRER, GOLD-P BESCHICHTET**

**JOBBER**  
**KURZ**

- ▶ **Flute Geometry** : Right hand helix
- ▶ **Point Angle** : 118°, Split point
- ▶ **Surface treatment** : Bright body, TiN coating on working area
- ▶ **Application** : Drilling steels, Cast steels alloyed and Non-alloyed, Grey cast iron, Graphite, Malleable cast iron

- ▶ **Nutenform** : Rechtsspirale
- ▶ **Spitzenwinkel** : 118° Kreuzanschliff
- ▶ **Oberfläche** : Blank mit TiN-Beschichtung im Arbeitsbereich
- ▶ **Anwendung** : Stahl, legierter und unlegierter Stahlguss, Grauguss, Graphit, Temperguss



Unit : mm

| EDP No.    | Drill Diameter | Flute Length | Overall Length | EDP No.    | Drill Diameter | Flute Length | Overall Length |
|------------|----------------|--------------|----------------|------------|----------------|--------------|----------------|
|            | D1             | L1           | L2             |            | D1             | L1           | L2             |
| D1GP165016 | 1.6            | 20           | 43             | D1GP165046 | 4.6            | 47           | 80             |
| D1GP165017 | 1.7            | 20           | 43             | D1GP165047 | 4.7            | 47           | 80             |
| D1GP165018 | 1.8            | 22           | 46             | D1GP165048 | 4.8            | 52           | 86             |
| D1GP165019 | 1.9            | 22           | 46             | D1GP165049 | 4.9            | 52           | 86             |
| D1GP165020 | 2.0            | 24           | 49             | D1GP165050 | 5.0            | 52           | 86             |
| D1GP165021 | 2.1            | 24           | 49             | D1GP165051 | 5.1            | 52           | 86             |
| D1GP165022 | 2.2            | 27           | 53             | D1GP165052 | 5.2            | 52           | 86             |
| D1GP165023 | 2.3            | 27           | 53             | D1GP165053 | 5.3            | 52           | 86             |
| D1GP165024 | 2.4            | 30           | 57             | D1GP165054 | 5.4            | 57           | 93             |
| D1GP165025 | 2.5            | 30           | 57             | D1GP165055 | 5.5            | 57           | 93             |
| D1GP165026 | 2.6            | 30           | 57             | D1GP165056 | 5.6            | 57           | 93             |
| D1GP165027 | 2.7            | 33           | 61             | D1GP165057 | 5.7            | 57           | 93             |
| D1GP165028 | 2.8            | 33           | 61             | D1GP165058 | 5.8            | 57           | 93             |
| D1GP165029 | 2.9            | 33           | 61             | D1GP165059 | 5.9            | 57           | 93             |
| D1GP165030 | 3.0            | 33           | 61             | D1GP165060 | 6.0            | 57           | 93             |
| D1GP165031 | 3.1            | 36           | 65             | D1GP165061 | 6.1            | 63           | 101            |
| D1GP165032 | 3.2            | 36           | 65             | D1GP165062 | 6.2            | 63           | 101            |
| D1GP165033 | 3.3            | 36           | 65             | D1GP165063 | 6.3            | 63           | 101            |
| D1GP165034 | 3.4            | 39           | 70             | D1GP165064 | 6.4            | 63           | 101            |
| D1GP165035 | 3.5            | 39           | 70             | D1GP165065 | 6.5            | 63           | 101            |
| D1GP165036 | 3.6            | 39           | 70             | D1GP165066 | 6.6            | 63           | 101            |
| D1GP165037 | 3.7            | 39           | 70             | D1GP165067 | 6.7            | 63           | 101            |
| D1GP165038 | 3.8            | 43           | 75             | D1GP165068 | 6.8            | 69           | 109            |
| D1GP165039 | 3.9            | 43           | 75             | D1GP165069 | 6.9            | 69           | 109            |
| D1GP165040 | 4.0            | 43           | 75             | D1GP165070 | 7.0            | 69           | 109            |
| D1GP165041 | 4.1            | 43           | 75             | D1GP165071 | 7.1            | 69           | 109            |
| D1GP165042 | 4.2            | 43           | 75             | D1GP165072 | 7.2            | 69           | 109            |
| D1GP165043 | 4.3            | 47           | 80             | D1GP165073 | 7.3            | 69           | 109            |
| D1GP165044 | 4.4            | 47           | 80             | D1GP165074 | 7.4            | 69           | 109            |
| D1GP165045 | 4.5            | 47           | 80             | D1GP165075 | 7.5            | 69           | 109            |

◎ : 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~ |           |          |                  |          |             |        |        |      |
| ◎             | ◎            |                    |                 |        |           | ○        | ○                | ○        | ○           |        |        |      |



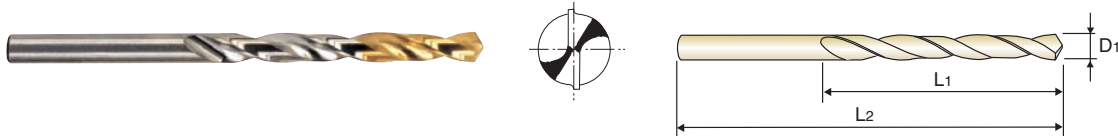
### HSS STRAIGHT SHANK DRILLS, GOLD-P COATED HSS SPIRALBOHRER, GOLD-P BESCHICHTET

JOBBER

KURZ

- ▶ **Flute Geometry** : Right hand helix
- ▶ **Point Angle** : 118°, Split point
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Unit : mm

| EDP No.    | Drill Diameter | Flute Length | Overall Length | EDP No.    | Drill Diameter | Flute Length | Overall Length |
|------------|----------------|--------------|----------------|------------|----------------|--------------|----------------|
|            | D1             | L1           | L2             |            | D1             | L1           | L2             |
| D1GP165076 | 7.6            | 75           | 117            | D1GP165104 | 10.4           | 87           | 133            |
| D1GP165077 | 7.7            | 75           | 117            | D1GP165105 | 10.5           | 87           | 133            |
| D1GP165078 | 7.8            | 75           | 117            | D1GP165106 | 10.6           | 87           | 133            |
| D1GP165079 | 7.9            | 75           | 117            | D1GP165107 | 10.7           | 94           | 142            |
| D1GP165080 | 8.0            | 75           | 117            | D1GP165108 | 10.8           | 94           | 142            |
| D1GP165081 | 8.1            | 75           | 117            | D1GP165109 | 10.9           | 94           | 142            |
| D1GP165082 | 8.2            | 75           | 117            | D1GP165110 | 11.0           | 94           | 142            |
| D1GP165083 | 8.3            | 75           | 117            | D1GP165111 | 11.1           | 94           | 142            |
| D1GP165084 | 8.4            | 75           | 117            | D1GP165112 | 11.2           | 94           | 142            |
| D1GP165085 | 8.5            | 75           | 117            | D1GP165113 | 11.3           | 94           | 142            |
| D1GP165086 | 8.6            | 81           | 125            | D1GP165114 | 11.4           | 94           | 142            |
| D1GP165087 | 8.7            | 81           | 125            | D1GP165115 | 11.5           | 94           | 142            |
| D1GP165088 | 8.8            | 81           | 125            | D1GP165116 | 11.6           | 94           | 142            |
| D1GP165089 | 8.9            | 81           | 125            | D1GP165117 | 11.7           | 94           | 142            |
| D1GP165090 | 9.0            | 81           | 125            | D1GP165118 | 11.8           | 94           | 142            |
| D1GP165091 | 9.1            | 81           | 125            | D1GP165119 | 11.9           | 101          | 151            |
| D1GP165092 | 9.2            | 81           | 125            | D1GP165120 | 12.0           | 101          | 151            |
| D1GP165093 | 9.3            | 81           | 125            | D1GP165121 | 12.1           | 101          | 151            |
| D1GP165094 | 9.4            | 81           | 125            | D1GP165122 | 12.2           | 101          | 151            |
| D1GP165095 | 9.5            | 81           | 125            | D1GP165123 | 12.3           | 101          | 151            |
| D1GP165096 | 9.6            | 87           | 133            | D1GP165124 | 12.4           | 101          | 151            |
| D1GP165097 | 9.7            | 87           | 133            | D1GP165125 | 12.5           | 101          | 151            |
| D1GP165098 | 9.8            | 87           | 133            | D1GP165126 | 12.6           | 101          | 151            |
| D1GP165099 | 9.9            | 87           | 133            | D1GP165127 | 12.7           | 101          | 151            |
| D1GP165100 | 10.0           | 87           | 133            | D1GP165128 | 12.8           | 101          | 151            |
| D1GP165101 | 10.1           | 87           | 133            | D1GP165129 | 12.9           | 101          | 151            |
| D1GP165102 | 10.2           | 87           | 133            | D1GP165130 | 13.0           | 101          | 151            |
| D1GP165103 | 10.3           | 87           | 133            |            |                |              |                |

◎ : 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~ |           |          |                  |          |             |        |        |      |
| ◎             | ◎            |                    |                 |        |           | ○        | ○                | ○        | ○           |        |        |      |

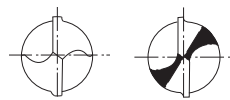
**HSS-E STRAIGHT SHANK DRILLS, GOLD-P COATED**  
**HSS-E SPIRALBOHRER, GOLD-P BESCHICHTET**

**JOBBER**

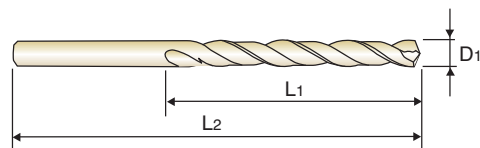
**KURZ**

- ▶ **Flute Geometry** : Right hand helix
- ▶ **Point Angle** : 135°, under 1.6mm : Normal point  
1.6mm & over : Split point
- ▶ **Surface treatment**: Bright body, TiN coating on working area
- ▶ **Application** : Drilling stainless steels, difficult to cut materials such as titanium alloys and inconel.

- ▶ **Nutenform** : Rechtsspirale
- ▶ **Spitzenwinkel** : 135°, unter 1.6mm : Normalanschliff  
1.6mm & über : Kreuzanschliff
- ▶ **Oberfläche** : Blank mit TiN-Beschichtung im Arbeitsbereich
- ▶ **Anwendung** : Tiefe Bohrungen in unlegierten und legierten Stählen, Grauguss, Temperguss, Aluminium- und Magnesiumlegierungen



under 1.6mm 1.6mm & over



DIN 338
HSS-E
N 33°
h8
135°
P.169

Unit : mm

| EDP No.    | Drill Diameter | Flute Length | Overall Length | EDP No.    | Drill Diameter | Flute Length | Overall Length |
|------------|----------------|--------------|----------------|------------|----------------|--------------|----------------|
|            | D1             | L1           | L2             |            | D1             | L1           | L2             |
| DLGP195010 | 1.0            | 12           | 34             | DLGP195041 | 4.1            | 43           | 75             |
| DLGP195011 | 1.1            | 14           | 36             | DLGP195042 | 4.2            | 43           | 75             |
| DLGP195012 | 1.2            | 16           | 38             | DLGP195043 | 4.3            | 47           | 80             |
| DLGP195013 | 1.3            | 16           | 38             | DLGP195044 | 4.4            | 47           | 80             |
| DLGP195014 | 1.4            | 18           | 40             | DLGP195045 | 4.5            | 47           | 80             |
| DLGP195015 | 1.5            | 18           | 40             | DLGP195046 | 4.6            | 47           | 80             |
| DLGP195016 | 1.6            | 20           | 43             | DLGP195047 | 4.7            | 47           | 80             |
| DLGP195017 | 1.7            | 20           | 43             | DLGP195048 | 4.8            | 52           | 86             |
| DLGP195018 | 1.8            | 22           | 46             | DLGP195049 | 4.9            | 52           | 86             |
| DLGP195019 | 1.9            | 22           | 46             | DLGP195050 | 5.0            | 52           | 86             |
| DLGP195020 | 2.0            | 24           | 49             | DLGP195051 | 5.1            | 52           | 86             |
| DLGP195021 | 2.1            | 24           | 49             | DLGP195052 | 5.2            | 52           | 86             |
| DLGP195022 | 2.2            | 27           | 53             | DLGP195053 | 5.3            | 52           | 86             |
| DLGP195023 | 2.3            | 27           | 53             | DLGP195054 | 5.4            | 57           | 93             |
| DLGP195024 | 2.4            | 30           | 57             | DLGP195055 | 5.5            | 57           | 93             |
| DLGP195025 | 2.5            | 30           | 57             | DLGP195056 | 5.6            | 57           | 93             |
| DLGP195026 | 2.6            | 30           | 57             | DLGP195057 | 5.7            | 57           | 93             |
| DLGP195027 | 2.7            | 33           | 61             | DLGP195058 | 5.8            | 57           | 93             |
| DLGP195028 | 2.8            | 33           | 61             | DLGP195059 | 5.9            | 57           | 93             |
| DLGP195029 | 2.9            | 33           | 61             | DLGP195060 | 6.0            | 57           | 93             |
| DLGP195030 | 3.0            | 33           | 61             | DLGP195061 | 6.1            | 63           | 101            |
| DLGP195031 | 3.1            | 36           | 65             | DLGP195062 | 6.2            | 63           | 101            |
| DLGP195032 | 3.2            | 36           | 65             | DLGP195063 | 6.3            | 63           | 101            |
| DLGP195033 | 3.3            | 36           | 65             | DLGP195064 | 6.4            | 63           | 101            |
| DLGP195034 | 3.4            | 39           | 70             | DLGP195065 | 6.5            | 63           | 101            |
| DLGP195035 | 3.5            | 39           | 70             | DLGP195066 | 6.6            | 63           | 101            |
| DLGP195036 | 3.6            | 39           | 70             | DLGP195067 | 6.7            | 63           | 101            |
| DLGP195037 | 3.7            | 39           | 70             | DLGP195068 | 6.8            | 69           | 109            |
| DLGP195038 | 3.8            | 43           | 75             | DLGP195069 | 6.9            | 69           | 109            |
| DLGP195039 | 3.9            | 43           | 75             | DLGP195070 | 7.0            | 69           | 109            |
| DLGP195040 | 4.0            | 43           | 75             | DLGP195071 | 7.1            | 69           | 109            |

◎ : 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~ |           |          |                  |          |             |        |        |      |
| ◎             | ◎            |                    |                 |        |           | ○        | ○                | ○        | ○           |        |        |      |





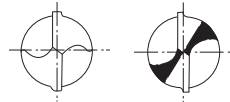
### HSS-E STRAIGHT SHANK DRILLS, GOLD-P COATED HSS-E SPIRALBOHRER, GOLD-P BESCHICHTET

JOBBER

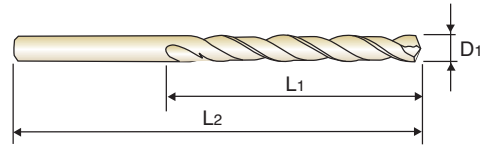
KURZ

- ▶ **Flute Geometry** : Right hand helix
- ▶ **Point Angle** : 135°, under 1.6mm : Normal point  
1.6mm & over : Split point
- ▶ **Surface treatment**: Bright body, TiN coating on working area
- ▶ **Application** : Drilling stainless steels, difficult to cut materials such as titanium alloys and inconel.

- ▶ **Nutenform** : Rechtsspirale
- ▶ **Spitzenwinkel** : 135°, unter 1.6mm : Normalanschliff  
1.6mm & über : Kreuzanschliff
- ▶ **Oberfläche** : Blank mit TiN-Beschichtung im Arbeitsbereich
- ▶ **Anwendung** : Tiefe Bohrungen in unlegierten und legierten Stählen, Grauguss, Temperguss, Aluminium- und Magnesiumlegierungen



under 1.6mm 1.6mm & over



P.169

Unit : mm

| EDP No.    | Drill Diameter | Flute Length | Overall Length | EDP No.    | Drill Diameter | Flute Length | Overall Length |
|------------|----------------|--------------|----------------|------------|----------------|--------------|----------------|
|            | D1             | L1           | L2             |            | D1             | L1           | L2             |
| DLGP195072 | 7.2            | 69           | 109            | DLGP195102 | 10.2           | 87           | 133            |
| DLGP195073 | 7.3            | 69           | 109            | DLGP195103 | 10.3           | 87           | 133            |
| DLGP195074 | 7.4            | 69           | 109            | DLGP195104 | 10.4           | 87           | 133            |
| DLGP195075 | 7.5            | 69           | 109            | DLGP195105 | 10.5           | 87           | 133            |
| DLGP195076 | 7.6            | 75           | 117            | DLGP195106 | 10.6           | 87           | 133            |
| DLGP195077 | 7.7            | 75           | 117            | DLGP195107 | 10.7           | 94           | 142            |
| DLGP195078 | 7.8            | 75           | 117            | DLGP195108 | 10.8           | 94           | 142            |
| DLGP195079 | 7.9            | 75           | 117            | DLGP195109 | 10.9           | 94           | 142            |
| DLGP195080 | 8.0            | 75           | 117            | DLGP195110 | 11.0           | 94           | 142            |
| DLGP195081 | 8.1            | 75           | 117            | DLGP195111 | 11.1           | 94           | 142            |
| DLGP195082 | 8.2            | 75           | 117            | DLGP195112 | 11.2           | 94           | 142            |
| DLGP195083 | 8.3            | 75           | 117            | DLGP195113 | 11.3           | 94           | 142            |
| DLGP195084 | 8.4            | 75           | 117            | DLGP195114 | 11.4           | 94           | 142            |
| DLGP195085 | 8.5            | 75           | 117            | DLGP195115 | 11.5           | 94           | 142            |
| DLGP195086 | 8.6            | 81           | 125            | DLGP195116 | 11.6           | 94           | 142            |
| DLGP195087 | 8.7            | 81           | 125            | DLGP195117 | 11.7           | 94           | 142            |
| DLGP195088 | 8.8            | 81           | 125            | DLGP195118 | 11.8           | 94           | 142            |
| DLGP195089 | 8.9            | 81           | 125            | DLGP195119 | 11.9           | 101          | 151            |
| DLGP195090 | 9.0            | 81           | 125            | DLGP195120 | 12.0           | 101          | 151            |
| DLGP195091 | 9.1            | 81           | 125            | DLGP195121 | 12.1           | 101          | 151            |
| DLGP195092 | 9.2            | 81           | 125            | DLGP195122 | 12.2           | 101          | 151            |
| DLGP195093 | 9.3            | 81           | 125            | DLGP195123 | 12.3           | 101          | 151            |
| DLGP195094 | 9.4            | 81           | 125            | DLGP195124 | 12.4           | 101          | 151            |
| DLGP195095 | 9.5            | 81           | 125            | DLGP195125 | 12.5           | 101          | 151            |
| DLGP195096 | 9.6            | 87           | 133            | DLGP195126 | 12.6           | 101          | 151            |
| DLGP195097 | 9.7            | 87           | 133            | DLGP195127 | 12.7           | 101          | 151            |
| DLGP195098 | 9.8            | 87           | 133            | DLGP195128 | 12.8           | 101          | 151            |
| DLGP195099 | 9.9            | 87           | 133            | DLGP195129 | 12.9           | 101          | 151            |
| DLGP195100 | 10.0           | 87           | 133            | DLGP195130 | 13.0           | 101          | 151            |
| DLGP195101 | 10.1           | 87           | 133            |            |                |              |                |

◎ : 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~ |           |          |                  |          |             |        |        |      |
| ◎             | ◎            |                    |                 |        |           | ○        | ○                | ○        | ○           |        |        |      |

**HSS-E DH100 STRAIGHT SHANK DRILLS for DEEP HOLES, GOLD-P COATED**  
**HSS-E DH100 SPIRALBOHRER, für TIEFLOCH mit ZYLINDERSCHAFT, GOLD-P BESCHICHTET**

**JOBBER**  
**KURZ**

- ▶ **Flute Geometry** : Right hand, 38° helix, DH100 worm pattern type.
- ▶ **Point Angle** : 130°, Split point giving higher chip removal.
- ▶ **Surface treatment** : Bright body, TiN coating on working area.
- ▶ **Application** : Drilling deep holes in non alloy steels, alloy steels, grey cast iron, malleable cast iron, Special aluminum or magnesium alloys.

- ▶ **Nutenform** : 38° Rechtsspirale, DH 100 Flachnut
- ▶ **Spitzenwinkel** : Durch 130° Kreuzanschliff Gute Spanabfuhr
- ▶ **Oberfläche** : Blank mit TiN-Beschichtung im Arbeitsbereich
- ▶ **Anwendung** : Tiefe Bohrungen in unlegierten und legierten Stählen, Grauguss, Temperguss, Aluminium- und Magnesiumlegierungen



Unit : mm

| EDP No.    | Drill Diameter | Flute Length | Overall Length | EDP No.    | Drill Diameter | Flute Length | Overall Length |
|------------|----------------|--------------|----------------|------------|----------------|--------------|----------------|
|            | D1             | L1           | L2             |            | D1             | L1           | L2             |
| DLGP506020 | 2.0            | 24           | 49             | DLGP506049 | 4.9            | 52           | 86             |
| DLGP506021 | 2.1            | 24           | 49             | DLGP506050 | 5.0            | 52           | 86             |
| DLGP506022 | 2.2            | 27           | 53             | DLGP506051 | 5.1            | 52           | 86             |
| DLGP506023 | 2.3            | 27           | 53             | DLGP506052 | 5.2            | 52           | 86             |
| DLGP506024 | 2.4            | 30           | 57             | DLGP506053 | 5.3            | 52           | 86             |
| DLGP506025 | 2.5            | 30           | 57             | DLGP506054 | 5.4            | 57           | 93             |
| DLGP506026 | 2.6            | 30           | 57             | DLGP506055 | 5.5            | 57           | 93             |
| DLGP506027 | 2.7            | 33           | 61             | DLGP506056 | 5.6            | 57           | 93             |
| DLGP506028 | 2.8            | 33           | 61             | DLGP506057 | 5.7            | 57           | 93             |
| DLGP506029 | 2.9            | 33           | 61             | DLGP506058 | 5.8            | 57           | 93             |
| DLGP506030 | 3.0            | 33           | 61             | DLGP506059 | 5.9            | 57           | 93             |
| DLGP506031 | 3.1            | 36           | 65             | DLGP506060 | 6.0            | 57           | 93             |
| DLGP506032 | 3.2            | 36           | 65             | DLGP506061 | 6.1            | 63           | 101            |
| DLGP506033 | 3.3            | 36           | 65             | DLGP506062 | 6.2            | 63           | 101            |
| DLGP506034 | 3.4            | 39           | 70             | DLGP506063 | 6.3            | 63           | 101            |
| DLGP506035 | 3.5            | 39           | 70             | DLGP506064 | 6.4            | 63           | 101            |
| DLGP506036 | 3.6            | 39           | 70             | DLGP506065 | 6.5            | 63           | 101            |
| DLGP506037 | 3.7            | 39           | 70             | DLGP506066 | 6.6            | 63           | 101            |
| DLGP506038 | 3.8            | 43           | 75             | DLGP506067 | 6.7            | 63           | 101            |
| DLGP506039 | 3.9            | 43           | 75             | DLGP506068 | 6.8            | 69           | 109            |
| DLGP506040 | 4.0            | 43           | 75             | DLGP506069 | 6.9            | 69           | 109            |
| DLGP506041 | 4.1            | 43           | 75             | DLGP506070 | 7.0            | 69           | 109            |
| DLGP506042 | 4.2            | 43           | 75             | DLGP506071 | 7.1            | 69           | 109            |
| DLGP506043 | 4.3            | 47           | 80             | DLGP506072 | 7.2            | 69           | 109            |
| DLGP506044 | 4.4            | 47           | 80             | DLGP506073 | 7.3            | 69           | 109            |
| DLGP506045 | 4.5            | 47           | 80             | DLGP506074 | 7.4            | 69           | 109            |
| DLGP506046 | 4.6            | 47           | 80             | DLGP506075 | 7.5            | 69           | 109            |
| DLGP506047 | 4.7            | 47           | 80             | DLGP506076 | 7.6            | 75           | 117            |
| DLGP506048 | 4.8            | 52           | 86             | DLGP506077 | 7.7            | 75           | 117            |

| 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~ |           |          |                  |          |             |        |        |      |
| ◎             | ◎            |                    |                 |        | ○         | ○        |                  |          | ○           |        |        |      |

◎ : Excellent ○ : Good



### HSS-E DH100 STRAIGHT SHANK DRILLS for DEEP HOLES, GOLD-P COATED

**JOBBER**

### HSS-E DH100 SPIRALBOHRER, für TIEFLOCH mit ZYLINDERSCHAFT, GOLD-P BESCHICHTET

**KURZ**

- ▶ **Flute Geometry** : Right hand, 38° helix, DH100 worm pattern type.
- ▶ **Point Angle** : 130°, Split point giving higher chip removal.
- ▶ **Surface treatment** : Bright body, TiN coating on working area.
- ▶ **Application** : Drilling deep holes in non alloy steels, alloy steels, grey cast iron, malleable cast iron, Special aluminum or magnesium alloys.

- ▶ **Nutenform** : 38° Rechtsspirale, DH 100 Flachnut
- ▶ **Spitzenwinkel** : Durch 130° Kreuzanschliff Gute Spanabfuhr
- ▶ **Oberfläche** : Blank mit TiN-Beschichtung im Arbeitsbereich
- ▶ **Anwendung** : Tiefe Bohrungen in unlegierten und legierten Stählen, Grauguss, Temperguss, Aluminium- und Magnesiumlegierungen



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Unit : mm

| EDP No.    | Drill Diameter | Flute Length | Overall Length | EDP No.    | Drill Diameter | Flute Length | Overall Length |
|------------|----------------|--------------|----------------|------------|----------------|--------------|----------------|
|            | D1             | L1           | L2             |            | D1             | L1           | L2             |
| DLGP506078 | 7.8            | 75           | 117            | DLGP506105 | 10.5           | 87           | 133            |
| DLGP506079 | 7.9            | 75           | 117            | DLGP506106 | 10.6           | 87           | 133            |
| DLGP506080 | 8.0            | 75           | 117            | DLGP506107 | 10.7           | 94           | 142            |
| DLGP506081 | 8.1            | 75           | 117            | DLGP506108 | 10.8           | 94           | 142            |
| DLGP506082 | 8.2            | 75           | 117            | DLGP506109 | 10.9           | 94           | 142            |
| DLGP506083 | 8.3            | 75           | 117            | DLGP506110 | 11.0           | 94           | 142            |
| DLGP506084 | 8.4            | 75           | 117            | DLGP506111 | 11.1           | 94           | 142            |
| DLGP506085 | 8.5            | 75           | 117            | DLGP506112 | 11.2           | 94           | 142            |
| DLGP506086 | 8.6            | 81           | 125            | DLGP506113 | 11.3           | 94           | 142            |
| DLGP506087 | 8.7            | 81           | 125            | DLGP506114 | 11.4           | 94           | 142            |
| DLGP506088 | 8.8            | 81           | 125            | DLGP506115 | 11.5           | 94           | 142            |
| DLGP506089 | 8.9            | 81           | 125            | DLGP506116 | 11.6           | 94           | 142            |
| DLGP506090 | 9.0            | 81           | 125            | DLGP506117 | 11.7           | 94           | 142            |
| DLGP506091 | 9.1            | 81           | 125            | DLGP506118 | 11.8           | 94           | 142            |
| DLGP506092 | 9.2            | 81           | 125            | DLGP506119 | 11.9           | 101          | 151            |
| DLGP506093 | 9.3            | 81           | 125            | DLGP506120 | 12.0           | 101          | 151            |
| DLGP506094 | 9.4            | 81           | 125            | DLGP506121 | 12.1           | 101          | 151            |
| DLGP506095 | 9.5            | 81           | 125            | DLGP506122 | 12.2           | 101          | 151            |
| DLGP506096 | 9.6            | 87           | 133            | DLGP506123 | 12.3           | 101          | 151            |
| DLGP506097 | 9.7            | 87           | 133            | DLGP506124 | 12.4           | 101          | 151            |
| DLGP506098 | 9.8            | 87           | 133            | DLGP506125 | 12.5           | 101          | 151            |
| DLGP506099 | 9.9            | 87           | 133            | DLGP506126 | 12.6           | 101          | 151            |
| DLGP506100 | 10.0           | 87           | 133            | DLGP506127 | 12.7           | 101          | 151            |
| DLGP506101 | 10.1           | 87           | 133            | DLGP506128 | 12.8           | 101          | 151            |
| DLGP506102 | 10.2           | 87           | 133            | DLGP506129 | 12.9           | 101          | 151            |
| DLGP506103 | 10.3           | 87           | 133            | DLGP506130 | 13.0           | 101          | 151            |
| DLGP506104 | 10.4           | 87           | 133            |            |                |              |                |

◎ : 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~ |           |          |                  |          |             |        |        |      |
| ◎             | ◎            |                    |                 |        | ○         | ○        |                  |          | ○           |        |        |      |



**GOLD-P COATED DRILL SETS**  
**GOLD-P BESCHICHTET BOHRER SATS**



**DIN338 DRILL SETS JOBBER LENGTH Gold-P coated Drills**

| SET NO.            | DESCRIPTON   | SIZE  | Q'TY   |
|--------------------|--|---|--------|
| <b>D1GP165SET1</b> | HSS Straight Shank, Split Point (∅1.0 & ∅1.5 : NORMAL point)   | 1.0-10.0x0.5mm step                         | 19 pcs |
| <b>D1GP165SET2</b> | HSS Straight Shank, Split Point (∅1.0 & ∅1.5 : NORMAL point)   | 1.0-13.0x0.5mm step                         | 25 pcs |
| <b>D1GP165SET3</b> | HSS Straight Shank, Split Point (∅1.0 & ∅1.5 : NORMAL point)   | 1.0-10.5x0.5mm step<br>+3.3 +4.2 +6.8 +10.2 | 24 pcs |
| <b>DLGP195SET1</b> | HSS-E Straight Shank, Split Point (∅1.0 & ∅1.5 : NORMAL point) | 1.0-10.0x0.5mm step                         | 19 pcs |
| <b>DLGP195SET2</b> | HSS-E Straight Shank, Split Point (∅1.0 & ∅1.5 : NORMAL point) | 1.0-13.0x0.5mm step                         | 25 pcs |
| <b>DLGP195SET3</b> | HSS-E Straight Shank, Split Point (∅1.0 & ∅1.5 : NORMAL point) | 1.0-10.5x0.5mm step<br>+3.3 +4.2 +6.8 +10.2 | 24 pcs |
| <b>DLGPSET982</b>  | HSS-E Straight Shank, Split Point (∅1.0 & ∅1.5 : NORMAL point) | 1.0-10.0x0.1mm step                         | 91 pcs |

i-DREAM DRILLS

DREAM DRILLS -GENERAL

DREAM DRILLS -INOX

DREAM DRILLS -ALU

DREAM DRILLS -CFRP

DREAM DRILLS -MQL TYPE

DREAM DRILLS for HARDENED STEELS

GENERAL CARBIDE DRILLS

NC-SPOTTING DRILLS

CENTER DRILLS

MULTI-1 DRILLS

HPD DRILLS

GOLD-P DRILLS

STRAIGHT SHANK DRILLS

TAPER SHANK DRILLS

NC-SPOTTING DRILLS

CENTER DRILLS

SPADE DRILLS

TECHNICAL DATA

GOLD-P COATED DRILLS  
GOLD-P BESCHICHTET BOHRER

## D1GP125, D1GP165, DLGP195 SERIES

| WORK MATERIAL  | CARBON STEELS |                         | CARBON STEELS |                         | ALLOY STEELS |                              | STAINLESS STEELS |                         | TITANIUM ALLOYS |                         | ALUMINUM ALLOYS, ZINC ALLOYS |               | MAGNESIUM ALLOYS |               |      |
|----------------|---------------|-------------------------|---------------|-------------------------|--------------|------------------------------|------------------|-------------------------|-----------------|-------------------------|------------------------------|---------------|------------------|---------------|------|
|                | HARDNESS      |                         | ~ HRC23       |                         | ~ HRC23 ~ 34 |                              | HRC23            |                         |                 |                         |                              |               |                  |               |      |
| STRENGTH       |               | ~ 570 N/mm <sup>2</sup> |               | ~ 830 N/mm <sup>2</sup> |              | 810 ~ 1110 N/mm <sup>2</sup> |                  | ~ 830 N/mm <sup>2</sup> |                 | ~ 410 N/mm <sup>2</sup> |                              |               |                  |               |      |
| DRILLING SPEED |               | 35 ~ 45 m/min           |               | 30 ~ 40 m/min           |              | 20 ~ 25 m/min                |                  | 20 ~ 25 m/min           |                 | 20 ~ 25 m/min           |                              | 85 ~ 95 m/min |                  | 30 ~ 35 m/min |      |
| DIAMETER       | N             | S                       | N             | S                       | N            | S                            | N                | S                       | N               | S                       | N                            | S             | N                | S             |      |
|                | 1.0           | 14000                   | 0.02          | 12500                   | 0.02         | 7700                         | 0.02             | 7000                    | 0.02            | 8050                    | 0.02                         | 30000         | 0.02             | 11500         | 0.03 |
| 2.0            | 7000          | 0.06                    | 6100          | 0.06                    | 3850         | 0.06                         | 3500             | 0.06                    | 4050            | 0.06                    | 15000                        | 0.06          | 5800             | 0.09          |      |
| 3.0            | 4650          | 0.10                    | 4100          | 0.08                    | 2550         | 0.08                         | 2350             | 0.08                    | 2700            | 0.08                    | 9900                         | 0.10          | 3850             | 0.13          |      |
| 4.0            | 3500          | 0.11                    | 3050          | 0.11                    | 1950         | 0.10                         | 1750             | 0.10                    | 2000            | 0.09                    | 7450                         | 0.11          | 2900             | 0.15          |      |
| 5.0            | 2800          | 0.12                    | 2450          | 0.11                    | 1550         | 0.10                         | 1400             | 0.10                    | 1600            | 0.10                    | 5950                         | 0.12          | 2300             | 0.17          |      |
| 6.0            | 2350          | 0.14                    | 2050          | 0.13                    | 1300         | 0.12                         | 1150             | 0.12                    | 1350            | 0.12                    | 4950                         | 0.14          | 1950             | 0.19          |      |
| 7.0            | 2000          | 0.16                    | 1750          | 0.15                    | 1100         | 0.14                         | 1000             | 0.14                    | 1150            | 0.14                    | 4250                         | 0.16          | 1650             | 0.22          |      |
| 8.0            | 1750          | 0.18                    | 1550          | 0.18                    | 960          | 0.15                         | 875              | 0.15                    | 1000            | 0.15                    | 3700                         | 0.18          | 1450             | 0.24          |      |
| 9.0            | 1550          | 0.20                    | 1350          | 0.22                    | 855          | 0.18                         | 780              | 0.18                    | 895             | 0.17                    | 3300                         | 0.20          | 1280             | 0.27          |      |
| 10.0           | 1400          | 0.21                    | 1250          | 0.22                    | 770          | 0.18                         | 700              | 0.18                    | 805             | 0.18                    | 3000                         | 0.23          | 1150             | 0.29          |      |
| 11.0           | 1250          | 0.22                    | 1100          | 0.22                    | 700          | 0.18                         | 650              | 0.18                    | 730             | 0.18                    | 2700                         | 0.23          | 1050             | 0.30          |      |
| 12.0           | 1150          | 0.23                    | 1000          | 0.22                    | 650          | 0.20                         | 585              | 0.20                    | 670             | 0.20                    | 2480                         | 0.23          | 960              | 0.31          |      |
| 13.0           | 1050          | 0.23                    | 950           | 0.22                    | 595          | 0.20                         | 540              | 0.20                    | 620             | 0.20                    | 2300                         | 0.23          | 890              | 0.31          |      |

N = R.P.M

S = Feed per Revolution (mm/rev.)

GOLD-P COATED DRILLS for DEEP HOLES  
GOLD-P BESCHICHTET BOHRER für TIEFLOCH MIT ZYLINDERSCHAFT

## DLGP506 SERIES

| WORK MATERIAL  | CARBON STEELS<br>ALLOY STEELS |                              | TOOL STEELS<br>HARDENED STEELS |                              | SOFT GREY CAST IRON |               | HARD GREY CAST IRON |               |      |
|----------------|-------------------------------|------------------------------|--------------------------------|------------------------------|---------------------|---------------|---------------------|---------------|------|
|                | HARDNESS                      |                              | HRC15 ~ 30                     |                              | HRC20 ~ 40          |               |                     |               |      |
| STRENGTH       |                               | 700 ~ 1000 N/mm <sup>2</sup> |                                | 800 ~ 1200 N/mm <sup>2</sup> |                     |               |                     |               |      |
| DRILLING SPEED |                               | 23 ~ 28 m/min                |                                | 15 ~ 20 m/min                |                     | 40 ~ 50 m/min |                     | 25 ~ 30 m/min |      |
| DIAMETER       | N                             | S                            | N                              | S                            | N                   | S             | N                   | S             |      |
|                | 1.0                           | 8750                         | 0.02                           | 6300                         | 0.02                | 16000         | 0.02                | 9800          | 0.02 |
| 2.0            | 4400                          | 0.06                         | 3150                           | 0.06                         | 7900                | 0.07          | 4900                | 0.07          |      |
| 3.0            | 2900                          | 0.08                         | 2100                           | 0.08                         | 5250                | 0.11          | 3250                | 0.11          |      |
| 4.0            | 2200                          | 0.09                         | 1600                           | 0.09                         | 3950                | 0.14          | 2450                | 0.14          |      |
| 5.0            | 1750                          | 0.10                         | 1250                           | 0.10                         | 3150                | 0.14          | 1950                | 0.14          |      |
| 6.0            | 1450                          | 0.12                         | 1050                           | 0.12                         | 2650                | 0.18          | 1650                | 0.18          |      |
| 7.0            | 1250                          | 0.14                         | 900                            | 0.14                         | 2250                | 0.20          | 1400                | 0.20          |      |
| 8.0            | 1100                          | 0.15                         | 790                            | 0.15                         | 1950                | 0.22          | 1250                | 0.22          |      |
| 9.0            | 975                           | 0.17                         | 700                            | 0.17                         | 1750                | 0.24          | 1100                | 0.24          |      |
| 10.0           | 875                           | 0.18                         | 630                            | 0.18                         | 1600                | 0.28          | 980                 | 0.28          |      |
| 11.0           | 800                           | 0.20                         | 575                            | 0.20                         | 1450                | 0.28          | 890                 | 0.28          |      |
| 12.0           | 730                           | 0.20                         | 525                            | 0.20                         | 1300                | 0.28          | 815                 | 0.28          |      |
| 13.0           | 675                           | 0.20                         | 485                            | 0.20                         | 1200                | 0.28          | 755                 | 0.28          |      |

N = R.P.M

S = Feed per Revolution (mm/rev.)