

**GD13**

METRIC & INCH



# Gold-P Drills



*Gold-P Drills*

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**YG-1 CO., LTD.**  
[www.yg1.kr](http://www.yg1.kr)

# Wonders

**Price** | *Why pay more for coated drill?*

**Performance** | *Higher productivity  
same quality with general full TiN coating*


















**【Gold-P Drill】**



**【Uncoated Drill】**

Which will you **choose?**

**Gold-P Drill?** or **Uncoated Drill?**

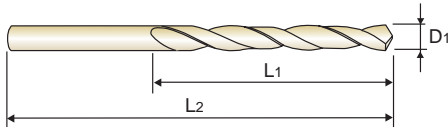
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|---|------------|---|-------|
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# HSS Straight Shank Jobber Length Gold-P Coated (DIN338)



DIN 338
HSS
N  
≈ 30°
h8
118°
P.21

- ▶ **Flute Geometry** : Right hand helix
- ▶ **Point Angle** : 118°, Normal point
- ▶ **Surface Treatment** : Bright body, TiN coating on working area
- ▶ **Application** : Drilling to steels, cast steels alloyed and Non-alloyed, grey cast iron, graphite, malleable cast iron

## D1GP125

Unit : mm

| EDP No.    | Drill Diameter | Flute Length | Overall Length |
|------------|----------------|--------------|----------------|
|            | D1             | L1           | L2             |
| D1GP125010 | 1.0            | 12           | 34             |
| D1GP125011 | 1.1            | 14           | 36             |
| D1GP125012 | 1.2            | 16           | 38             |
| D1GP125013 | 1.3            | 16           | 38             |
| D1GP125014 | 1.4            | 18           | 40             |
| D1GP125015 | 1.5            | 18           | 40             |
| D1GP125016 | 1.6            | 20           | 43             |
| D1GP125017 | 1.7            | 20           | 43             |
| D1GP125018 | 1.8            | 22           | 46             |
| D1GP125019 | 1.9            | 22           | 46             |
| D1GP125020 | 2.0            | 24           | 49             |
| D1GP125021 | 2.1            | 24           | 49             |
| D1GP125022 | 2.2            | 27           | 53             |
| D1GP125023 | 2.3            | 27           | 53             |
| D1GP125024 | 2.4            | 30           | 57             |
| D1GP125025 | 2.5            | 30           | 57             |
| D1GP125026 | 2.6            | 30           | 57             |
| D1GP125027 | 2.7            | 33           | 61             |
| D1GP125028 | 2.8            | 33           | 61             |
| D1GP125029 | 2.9            | 33           | 61             |
| D1GP125030 | 3.0            | 33           | 61             |
| D1GP125031 | 3.1            | 36           | 65             |
| D1GP125032 | 3.2            | 36           | 65             |
| D1GP125033 | 3.3            | 36           | 65             |
| D1GP125034 | 3.4            | 39           | 70             |
| D1GP125035 | 3.5            | 39           | 70             |
| D1GP125036 | 3.6            | 39           | 70             |
| D1GP125037 | 3.7            | 39           | 70             |
| D1GP125038 | 3.8            | 43           | 75             |
| D1GP125039 | 3.9            | 43           | 75             |
| D1GP125040 | 4.0            | 43           | 75             |

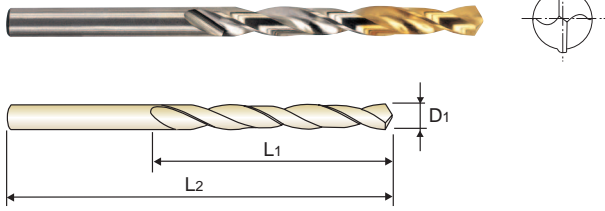
| EDP No.    | Drill Diameter | Flute Length | Overall Length |
|------------|----------------|--------------|----------------|
|            | D1             | L1           | L2             |
| D1GP125041 | 4.1            | 43           | 75             |
| D1GP125042 | 4.2            | 43           | 75             |
| D1GP125043 | 4.3            | 47           | 80             |
| D1GP125044 | 4.4            | 47           | 80             |
| D1GP125045 | 4.5            | 47           | 80             |
| D1GP125046 | 4.6            | 47           | 80             |
| D1GP125047 | 4.7            | 47           | 80             |
| D1GP125048 | 4.8            | 52           | 86             |
| D1GP125049 | 4.9            | 52           | 86             |
| D1GP125050 | 5.0            | 52           | 86             |
| D1GP125051 | 5.1            | 52           | 86             |
| D1GP125052 | 5.2            | 52           | 86             |
| D1GP125053 | 5.3            | 52           | 86             |
| D1GP125054 | 5.4            | 57           | 93             |
| D1GP125055 | 5.5            | 57           | 93             |
| D1GP125056 | 5.6            | 57           | 93             |
| D1GP125057 | 5.7            | 57           | 93             |
| D1GP125058 | 5.8            | 57           | 93             |
| D1GP125059 | 5.9            | 57           | 93             |
| D1GP125060 | 6.0            | 57           | 93             |
| D1GP125061 | 6.1            | 63           | 101            |
| D1GP125062 | 6.2            | 63           | 101            |
| D1GP125063 | 6.3            | 63           | 101            |
| D1GP125064 | 6.4            | 63           | 101            |
| D1GP125065 | 6.5            | 63           | 101            |
| D1GP125066 | 6.6            | 63           | 101            |
| D1GP125067 | 6.7            | 63           | 101            |
| D1GP125068 | 6.8            | 69           | 109            |
| D1GP125069 | 6.9            | 69           | 109            |
| D1GP125070 | 7.0            | 69           | 109            |
| 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 |
|---------------|--------------|--------------------|-----------------|--------|-----------|----------|------------------|----------|-------------|--------|--------|
| ~HB225        | HB225~325    | HRC20~40           | HRC45~55        | HRC55~ |           |          |                  |          |             |        |        |
| ●             | ●            |                    |                 |        |           | ○        | ○                | ○        | ○           |        |        |



# HSS Straight Shank Jobber Length Gold-P Coated (DIN338)



- ▶ **Flute Geometry** : Right hand helix
- ▶ **Point Angle** : 118°, Normal point
- ▶ **Surface Treatment** : Bright body, TiN coating on working area
- ▶ **Application** : Drilling to steels, cast steels alloyed and Non-alloyed, grey cast iron, graphite, malleable cast iron

## D1GP125

Unit : mm

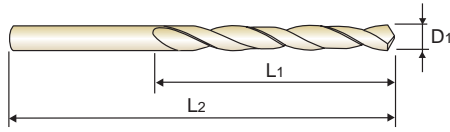
| EDP No.    | Drill Diameter | Flute Length | Overall Length | EDP No.    | Drill Diameter | Flute Length | Overall Length |
|------------|----------------|--------------|----------------|------------|----------------|--------------|----------------|
|            | D1             | L1           | L2             |            | 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 |
|---------------|--------------|--------------------|-----------------|--------|-----------|----------|------------------|----------|-------------|--------|--------|
| ~HB225        | HB225~325    | HRC20~40           | HRC45~55        | HRC55~ |           |          |                  |          |             |        |        |
| ●             | ●            |                    |                 |        |           | ○        | ○                | ○        | ○           |        |        |



# HSS Straight Shank Jobber Length Gold-P Coated (DIN338)



DIN 338
HSS
N ≈ 30°
h8
118°
P.21

- ▶ **Flute Geometry** : Right hand helix
- ▶ **Point Angle** : 118°, Split point
- ▶ **Surface Treatment** : Bright body, TiN coating on working area
- ▶ **Application** : Drilling to steels, cast steels alloyed and Non-alloyed, grey cast iron, graphite, malleable cast iron

## D1GP165

Unit : mm

| EDP No.    | Drill Diameter | Flute Length | Overall Length |
|------------|----------------|--------------|----------------|
|            | D1             | L1           | L2             |
| D1GP165016 | 1.6            | 20           | 43             |
| D1GP165017 | 1.7            | 20           | 43             |
| D1GP165018 | 1.8            | 22           | 46             |
| D1GP165019 | 1.9            | 22           | 46             |
| D1GP165020 | 2.0            | 24           | 49             |
| D1GP165021 | 2.1            | 24           | 49             |
| D1GP165022 | 2.2            | 27           | 53             |
| D1GP165023 | 2.3            | 27           | 53             |
| D1GP165024 | 2.4            | 30           | 57             |
| D1GP165025 | 2.5            | 30           | 57             |
| D1GP165026 | 2.6            | 30           | 57             |
| D1GP165027 | 2.7            | 33           | 61             |
| D1GP165028 | 2.8            | 33           | 61             |
| D1GP165029 | 2.9            | 33           | 61             |
| D1GP165030 | 3.0            | 33           | 61             |
| D1GP165031 | 3.1            | 36           | 65             |
| D1GP165032 | 3.2            | 36           | 65             |
| D1GP165033 | 3.3            | 36           | 65             |
| D1GP165034 | 3.4            | 39           | 70             |
| D1GP165035 | 3.5            | 39           | 70             |
| D1GP165036 | 3.6            | 39           | 70             |
| D1GP165037 | 3.7            | 39           | 70             |
| D1GP165038 | 3.8            | 43           | 75             |
| D1GP165039 | 3.9            | 43           | 75             |
| D1GP165040 | 4.0            | 43           | 75             |
| D1GP165041 | 4.1            | 43           | 75             |
| D1GP165042 | 4.2            | 43           | 75             |
| D1GP165043 | 4.3            | 47           | 80             |
| D1GP165044 | 4.4            | 47           | 80             |
| D1GP165045 | 4.5            | 47           | 80             |

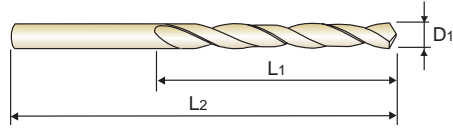
| EDP No.    | Drill Diameter | Flute Length | Overall Length |
|------------|----------------|--------------|----------------|
|            | D1             | L1           | L2             |
| D1GP165046 | 4.6            | 47           | 80             |
| D1GP165047 | 4.7            | 47           | 80             |
| D1GP165048 | 4.8            | 52           | 86             |
| D1GP165049 | 4.9            | 52           | 86             |
| D1GP165050 | 5.0            | 52           | 86             |
| D1GP165051 | 5.1            | 52           | 86             |
| D1GP165052 | 5.2            | 52           | 86             |
| D1GP165053 | 5.3            | 52           | 86             |
| D1GP165054 | 5.4            | 57           | 93             |
| D1GP165055 | 5.5            | 57           | 93             |
| D1GP165056 | 5.6            | 57           | 93             |
| D1GP165057 | 5.7            | 57           | 93             |
| D1GP165058 | 5.8            | 57           | 93             |
| D1GP165059 | 5.9            | 57           | 93             |
| D1GP165060 | 6.0            | 57           | 93             |
| D1GP165061 | 6.1            | 63           | 101            |
| D1GP165062 | 6.2            | 63           | 101            |
| D1GP165063 | 6.3            | 63           | 101            |
| D1GP165064 | 6.4            | 63           | 101            |
| D1GP165065 | 6.5            | 63           | 101            |
| D1GP165066 | 6.6            | 63           | 101            |
| D1GP165067 | 6.7            | 63           | 101            |
| D1GP165068 | 6.8            | 69           | 109            |
| D1GP165069 | 6.9            | 69           | 109            |
| D1GP165070 | 7.0            | 69           | 109            |
| D1GP165071 | 7.1            | 69           | 109            |
| D1GP165072 | 7.2            | 69           | 109            |
| D1GP165073 | 7.3            | 69           | 109            |
| D1GP165074 | 7.4            | 69           | 109            |
| 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 |
|---------------|--------------|--------------------|-----------------|--------|-----------|----------|------------------|----------|-------------|--------|--------|
| ~HB225        | HB225~325    | HRC20~40           | HRC45~55        | HRC55~ |           |          |                  |          |             |        |        |
| ●             | ●            |                    |                 |        |           | ○        | ○                | ○        | ○           |        |        |



# HSS Straight Shank Jobber Length Gold-P Coated (DIN338)



DIN 338
HSS
N  $\approx 30^\circ$ 
h8
118°
P.21

- ▶ **Flute Geometry** : Right hand helix
- ▶ **Point Angle** : 118°, Split point
- ▶ **Surface Treatment** : Bright body, TiN coating on working area
- ▶ **Application** : Drilling to steels, cast steels alloyed and Non-alloyed, grey cast iron, graphite, malleable cast iron

## D1GP165

Unit : mm

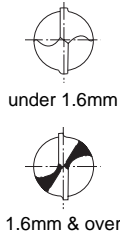
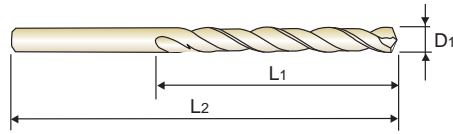
| EDP No.    | Drill Diameter | Flute Length | Overall Length | EDP No.    | Drill Diameter | Flute Length | Overall Length |
|------------|----------------|--------------|----------------|------------|----------------|--------------|----------------|
|            | D1             | L1           | L2             |            | 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 |
|---------------|--------------|--------------------|-----------------|--------|-----------|----------|------------------|----------|-------------|--------|--------|
| ~HB225        | HB225~325    | HRC20~40           | HRC45~55        | HRC55~ |           |          |                  |          |             |        |        |
| ●             | ●            |                    |                 |        |           | ○        | ○                | ○        | ○           |        |        |



# HSS-E Straight Shank Jobber Length Gold-P Coated (DIN338)



DIN 338
HSS-E
N ≈ 33°
h8
135°
P.21

- ▶ **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 to steels, cast steels alloyed and Non-alloyed, grey cast iron, graphite, malleable cast iron

**DLGP195**

Unit : mm

| EDP No.    | Drill Diameter | Flute Length | Overall Length |
|------------|----------------|--------------|----------------|
|            | D1             | L1           | L2             |
| DLGP195010 | 1.0            | 12           | 34             |
| DLGP195011 | 1.1            | 14           | 36             |
| DLGP195012 | 1.2            | 16           | 38             |
| DLGP195013 | 1.3            | 16           | 38             |
| DLGP195014 | 1.4            | 18           | 40             |
| DLGP195015 | 1.5            | 18           | 40             |
| DLGP195016 | 1.6            | 20           | 43             |
| DLGP195017 | 1.7            | 20           | 43             |
| DLGP195018 | 1.8            | 22           | 46             |
| DLGP195019 | 1.9            | 22           | 46             |
| DLGP195020 | 2.0            | 24           | 49             |
| DLGP195021 | 2.1            | 24           | 49             |
| DLGP195022 | 2.2            | 27           | 53             |
| DLGP195023 | 2.3            | 27           | 53             |
| DLGP195024 | 2.4            | 30           | 57             |
| DLGP195025 | 2.5            | 30           | 57             |
| DLGP195026 | 2.6            | 30           | 57             |
| DLGP195027 | 2.7            | 33           | 61             |
| DLGP195028 | 2.8            | 33           | 61             |
| DLGP195029 | 2.9            | 33           | 61             |
| DLGP195030 | 3.0            | 33           | 61             |
| DLGP195031 | 3.1            | 36           | 65             |
| DLGP195032 | 3.2            | 36           | 65             |
| DLGP195033 | 3.3            | 36           | 65             |
| DLGP195034 | 3.4            | 39           | 70             |
| DLGP195035 | 3.5            | 39           | 70             |
| DLGP195036 | 3.6            | 39           | 70             |
| DLGP195037 | 3.7            | 39           | 70             |
| DLGP195038 | 3.8            | 43           | 75             |
| DLGP195039 | 3.9            | 43           | 75             |
| DLGP195040 | 4.0            | 43           | 75             |

| EDP No.    | Drill Diameter | Flute Length | Overall Length |
|------------|----------------|--------------|----------------|
|            | D1             | L1           | L2             |
| DLGP195041 | 4.1            | 43           | 75             |
| DLGP195042 | 4.2            | 43           | 75             |
| DLGP195043 | 4.3            | 47           | 80             |
| DLGP195044 | 4.4            | 47           | 80             |
| DLGP195045 | 4.5            | 47           | 80             |
| DLGP195046 | 4.6            | 47           | 80             |
| DLGP195047 | 4.7            | 47           | 80             |
| DLGP195048 | 4.8            | 52           | 86             |
| DLGP195049 | 4.9            | 52           | 86             |
| DLGP195050 | 5.0            | 52           | 86             |
| DLGP195051 | 5.1            | 52           | 86             |
| DLGP195052 | 5.2            | 52           | 86             |
| DLGP195053 | 5.3            | 52           | 86             |
| DLGP195054 | 5.4            | 57           | 93             |
| DLGP195055 | 5.5            | 57           | 93             |
| DLGP195056 | 5.6            | 57           | 93             |
| DLGP195057 | 5.7            | 57           | 93             |
| DLGP195058 | 5.8            | 57           | 93             |
| DLGP195059 | 5.9            | 57           | 93             |
| DLGP195060 | 6.0            | 57           | 93             |
| DLGP195061 | 6.1            | 63           | 101            |
| DLGP195062 | 6.2            | 63           | 101            |
| DLGP195063 | 6.3            | 63           | 101            |
| DLGP195064 | 6.4            | 63           | 101            |
| DLGP195065 | 6.5            | 63           | 101            |
| DLGP195066 | 6.6            | 63           | 101            |
| DLGP195067 | 6.7            | 63           | 101            |
| DLGP195068 | 6.8            | 69           | 109            |
| DLGP195069 | 6.9            | 69           | 109            |
| DLGP195070 | 7.0            | 69           | 109            |
| DLGP195071 | 7.1            | 69           | 109            |

● : Excellent ○ : Good

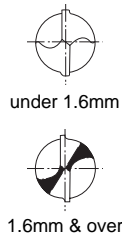
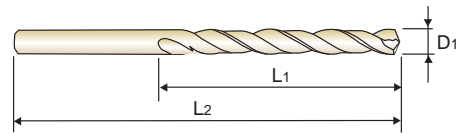
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |        | Cast Iron | Aluminum | Stainless Steels | Titanium | Mild Steels | Copper | Bronze |
|---------------|--------------|--------------------|-----------------|--------|-----------|----------|------------------|----------|-------------|--------|--------|
| ~HB225        | HB225~325    | HRC20~40           | HRC45~55        | HRC55~ |           |          |                  |          |             |        |        |
| ●             | ●            |                    |                 |        |           | ○        | ○                | ○        | ○           |        |        |





# HSS-E Straight Shank Jobber Length

## Gold-P Coated (DIN338)



DIN 338
HSS-E
N ≈ 33°
h8
135°
P.21

- ▶ **Flute Geometry** : Right hand helix
- ▶ **Point Angle** : 135°
- ▶ **Surface Treatment** : under 1.6mm : Normal point  
1.6mm & over : Split point
- ▶ **Application** : Bright body, TiN coating on working area  
: Drilling to steels, cast steels alloyed and Non-alloyed, grey cast iron, graphite, malleable cast iron

**DLGP195**

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            |            |                |              |                |

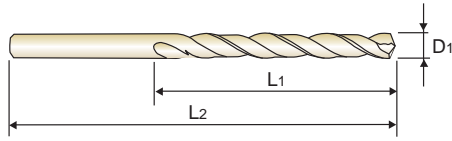
● : Excellent ○ : Good

| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |        | Cast Iron | Aluminum | Stainless Steels | Titanium | Mild Steels | Copper | Bronze |
|---------------|--------------|--------------------|-----------------|--------|-----------|----------|------------------|----------|-------------|--------|--------|
| ~HB225        | HB225~325    | HRC20~40           | HRC45~55        | HRC55~ |           |          |                  |          |             |        |        |
| ●             | ●            |                    |                 |        |           | ○        | ○                | ○        | ○           |        |        |



# HSS-E Straight Shank Jobber Length DH100 Type

## Gold-P Coated Drills for Deep Hole(DIN338)



DIN 338
HSS-E
N ≈ 38°
h8
130°
P.21

- ▶ **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

### DLGP506

Unit : mm

| EDP No.    | Drill Diameter | Flute Length | Overall Length |
|------------|----------------|--------------|----------------|
|            | D1             | L1           | L2             |
| DLGP506020 | 2.0            | 24           | 49             |
| DLGP506021 | 2.1            | 24           | 49             |
| DLGP506022 | 2.2            | 27           | 53             |
| DLGP506023 | 2.3            | 27           | 53             |
| DLGP506024 | 2.4            | 30           | 57             |
| DLGP506025 | 2.5            | 30           | 57             |
| DLGP506026 | 2.6            | 30           | 57             |
| DLGP506027 | 2.7            | 33           | 61             |
| DLGP506028 | 2.8            | 33           | 61             |
| DLGP506029 | 2.9            | 33           | 61             |
| DLGP506030 | 3.0            | 33           | 61             |
| DLGP506031 | 3.1            | 36           | 65             |
| DLGP506032 | 3.2            | 36           | 65             |
| DLGP506033 | 3.3            | 36           | 65             |
| DLGP506034 | 3.4            | 39           | 70             |
| DLGP506035 | 3.5            | 39           | 70             |
| DLGP506036 | 3.6            | 39           | 70             |
| DLGP506037 | 3.7            | 39           | 70             |
| DLGP506038 | 3.8            | 43           | 75             |
| DLGP506039 | 3.9            | 43           | 75             |
| DLGP506040 | 4.0            | 43           | 75             |
| DLGP506041 | 4.1            | 43           | 75             |
| DLGP506042 | 4.2            | 43           | 75             |
| DLGP506043 | 4.3            | 47           | 80             |
| DLGP506044 | 4.4            | 47           | 80             |
| DLGP506045 | 4.5            | 47           | 80             |
| DLGP506046 | 4.6            | 47           | 80             |
| DLGP506047 | 4.7            | 47           | 80             |
| DLGP506048 | 4.8            | 52           | 86             |

| EDP No.    | Drill Diameter | Flute Length | Overall Length |
|------------|----------------|--------------|----------------|
|            | D1             | L1           | L2             |
| DLGP506049 | 4.9            | 52           | 86             |
| DLGP506050 | 5.0            | 52           | 86             |
| DLGP506051 | 5.1            | 52           | 86             |
| DLGP506052 | 5.2            | 52           | 86             |
| DLGP506053 | 5.3            | 52           | 86             |
| DLGP506054 | 5.4            | 57           | 93             |
| DLGP506055 | 5.5            | 57           | 93             |
| DLGP506056 | 5.6            | 57           | 93             |
| DLGP506057 | 5.7            | 57           | 93             |
| DLGP506058 | 5.8            | 57           | 93             |
| DLGP506059 | 5.9            | 57           | 93             |
| DLGP506060 | 6.0            | 57           | 93             |
| DLGP506061 | 6.1            | 63           | 101            |
| DLGP506062 | 6.2            | 63           | 101            |
| DLGP506063 | 6.3            | 63           | 101            |
| DLGP506064 | 6.4            | 63           | 101            |
| DLGP506065 | 6.5            | 63           | 101            |
| DLGP506066 | 6.6            | 63           | 101            |
| DLGP506067 | 6.7            | 63           | 101            |
| DLGP506068 | 6.8            | 69           | 109            |
| DLGP506069 | 6.9            | 69           | 109            |
| DLGP506070 | 7.0            | 69           | 109            |
| DLGP506071 | 7.1            | 69           | 109            |
| DLGP506072 | 7.2            | 69           | 109            |
| DLGP506073 | 7.3            | 69           | 109            |
| DLGP506074 | 7.4            | 69           | 109            |
| DLGP506075 | 7.5            | 69           | 109            |
| DLGP506076 | 7.6            | 75           | 117            |
| DLGP506077 | 7.7            | 75           | 117            |

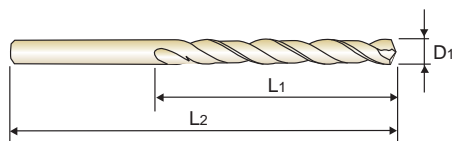
● : Excellent ○ : Good

| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |        | Cast Iron | Aluminum | Stainless Steels | Titanium | Mild Steels | Copper | Bronze |
|---------------|--------------|--------------------|-----------------|--------|-----------|----------|------------------|----------|-------------|--------|--------|
| ~HB225        | HB225~325    | HRC20~40           | HRC45~55        | HRC55~ |           |          |                  |          |             |        |        |
| ●             | ●            |                    |                 |        | ○         | ○        |                  |          | ○           |        |        |



# HSS-E Straight Shank Jobber Length DH100 Type

## Gold-P Coated Drills for Deep Hole(DIN338)



DIN 338
HSS-E
N ≈ 38°
h8
130°
P.21

- ▶ **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

**DLGP506**

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            |            |                |              |                |

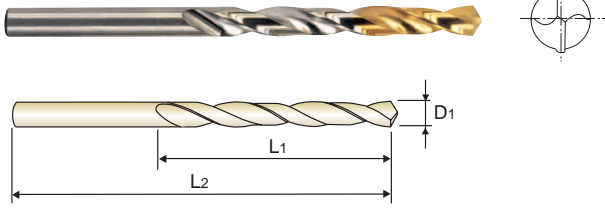
● : Excellent ○ : Good

| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |        | Cast Iron | Aluminum | Stainless Steels | Titanium | Mild Steels | Copper | Bronze |
|---------------|--------------|--------------------|-----------------|--------|-----------|----------|------------------|----------|-------------|--------|--------|
| ~HB225        | HB225~325    | HRC20~40           | HRC45~55        | HRC55~ |           |          |                  |          |             |        |        |
| ●             | ●            |                    |                 |        | ○         | ○        |                  |          | ○           |        |        |



# HSS Straight Shank Regular Length

## Gold-P Coated Drills(JIS)



HSS
N  
≈ 30°
h8
118°
P.21

- ▶ **Flute Geometry** : Right hand helix
- ▶ **Point Angle** : 118°, Normal point
- ▶ **Surface Treatment** : Bright body TiN coating on working part
- ▶ **Application** : Drilling in steel, cast steel alloyed and Non-alloyed, gray cast iron, graphite, malleable cast iron

### D1GP103

Unit : mm

| EDP No.    | Drill Diameter | Flute Length | Overall Length |
|------------|----------------|--------------|----------------|
|            | D1             | L1           | L2             |
| D1GP103010 | 1.0            | 18           | 40             |
| D1GP103011 | 1.1            | 20           | 42             |
| D1GP103012 | 1.2            | 20           | 42             |
| D1GP103013 | 1.3            | 22           | 45             |
| D1GP103014 | 1.4            | 23           | 48             |
| D1GP103015 | 1.5            | 23           | 48             |
| D1GP103016 | 1.6            | 25           | 50             |
| D1GP103017 | 1.7            | 25           | 50             |
| D1GP103018 | 1.8            | 28           | 52             |
| D1GP103019 | 1.9            | 28           | 52             |
| D1GP103020 | 2.0            | 29           | 55             |
| D1GP103021 | 2.1            | 29           | 55             |
| D1GP103022 | 2.2            | 33           | 58             |
| D1GP103023 | 2.3            | 33           | 58             |
| D1GP103024 | 2.4            | 35           | 61             |
| D1GP103025 | 2.5            | 35           | 61             |
| D1GP103026 | 2.6            | 37           | 64             |
| D1GP103027 | 2.7            | 37           | 64             |
| D1GP103028 | 2.8            | 39           | 67             |
| D1GP103029 | 2.9            | 42           | 71             |
| D1GP103030 | 3.0            | 42           | 71             |
| D1GP103031 | 3.1            | 42           | 71             |
| D1GP103032 | 3.2            | 42           | 71             |
| D1GP103033 | 3.3            | 45           | 73             |
| D1GP103034 | 3.4            | 45           | 73             |
| D1GP103035 | 3.5            | 45           | 73             |
| D1GP103036 | 3.6            | 48           | 76             |
| D1GP103037 | 3.7            | 48           | 76             |
| D1GP103038 | 3.8            | 48           | 76             |
| D1GP103039 | 3.9            | 51           | 79             |
| D1GP103040 | 4.0            | 54           | 83             |

| EDP No.    | Drill Diameter | Flute Length | Overall Length |
|------------|----------------|--------------|----------------|
|            | D1             | L1           | L2             |
| D1GP103041 | 4.1            | 54           | 83             |
| D1GP103042 | 4.2            | 54           | 83             |
| D1GP103043 | 4.3            | 54           | 83             |
| D1GP103044 | 4.4            | 56           | 86             |
| D1GP103045 | 4.5            | 56           | 86             |
| D1GP103046 | 4.6            | 56           | 86             |
| D1GP103047 | 4.7            | 59           | 89             |
| D1GP103048 | 4.8            | 59           | 89             |
| D1GP103049 | 4.9            | 62           | 92             |
| D1GP103050 | 5.0            | 62           | 92             |
| D1GP103051 | 5.1            | 62           | 92             |
| D1GP103052 | 5.2            | 64           | 95             |
| D1GP103053 | 5.3            | 64           | 95             |
| D1GP103054 | 5.4            | 64           | 95             |
| D1GP103055 | 5.5            | 64           | 95             |
| D1GP103056 | 5.6            | 67           | 98             |
| D1GP103057 | 5.7            | 67           | 98             |
| D1GP103058 | 5.8            | 67           | 98             |
| D1GP103059 | 5.9            | 67           | 98             |
| D1GP103060 | 6.0            | 70           | 102            |
| D1GP103061 | 6.1            | 70           | 102            |
| D1GP103062 | 6.2            | 70           | 102            |
| D1GP103063 | 6.3            | 70           | 102            |
| D1GP103064 | 6.4            | 73           | 105            |
| D1GP103065 | 6.5            | 73           | 105            |
| D1GP103066 | 6.6            | 73           | 105            |
| D1GP103067 | 6.7            | 73           | 105            |
| D1GP103068 | 6.8            | 73           | 105            |
| D1GP103069 | 6.9            | 73           | 105            |
| D1GP103070 | 7.0            | 73           | 105            |
| D1GP103071 | 7.1            | 75           | 108            |

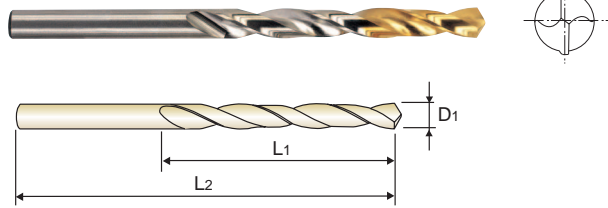
● : Excellent ○ : Good

| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |        | Cast Iron | Aluminum | Stainless Steels | Titanium | Mild Steels | Copper | Bronze |
|---------------|--------------|--------------------|-----------------|--------|-----------|----------|------------------|----------|-------------|--------|--------|
| ~HB225        | HB225~325    | HRC20~40           | HRC45~55        | HRC55~ |           |          |                  |          |             |        |        |
| ●             | ●            |                    |                 |        | ○         | ○        | ○                | ○        | ●           |        |        |





# HSS Straight Shank Regular Length Gold-P Coated Drills(JIS)



HSS
N  
≈ 30°
h8
118°
P.21

- ▶ **Flute Geometry** : Right hand helix
- ▶ **Point Angle** : 118°, Normal point
- ▶ **Surface Treatment** : Bright body TiN coating on working part
- ▶ **Application** : Drilling in steel, cast steel alloyed and Non-alloyed, gray cast iron, graphite, malleable cast iron

## D1GP103

Unit : mm

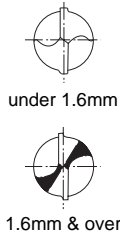
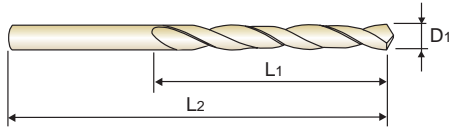
| EDP No.    | Drill Diameter | Flute Length | Overall Length | EDP No.    | Drill Diameter | Flute Length | Overall Length |
|------------|----------------|--------------|----------------|------------|----------------|--------------|----------------|
|            | D1             | L1           | L2             |            | D1             | L1           | L2             |
| D1GP103072 | 7.2            | 75           | 108            | D1GP103102 | 10.2           | 98           | 133            |
| D1GP103073 | 7.3            | 75           | 108            | D1GP103103 | 10.3           | 98           | 133            |
| D1GP103074 | 7.4            | 78           | 111            | D1GP103104 | 10.4           | 98           | 133            |
| D1GP103075 | 7.5            | 78           | 111            | D1GP103105 | 10.5           | 100          | 137            |
| D1GP103076 | 7.6            | 78           | 111            | D1GP103106 | 10.6           | 100          | 137            |
| D1GP103077 | 7.7            | 81           | 114            | D1GP103107 | 10.7           | 100          | 137            |
| D1GP103078 | 7.8            | 81           | 114            | D1GP103108 | 10.8           | 103          | 140            |
| D1GP103079 | 7.9            | 81           | 114            | D1GP103109 | 10.9           | 103          | 140            |
| D1GP103080 | 8.0            | 81           | 114            | D1GP103110 | 11.0           | 103          | 140            |
| D1GP103081 | 8.1            | 84           | 117            | D1GP103111 | 11.1           | 103          | 140            |
| D1GP103082 | 8.2            | 84           | 117            | D1GP103112 | 11.2           | 106          | 143            |
| D1GP103083 | 8.3            | 84           | 117            | D1GP103113 | 11.3           | 106          | 143            |
| D1GP103084 | 8.4            | 87           | 121            | D1GP103114 | 11.4           | 106          | 143            |
| D1GP103085 | 8.5            | 87           | 121            | D1GP103115 | 11.5           | 106          | 143            |
| D1GP103086 | 8.6            | 87           | 121            | D1GP103116 | 11.6           | 109          | 146            |
| D1GP103087 | 8.7            | 87           | 121            | D1GP103117 | 11.7           | 109          | 146            |
| D1GP103088 | 8.8            | 89           | 124            | D1GP103118 | 11.8           | 109          | 146            |
| D1GP103089 | 8.9            | 89           | 124            | D1GP103119 | 11.9           | 109          | 146            |
| D1GP103090 | 9.0            | 89           | 124            | D1GP103120 | 12.0           | 111          | 149            |
| D1GP103091 | 9.1            | 89           | 124            | D1GP103121 | 12.1           | 111          | 149            |
| D1GP103092 | 9.2            | 92           | 127            | D1GP103122 | 12.2           | 111          | 149            |
| D1GP103093 | 9.3            | 92           | 127            | D1GP103123 | 12.3           | 111          | 149            |
| D1GP103094 | 9.4            | 92           | 127            | D1GP103124 | 12.4           | 114          | 152            |
| D1GP103095 | 9.5            | 92           | 127            | D1GP103125 | 12.5           | 114          | 152            |
| D1GP103096 | 9.6            | 95           | 130            | D1GP103126 | 12.6           | 114          | 152            |
| D1GP103097 | 9.7            | 95           | 130            | D1GP103127 | 12.7           | 114          | 152            |
| D1GP103098 | 9.8            | 95           | 130            | D1GP103128 | 12.8           | 114          | 152            |
| D1GP103099 | 9.9            | 95           | 130            | D1GP103129 | 12.9           | 114          | 152            |
| D1GP103100 | 10.0           | 95           | 130            | D1GP103130 | 13.0           | 114          | 152            |
| D1GP103101 | 10.1           | 98           | 133            |            |                |              |                |

● : Excellent ○ : Good

| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |        | Cast Iron | Aluminum | Stainless Steels | Titanium | Mild Steels | Copper | Bronze |
|---------------|--------------|--------------------|-----------------|--------|-----------|----------|------------------|----------|-------------|--------|--------|
| ~HB225        | HB225~325    | HRC20~40           | HRC45~55        | HRC55~ |           |          |                  |          |             |        |        |
| ●             | ●            |                    |                 |        | ○         | ○        | ○                | ○        | ●           |        |        |



# HSSCo8 Straight Shank Regular Length Gold-P Coated Drills(JIS)



HSS Co8
N 33°
h8
135°
P.21

- ▶ **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 part
- ▶ **Application** : Drilling in stainless steels, materials of difficult machinability such as titanium alloy and inconel

**D2GP191**

Unit : mm

| EDP No.    | Drill Diameter | Flute Length | Overall Length |
|------------|----------------|--------------|----------------|
|            | D1             | L1           | L2             |
| D2GP191010 | 1.0            | 18           | 40             |
| D2GP191011 | 1.1            | 20           | 42             |
| D2GP191012 | 1.2            | 20           | 42             |
| D2GP191013 | 1.3            | 22           | 45             |
| D2GP191014 | 1.4            | 23           | 48             |
| D2GP191015 | 1.5            | 23           | 48             |
| D2GP191016 | 1.6            | 25           | 50             |
| D2GP191017 | 1.7            | 25           | 50             |
| D2GP191018 | 1.8            | 28           | 52             |
| D2GP191019 | 1.9            | 28           | 52             |
| D2GP191020 | 2.0            | 29           | 55             |
| D2GP191021 | 2.1            | 29           | 55             |
| D2GP191022 | 2.2            | 33           | 58             |
| D2GP191023 | 2.3            | 33           | 58             |
| D2GP191024 | 2.4            | 35           | 61             |
| D2GP191025 | 2.5            | 35           | 61             |
| D2GP191026 | 2.6            | 37           | 64             |
| D2GP191027 | 2.7            | 37           | 64             |
| D2GP191028 | 2.8            | 39           | 67             |
| D2GP191029 | 2.9            | 42           | 71             |
| D2GP191030 | 3.0            | 42           | 71             |
| D2GP191031 | 3.1            | 42           | 71             |
| D2GP191032 | 3.2            | 42           | 71             |
| D2GP191033 | 3.3            | 45           | 73             |
| D2GP191034 | 3.4            | 45           | 73             |
| D2GP191035 | 3.5            | 45           | 73             |
| D2GP191036 | 3.6            | 48           | 76             |
| D2GP191037 | 3.7            | 48           | 76             |
| D2GP191038 | 3.8            | 48           | 76             |
| D2GP191039 | 3.9            | 51           | 79             |
| D2GP191040 | 4.0            | 54           | 83             |

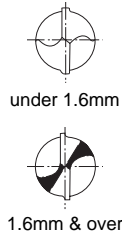
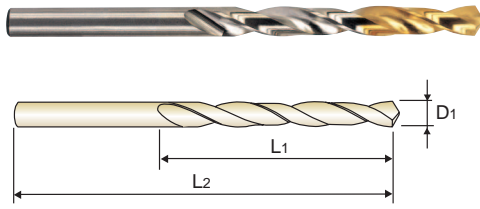
| EDP No.    | Drill Diameter | Flute Length | Overall Length |
|------------|----------------|--------------|----------------|
|            | D1             | L1           | L2             |
| D2GP191041 | 4.1            | 54           | 83             |
| D2GP191042 | 4.2            | 54           | 83             |
| D2GP191043 | 4.3            | 54           | 83             |
| D2GP191044 | 4.4            | 56           | 86             |
| D2GP191045 | 4.5            | 56           | 86             |
| D2GP191046 | 4.6            | 56           | 86             |
| D2GP191047 | 4.7            | 59           | 89             |
| D2GP191048 | 4.8            | 59           | 89             |
| D2GP191049 | 4.9            | 62           | 92             |
| D2GP191050 | 5.0            | 62           | 92             |
| D2GP191051 | 5.1            | 62           | 92             |
| D2GP191052 | 5.2            | 64           | 95             |
| D2GP191053 | 5.3            | 64           | 95             |
| D2GP191054 | 5.4            | 64           | 95             |
| D2GP191055 | 5.5            | 64           | 95             |
| D2GP191056 | 5.6            | 67           | 98             |
| D2GP191057 | 5.7            | 67           | 98             |
| D2GP191058 | 5.8            | 67           | 98             |
| D2GP191059 | 5.9            | 67           | 98             |
| D2GP191060 | 6.0            | 70           | 102            |
| D2GP191061 | 6.1            | 70           | 102            |
| D2GP191062 | 6.2            | 70           | 102            |
| D2GP191063 | 6.3            | 70           | 102            |
| D2GP191064 | 6.4            | 73           | 105            |
| D2GP191065 | 6.5            | 73           | 105            |
| D2GP191066 | 6.6            | 73           | 105            |
| D2GP191067 | 6.7            | 73           | 105            |
| D2GP191068 | 6.8            | 73           | 105            |
| D2GP191069 | 6.9            | 73           | 105            |
| D2GP191070 | 7.0            | 73           | 105            |
| D2GP191071 | 7.1            | 75           | 108            |

● : Excellent ○ : Good

| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |        | Cast Iron | Aluminum | Stainless Steels | Titanium | Mild Steels | Copper | Bronze |
|---------------|--------------|--------------------|-----------------|--------|-----------|----------|------------------|----------|-------------|--------|--------|
| ~HB225        | HB225~325    | HRC20~40           | HRC45~55        | HRC55~ |           |          |                  |          |             |        |        |
| ●             | ●            |                    |                 |        | ○         | ○        | ○                | ○        | ○           |        |        |



# HSSCo8 Straight Shank Regular Length Gold-P Coated Drills(JIS)



HSS Co8
N 33°
h8
135°
P.21

- ▶ **Flute Geometry** : Right hand helix
- ▶ **Point Angle** : 135°
- ▶ **Surface Treatment** : under 1.6mm : Normal point  
1.6mm & over : Split point
- ▶ **Application** : Bright body TiN coating on working part  
: Drilling in stainless steels, materials of difficult machinability such as titanium alloy and inconel

**D2GP191**

Unit : mm

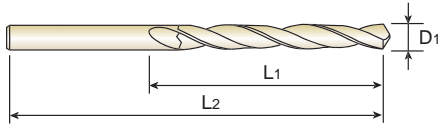
| EDP No.    | Drill Diameter | Flute Length | Overall Length | EDP No.    | Drill Diameter | Flute Length | Overall Length |
|------------|----------------|--------------|----------------|------------|----------------|--------------|----------------|
|            | D1             | L1           | L2             |            | D1             | L1           | L2             |
| D2GP191072 | 7.2            | 75           | 108            | D2GP191102 | 10.2           | 98           | 133            |
| D2GP191073 | 7.3            | 75           | 108            | D2GP191103 | 10.3           | 98           | 133            |
| D2GP191074 | 7.4            | 78           | 111            | D2GP191104 | 10.4           | 98           | 133            |
| D2GP191075 | 7.5            | 78           | 111            | D2GP191105 | 10.5           | 100          | 137            |
| D2GP191076 | 7.6            | 78           | 111            | D2GP191106 | 10.6           | 100          | 137            |
| D2GP191077 | 7.7            | 81           | 114            | D2GP191107 | 10.7           | 100          | 137            |
| D2GP191078 | 7.8            | 81           | 114            | D2GP191108 | 10.8           | 103          | 140            |
| D2GP191079 | 7.9            | 81           | 114            | D2GP191109 | 10.9           | 103          | 140            |
| D2GP191080 | 8.0            | 81           | 114            | D2GP191110 | 11.0           | 103          | 140            |
| D2GP191081 | 8.1            | 84           | 117            | D2GP191111 | 11.1           | 103          | 140            |
| D2GP191082 | 8.2            | 84           | 117            | D2GP191112 | 11.2           | 106          | 143            |
| D2GP191083 | 8.3            | 84           | 117            | D2GP191113 | 11.3           | 106          | 143            |
| D2GP191084 | 8.4            | 87           | 121            | D2GP191114 | 11.4           | 106          | 143            |
| D2GP191085 | 8.5            | 87           | 121            | D2GP191115 | 11.5           | 106          | 143            |
| D2GP191086 | 8.6            | 87           | 121            | D2GP191116 | 11.6           | 109          | 146            |
| D2GP191087 | 8.7            | 87           | 121            | D2GP191117 | 11.7           | 109          | 146            |
| D2GP191088 | 8.8            | 89           | 124            | D2GP191118 | 11.8           | 109          | 146            |
| D2GP191089 | 8.9            | 89           | 124            | D2GP191119 | 11.9           | 109          | 146            |
| D2GP191090 | 9.0            | 89           | 124            | D2GP191120 | 12.0           | 111          | 149            |
| D2GP191091 | 9.1            | 89           | 124            | D2GP191121 | 12.1           | 111          | 149            |
| D2GP191092 | 9.2            | 92           | 127            | D2GP191122 | 12.2           | 111          | 149            |
| D2GP191093 | 9.3            | 92           | 127            | D2GP191123 | 12.3           | 111          | 149            |
| D2GP191094 | 9.4            | 92           | 127            | D2GP191124 | 12.4           | 114          | 152            |
| D2GP191095 | 9.5            | 92           | 127            | D2GP191125 | 12.5           | 114          | 152            |
| D2GP191096 | 9.6            | 95           | 130            | D2GP191126 | 12.6           | 114          | 152            |
| D2GP191097 | 9.7            | 95           | 130            | D2GP191127 | 12.7           | 114          | 152            |
| D2GP191098 | 9.8            | 95           | 130            | D2GP191128 | 12.8           | 114          | 152            |
| D2GP191099 | 9.9            | 95           | 130            | D2GP191129 | 12.9           | 114          | 152            |
| D2GP191100 | 10.0           | 95           | 130            | D2GP191130 | 13.0           | 114          | 152            |
| D2GP191101 | 10.1           | 98           | 133            |            |                |              |                |

● : Excellent ○ : Good

| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |        | Cast Iron | Aluminum | Stainless Steels | Titanium | Mild Steels | Copper | Bronze |
|---------------|--------------|--------------------|-----------------|--------|-----------|----------|------------------|----------|-------------|--------|--------|
| ~HB225        | HB225~325    | HRC20~40           | HRC45~55        | HRC55~ |           |          |                  |          |             |        |        |
| ●             | ●            |                    |                 |        | ○         | ○        | ○                | ○        | ○           |        |        |



# HSS Straight Shank Jobber Length Gold-P Coated Drills(ANSI)



under 1/16



1/16 & over



- ▶ **Flute Geometry** : Right hand helix, wider flutes
- ▶ **Point Angle** : 135°  
under 1/16 : Normal point  
1/16 & over : Split point
- ▶ **Surface Treatment** : Bright body TiN coating on working part
- ▶ **Application** : Drilling in steel, cast steel alloyed and Non-alloyed, grey cast iron, graphite, malleable cast iron

## D1GP182 D1GP139

### ▶ Fractional sizes

| EDP No.    | Diameter         |         | Flute Length<br>L1 | Overall Length<br>L2 |
|------------|------------------|---------|--------------------|----------------------|
|            | Fractional<br>D1 | Decimal |                    |                      |
| D1GP113003 | 3/64             | .0469   | 3/4                | 1-3/4                |
| D1GP182004 | 1/16             | .0625   | 7/8                | 1-7/8                |
| D1GP182005 | 5/64             | .0781   | 1                  | 2                    |
| D1GP182006 | 3/32             | .0938   | 1-1/4              | 2-1/4                |
| D1GP182007 | 7/64             | .1094   | 1-1/2              | 2-5/8                |
| D1GP182008 | 1/8              | .1250   | 1-5/8              | 2-3/4                |
| D1GP182009 | 9/64             | .1406   | 1-3/4              | 2-7/8                |
| D1GP182010 | 5/32             | .1563   | 2                  | 3-1/8                |
| D1GP182011 | 11/64            | .1719   | 2-1/8              | 3-1/4                |
| D1GP182012 | 3/16             | .1875   | 2-5/16             | 3-1/2                |
| D1GP182013 | 13/64            | .2031   | 2-7/16             | 3-5/8                |
| D1GP182014 | 7/32             | .2188   | 2-1/2              | 3-3/4                |
| D1GP182015 | 15/64            | .2344   | 2-5/8              | 3-7/8                |
| D1GP182016 | 1/4              | .2500   | 2-3/4              | 4                    |
| D1GP182017 | 17/64            | .2656   | 2-7/8              | 4-1/8                |
| D1GP182018 | 9/32             | .2813   | 2-15/16            | 4-1/4                |
| D1GP182019 | 19/64            | .2969   | 3-1/16             | 4-3/8                |
| D1GP182020 | 5/16             | .3125   | 3-3/16             | 4-1/2                |
| D1GP182021 | 21/64            | .3281   | 3-5/16             | 4-5/8                |
| D1GP182022 | 11/32            | .3438   | 3-7/16             | 4-3/4                |
| D1GP182023 | 23/64            | .3594   | 3-1/2              | 4-7/8                |
| D1GP182024 | 3/8              | .3750   | 3-5/8              | 5                    |
| D1GP182025 | 25/64            | .3906   | 3-3/4              | 5-1/8                |
| D1GP182026 | 13/32            | .4063   | 3-7/8              | 5-1/4                |
| D1GP182027 | 27/64            | .4219   | 3-15/16            | 5-3/8                |
| D1GP182028 | 7/16             | .4375   | 4-1/16             | 5-1/2                |
| D1GP182029 | 29/64            | .4531   | 4-3/16             | 5-5/8                |
| D1GP182030 | 15/32            | .4688   | 4-5/16             | 5-3/4                |
| D1GP182031 | 31/64            | .4844   | 4-3/8              | 5-7/8                |
| D1GP182032 | 1/2              | .5000   | 4-1/2              | 6                    |

### ▶ Letter sizes

Unit : Inch

| EDP No.    | Diameter     |         | Flute Length<br>L1 | Overall Length<br>L2 |
|------------|--------------|---------|--------------------|----------------------|
|            | Letter<br>D1 | Decimal |                    |                      |
| D1GP139101 | A            | .2340   | 2-5/8              | 3-7/8                |
| D1GP139102 | B            | .2380   | 2-3/4              | 4                    |
| D1GP139103 | C            | .2420   | 2-3/4              | 4                    |
| D1GP139104 | D            | .2460   | 2-3/4              | 4                    |
| D1GP139105 | E            | .2500   | 2-3/4              | 4                    |
| D1GP139106 | F            | .2570   | 2-7/8              | 4-1/8                |
| D1GP139107 | G            | .2610   | 2-7/8              | 4-1/8                |
| D1GP139108 | H            | .2660   | 2-7/8              | 4-1/8                |
| D1GP139109 | I            | .2720   | 2-7/8              | 4-1/8                |
| D1GP139110 | J            | .2770   | 2-7/8              | 4-1/8                |
| D1GP139111 | K            | .2810   | 2-15/16            | 4-1/4                |
| D1GP139112 | L            | .2900   | 2-15/16            | 4-1/4                |
| D1GP139113 | M            | .2950   | 3-1/16             | 4-3/8                |
| D1GP139114 | N            | .3020   | 3-1/16             | 4-3/8                |
| D1GP139115 | O            | .3160   | 3-3/16             | 4-1/2                |
| D1GP139116 | P            | .3230   | 3-5/16             | 4-5/8                |
| D1GP139117 | Q            | .3320   | 3-7/16             | 4-3/4                |
| D1GP139118 | R            | .3390   | 3-7/16             | 4-3/4                |
| D1GP139119 | S            | .3480   | 3-1/2              | 4-7/8                |
| D1GP139120 | T            | .3580   | 3-1/2              | 4-7/8                |
| D1GP139121 | U            | .3680   | 3-5/8              | 5                    |
| D1GP139122 | V            | .3770   | 3-5/8              | 5                    |
| D1GP139123 | W            | .3860   | 3-3/4              | 5-1/8                |
| D1GP139124 | X            | .3970   | 3-3/4              | 5-1/8                |
| D1GP139125 | Y            | .4040   | 3-7/8              | 5-1/4                |
| D1GP139126 | Z            | .4130   | 3-7/8              | 5-1/4                |

| Tolerance<br>Diameter (Inch)        |            |
|-------------------------------------|------------|
| up to 1/8(.1250)                    | 0 ~ -.0005 |
| over 1/8(.1250)<br>up to 1/4(.2500) | 0 ~ -.0007 |
| over 1/4(.2500)<br>up to 1/2(.5000) | 0 ~ -.0010 |

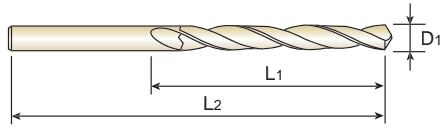
● : Excellent ○ : Good

| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |        | Cast Iron | Aluminum | Stainless Steels | Titanium | Mild Steels | Copper | Bronze |
|---------------|--------------|--------------------|-----------------|--------|-----------|----------|------------------|----------|-------------|--------|--------|
| ~HB225        | HB225~325    | HRC20~40           | HRC45~55        | HRC55~ |           |          |                  |          |             |        |        |
| ●             | ●            |                    |                 |        |           | ○        | ○                | ○        | ○           |        |        |





# HSS Straight Shank Jobber Length Gold-P Coated Drills(ANSI)



#53~56



#1~#52

ANSI HSS N ≈ 30° h8 135° 118° P.22  
 #53~56 #1~#52

- ▶ **Flute Geometry** : Right hand helix, wider flutes
- ▶ **Point Angle** : 135°, Split point  
Wire gauge size #53~#56: Normal point  
Wire gauge size #1~#52: Split point
- ▶ **Surface Treatment** : Bright body TiN coating on working part
- ▶ **Application** : Drilling in steel, cast steel alloyed and Non-alloyed, grey cast iron, graphite, malleable cast iron

**D1GP138**

## ▶ Wire gauge sizes

Unit : Inch

| EDP No.    | Diameter         |         | Flute Length<br>L1 | Overall Length<br>L2 |
|------------|------------------|---------|--------------------|----------------------|
|            | Wire gauge<br>D1 | Decimal |                    |                      |
| D1GP138256 | 1                | .2280   | 2-5/8              | 3-7/8                |
| D1GP138255 | 2                | .2210   | 2-5/8              | 3-7/8                |
| D1GP138254 | 3                | .2130   | 2-1/2              | 3-3/4                |
| D1GP138253 | 4                | .2090   | 2-1/2              | 3-3/4                |
| D1GP138252 | 5                | .2055   | 2-1/2              | 3-3/4                |
| D1GP138251 | 6                | .2040   | 2-1/2              | 3-3/4                |
| D1GP138250 | 7                | .2010   | 2-7/16             | 3-5/8                |
| D1GP138249 | 8                | .1990   | 2-7/16             | 3-5/8                |
| D1GP138248 | 9                | .1960   | 2-7/16             | 3-5/8                |
| D1GP138247 | 10               | .1935   | 2-7/16             | 3-5/8                |
| D1GP138246 | 11               | .1910   | 2-5/16             | 3-1/2                |
| D1GP138245 | 12               | .1890   | 2-5/16             | 3-1/2                |
| D1GP138244 | 13               | .1850   | 2-5/16             | 3-1/2                |
| D1GP138243 | 14               | .1820   | 2-3/16             | 3-3/8                |
| D1GP138242 | 15               | .1800   | 2-3/16             | 3-3/8                |
| D1GP138241 | 16               | .1770   | 2-3/16             | 3-3/8                |
| D1GP138240 | 17               | .1730   | 2-3/16             | 3-3/8                |
| D1GP138239 | 18               | .1695   | 2-1/8              | 3-1/4                |
| D1GP138238 | 19               | .1660   | 2-1/8              | 3-1/4                |
| D1GP138237 | 20               | .1610   | 2-1/8              | 3-1/4                |
| D1GP138236 | 21               | .1590   | 2-1/8              | 3-1/4                |
| D1GP138235 | 22               | .1570   | 2                  | 3-1/8                |
| D1GP138234 | 23               | .1540   | 2                  | 3-1/8                |
| D1GP138233 | 24               | .1520   | 2                  | 3-1/8                |
| D1GP138232 | 25               | .1495   | 1-7/8              | 3                    |
| D1GP138231 | 26               | .1470   | 1-7/8              | 3                    |
| D1GP138230 | 27               | .1440   | 1-7/8              | 3                    |
| D1GP138229 | 28               | .1405   | 1-3/4              | 2-7/8                |

| EDP No.    | Diameter         |         | Flute Length<br>L1 | Overall Length<br>L2 |
|------------|------------------|---------|--------------------|----------------------|
|            | Wire gauge<br>D1 | Decimal |                    |                      |
| D1GP138228 | 29               | .1360   | 1-3/4              | 2-7/8                |
| D1GP138227 | 30               | .1285   | 1-5/8              | 2-3/4                |
| D1GP138226 | 31               | .1200   | 1-5/8              | 2-3/4                |
| D1GP138225 | 32               | .1160   | 1-5/8              | 2-3/4                |
| D1GP138224 | 33               | .1130   | 1-1/2              | 2-5/8                |
| D1GP138223 | 34               | .1110   | 1-1/2              | 2-5/8                |
| D1GP138222 | 35               | .1100   | 1-1/2              | 2-5/8                |
| D1GP138221 | 36               | .1065   | 1-7/16             | 2-1/2                |
| D1GP138220 | 37               | .1040   | 1-7/16             | 2-1/2                |
| D1GP138219 | 38               | .1015   | 1-7/16             | 2-1/2                |
| D1GP138218 | 39               | .0995   | 1-3/8              | 2-3/8                |
| D1GP138217 | 40               | .0980   | 1-3/8              | 2-3/8                |
| D1GP138216 | 41               | .0960   | 1-3/8              | 2-3/8                |
| D1GP138215 | 42               | .0935   | 1-1/4              | 2-1/4                |
| D1GP138214 | 43               | .0890   | 1-1/4              | 2-1/4                |
| D1GP138213 | 44               | .0860   | 1-1/8              | 2-1/8                |
| D1GP138212 | 45               | .0820   | 1-1/8              | 2-1/8                |
| D1GP138211 | 46               | .0810   | 1-1/8              | 2-1/8                |
| D1GP138210 | 47               | .0785   | 1                  | 2                    |
| D1GP138209 | 48               | .0760   | 1                  | 2                    |
| D1GP138208 | 49               | .0730   | 1                  | 2                    |
| D1GP138207 | 50               | .0700   | 1                  | 2                    |
| D1GP138206 | 51               | .0670   | 1                  | 2                    |
| D1GP138205 | 52               | .0635   | 7/8                | 1-7/8                |
| D1GP134204 | 53               | .0595   | 7/8                | 1-7/8                |
| D1GP134203 | 54               | .0550   | 7/8                | 1-7/8                |
| D1GP134202 | 55               | .0520   | 7/8                | 1-7/8                |
| D1GP134201 | 56               | .0465   | 3/4                | 1-3/4                |

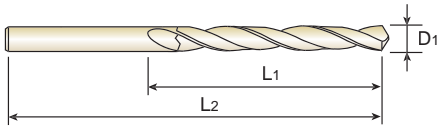
| Tolerance<br>Diameter (Inch)        |            |
|-------------------------------------|------------|
| up to 1/8(.1250)                    | 0 ~ -.0005 |
| over 1/8(.1250)<br>up to 1/4(.2500) | 0 ~ -.0007 |
| over 1/4(.2500)<br>up to 1/2(.5000) | 0 ~ -.0010 |

● : Excellent ○ : Good

| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |        | Cast Iron | Aluminum | Stainless Steels | Titanium | Mild Steels | Copper | Bronze |
|---------------|--------------|--------------------|-----------------|--------|-----------|----------|------------------|----------|-------------|--------|--------|
| ~HB225        | HB225~325    | HRC20~40           | HRC45~55        | HRC55~ |           |          |                  |          |             |        |        |
| ●             | ●            |                    |                 |        |           | ○        | ○                | ○        | ○           |        |        |



# HSSCo8 Straight Shank Jobber Length Gold-P Coated Drills(ANSI)



under 1/16



1/16 & over



- ▶ **Flute Geometry** : Right hand helix, wider flutes
- ▶ **Point Angle** : 135°  
under 1/16 : Normal point  
1/16 & over : Split point
- ▶ **Surface Treatment** : Bright body TiN coating on working part
- ▶ **Application** : Drilling in steel, cast steel alloyed and Non-alloyed, grey cast iron, graphite, malleable cast iron

## D2GP185 D2GP186

### ▶ Fractional sizes

| EDP No.    | Diameter         |         | Flute Length<br>L1 | Overall Length<br>L2 |
|------------|------------------|---------|--------------------|----------------------|
|            | Fractional<br>D1 | Decimal |                    |                      |
| D2GP185003 | 3/64             | .0469   | 3/4                | 1-3/4                |
| D2GP185004 | 1/16             | .0625   | 7/8                | 1-7/8                |
| D2GP185005 | 5/64             | .0781   | 1                  | 2                    |
| D2GP185006 | 3/32             | .0938   | 1-1/4              | 2-1/4                |
| D2GP185007 | 7/64             | .1094   | 1-1/2              | 2-5/8                |
| D2GP185008 | 1/8              | .1250   | 1-5/8              | 2-3/4                |
| D2GP185009 | 9/64             | .1406   | 1-3/4              | 2-7/8                |
| D2GP185010 | 5/32             | .1563   | 2                  | 3-1/8                |
| D2GP185011 | 11/64            | .1719   | 2-1/8              | 3-1/4                |
| D2GP185012 | 3/16             | .1875   | 2-5/16             | 3-1/2                |
| D2GP185013 | 13/64            | .2031   | 2-7/16             | 3-5/8                |
| D2GP185014 | 7/32             | .2188   | 2-1/2              | 3-3/4                |
| D2GP185015 | 15/64            | .2344   | 2-5/8              | 3-7/8                |
| D2GP185016 | 1/4              | .2500   | 2-3/4              | 4                    |
| D2GP185017 | 17/64            | .2656   | 2-7/8              | 4-1/8                |
| D2GP185018 | 9/32             | .2813   | 2-15/16            | 4-1/4                |
| D2GP185019 | 19/64            | .2969   | 3-1/16             | 4-3/8                |
| D2GP185020 | 5/16             | .3125   | 3-3/16             | 4-1/2                |
| D2GP185021 | 21/64            | .3281   | 3-5/16             | 4-5/8                |
| D2GP185022 | 11/32            | .3438   | 3-7/16             | 4-3/4                |
| D2GP185023 | 23/64            | .3594   | 3-1/2              | 4-7/8                |
| D2GP185024 | 3/8              | .3750   | 3-5/8              | 5                    |
| D2GP185025 | 25/64            | .3906   | 3-3/4              | 5-1/8                |
| D2GP185026 | 13/32            | .4063   | 3-7/8              | 5-1/4                |
| D2GP185027 | 27/64            | .4219   | 3-15/16            | 5-3/8                |
| D2GP185028 | 7/16             | .4375   | 4-1/16             | 5-1/2                |
| D2GP185029 | 29/64            | .4531   | 4-3/16             | 5-5/8                |
| D2GP185030 | 15/32            | .4688   | 4-5/16             | 5-3/4                |
| D2GP185031 | 31/64            | .4844   | 4-3/8              | 5-7/8                |
| D2GP185032 | 1/2              | .5000   | 4-1/2              | 6                    |

### ▶ Letter sizes

Unit : Inch

| EDP No.    | Diameter     |         | Flute Length<br>L1 | Overall Length<br>L2 |
|------------|--------------|---------|--------------------|----------------------|
|            | Letter<br>D1 | Decimal |                    |                      |
| D2GP186101 | A            | .2340   | 2-5/8              | 3-7/8                |
| D2GP186102 | B            | .2380   | 2-3/4              | 4                    |
| D2GP186103 | C            | .2420   | 2-3/4              | 4                    |
| D2GP186104 | D            | .2460   | 2-3/4              | 4                    |
| D2GP186105 | E            | .2500   | 2-3/4              | 4                    |
| D2GP186106 | F            | .2570   | 2-7/8              | 4-1/8                |
| D2GP186107 | G            | .2610   | 2-7/8              | 4-1/8                |
| D2GP186108 | H            | .2660   | 2-7/8              | 4-1/8                |
| D2GP186109 | I            | .2720   | 2-7/8              | 4-1/8                |
| D2GP186110 | J            | .2770   | 2-7/8              | 4-1/8                |
| D2GP186111 | K            | .2810   | 2-15/16            | 4-1/4                |
| D2GP186112 | L            | .2900   | 2-15/16            | 4-1/4                |
| D2GP186113 | M            | .2950   | 3-1/16             | 4-3/8                |
| D2GP186114 | N            | .3020   | 3-1/16             | 4-3/8                |
| D2GP186115 | O            | .3160   | 3-3/16             | 4-1/2                |
| D2GP186116 | P            | .3230   | 3-5/16             | 4-5/8                |
| D2GP186117 | Q            | .3320   | 3-7/16             | 4-3/4                |
| D2GP186118 | R            | .3390   | 3-7/16             | 4-3/4                |
| D2GP186119 | S            | .3480   | 3-1/2              | 4-7/8                |
| D2GP186120 | T            | .3580   | 3-1/2              | 4-7/8                |
| D2GP186121 | U            | .3680   | 3-5/8              | 5                    |
| D2GP186122 | V            | .3770   | 3-5/8              | 5                    |
| D2GP186123 | W            | .3860   | 3-3/4              | 5-1/8                |
| D2GP186124 | X            | .3970   | 3-3/4              | 5-1/8                |
| D2GP186125 | Y            | .4040   | 3-7/8              | 5-1/4                |
| D2GP186126 | Z            | .4130   | 3-7/8              | 5-1/4                |

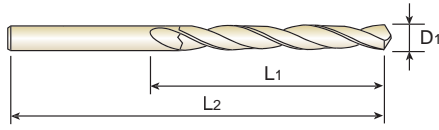
| Tolerance<br>Diameter (Inch)        |            |
|-------------------------------------|------------|
| up to 1/8(.1250)                    | 0 ~ -.0005 |
| over 1/8(.1250)<br>up to 1/4(.2500) | 0 ~ -.0007 |
| over 1/4(.2500)<br>up to 1/2(.5000) | 0 ~ -.0010 |

● : Excellent ○ : Good

| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |        | Cast Iron | Aluminum | Stainless Steels | Titanium | Mild Steels | Copper | Bronze |
|---------------|--------------|--------------------|-----------------|--------|-----------|----------|------------------|----------|-------------|--------|--------|
| ~HB225        | HB225~325    | HRC20~40           | HRC45~55        | HRC55~ |           |          |                  |          |             |        |        |
| ●             | ●            |                    |                 |        |           | ○        | ○                | ○        | ○           |        |        |



# HSSCo8 Straight Shank Jobber Length Gold-P Coated Drills(ANSI)



#53-56



#1-52

ANSI
HSS Co8
N ≈ 30°
h8
135°
P.22

- ▶ **Flute Geometry** : Right hand helix, wider flutes
- ▶ **Point Angle** : 135°, Split point  
Wire gauge size #53-#56: Normal point  
Wire gauge size #1-#52: Split point
- ▶ **Surface Treatment** : Bright body TiN coating on working part
- ▶ **Application** : Drilling in steel, cast steel alloyed and Non-alloyed, grey cast iron, graphite, malleable cast iron

**D2GP187**

## ▶ Wire gauge sizes

Unit : Inch

| EDP No.    | Diameter         |         | Flute Length<br>L1 | Overall Length<br>L2 |
|------------|------------------|---------|--------------------|----------------------|
|            | Wire gauge<br>D1 | Decimal |                    |                      |
| D2GP187256 | 1                | .2280   | 2-5/8              | 3-7/8                |
| D2GP187255 | 2                | .2210   | 2-5/8              | 3-7/8                |
| D2GP187254 | 3                | .2130   | 2-1/2              | 3-3/4                |
| D2GP187253 | 4                | .2090   | 2-1/2              | 3-3/4                |
| D2GP187252 | 5                | .2055   | 2-1/2              | 3-3/4                |
| D2GP187251 | 6                | .2040   | 2-1/2              | 3-3/4                |
| D2GP187250 | 7                | .2010   | 2-7/16             | 3-5/8                |
| D2GP187249 | 8                | .1990   | 2-7/16             | 3-5/8                |
| D2GP187248 | 9                | .1960   | 2-7/16             | 3-5/8                |
| D2GP187247 | 10               | .1935   | 2-7/16             | 3-5/8                |
| D2GP187246 | 11               | .1910   | 2-5/16             | 3-1/2                |
| D2GP187245 | 12               | .1890   | 2-5/16             | 3-1/2                |
| D2GP187244 | 13               | .1850   | 2-5/16             | 3-1/2                |
| D2GP187243 | 14               | .1820   | 2-3/16             | 3-3/8                |
| D2GP187242 | 15               | .1800   | 2-3/16             | 3-3/8                |
| D2GP187241 | 16               | .1770   | 2-3/16             | 3-3/8                |
| D2GP187240 | 17               | .1730   | 2-3/16             | 3-3/8                |
| D2GP187239 | 18               | .1695   | 2-1/8              | 3-1/4                |
| D2GP187238 | 19               | .1660   | 2-1/8              | 3-1/4                |
| D2GP187237 | 20               | .1610   | 2-1/8              | 3-1/4                |
| D2GP187236 | 21               | .1590   | 2-1/8              | 3-1/4                |
| D2GP187235 | 22               | .1570   | 2                  | 3-1/8                |
| D2GP187234 | 23               | .1540   | 2                  | 3-1/8                |
| D2GP187233 | 24               | .1520   | 2                  | 3-1/8                |
| D2GP187232 | 25               | .1495   | 1-7/8              | 3                    |
| D2GP187231 | 26               | .1470   | 1-7/8              | 3                    |
| D2GP187230 | 27               | .1440   | 1-7/8              | 3                    |
| D2GP187229 | 28               | .1405   | 1-3/4              | 2-7/8                |

| EDP No.    | Diameter         |         | Flute Length<br>L1 | Overall Length<br>L2 |
|------------|------------------|---------|--------------------|----------------------|
|            | Wire gauge<br>D1 | Decimal |                    |                      |
| D2GP187228 | 29               | .1360   | 1-3/4              | 2-7/8                |
| D2GP187227 | 30               | .1285   | 1-5/8              | 2-3/4                |
| D2GP187226 | 31               | .1200   | 1-5/8              | 2-3/4                |
| D2GP187225 | 32               | .1160   | 1-5/8              | 2-3/4                |
| D2GP187224 | 33               | .1130   | 1-1/2              | 2-5/8                |
| D2GP187223 | 34               | .1110   | 1-1/2              | 2-5/8                |
| D2GP187222 | 35               | .1100   | 1-1/2              | 2-5/8                |
| D2GP187221 | 36               | .1065   | 1-7/16             | 2-1/2                |
| D2GP187220 | 37               | .1040   | 1-7/16             | 2-1/2                |
| D2GP187219 | 38               | .1015   | 1-7/16             | 2-1/2                |
| D2GP187218 | 39               | .0995   | 1-3/8              | 2-3/8                |
| D2GP187217 | 40               | .0980   | 1-3/8              | 2-3/8                |
| D2GP187216 | 41               | .0960   | 1-3/8              | 2-3/8                |
| D2GP187215 | 42               | .0935   | 1-1/4              | 2-1/4                |
| D2GP187214 | 43               | .0890   | 1-1/4              | 2-1/4                |
| D2GP187213 | 44               | .0860   | 1-1/8              | 2-1/8                |
| D2GP187212 | 45               | .0820   | 1-1/8              | 2-1/8                |
| D2GP187211 | 46               | .0810   | 1-1/8              | 2-1/8                |
| D2GP187210 | 47               | .0785   | 1                  | 2                    |
| D2GP187209 | 48               | .0760   | 1                  | 2                    |
| D2GP187208 | 49               | .0730   | 1                  | 2                    |
| D2GP187207 | 50               | .0700   | 1                  | 2                    |
| D2GP187206 | 51               | .0670   | 1                  | 2                    |
| D2GP187205 | 52               | .0635   | 7/8                | 1-7/8                |
| D2GP187204 | 53               | .0595   | 7/8                | 1-7/8                |
| D2GP187203 | 54               | .0550   | 7/8                | 1-7/8                |
| D2GP187202 | 55               | .0520   | 7/8                | 1-7/8                |
| D2GP187201 | 56               | .0465   | 3/4                | 1-3/4                |

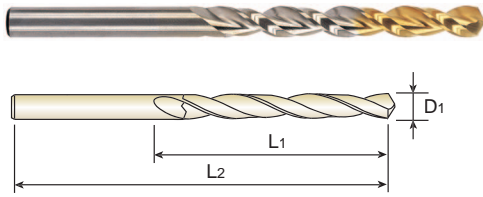
| Tolerance<br>Diameter (Inch)        |            |
|-------------------------------------|------------|
| up to 1/8(.1250)                    | 0 ~ -.0005 |
| over 1/8(.1250)<br>up to 1/4(.2500) | 0 ~ -.0007 |
| over 1/4(.2500)<br>up to 1/2(.5000) | 0 ~ -.0010 |

● : Excellent ○ : Good

| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |        | Cast Iron | Aluminum | Stainless Steels | Titanium | Mild Steels | Copper | Bronze |
|---------------|--------------|--------------------|-----------------|--------|-----------|----------|------------------|----------|-------------|--------|--------|
| ~HB225        | HB225~325    | HRC20~40           | HRC45~55        | HRC55~ |           |          |                  |          |             |        |        |
| ●             | ●            |                    |                 |        |           | ○        | ○                | ○        | ○           |        |        |



# HSS-E Straight Shank Jobber Length DH100 Type Gold-P Coated Drills(ANSI)



- ▶ **Flute Geometry** : Right hand helix, 38° helix, parabolic flute
- ▶ **Point Angle** : 130°, Split point
- ▶ **Surface Treatment** : Bright body TiN coating on working part
- ▶ **Application** : Improved chip removal in most materials, especially in deep drilling applications

## DLGP511 DLGP513

### ▶ Fractional sizes

| EDP No.    | Diameter         |         | Flute Length<br>L1 | Overall Length<br>L2 |
|------------|------------------|---------|--------------------|----------------------|
|            | Fractional<br>D1 | Decimal |                    |                      |
| DLGP511005 | 5/64             | .0781   | 1                  | 2                    |
| DLGP511006 | 3/32             | .0938   | 1-1/4              | 2-1/4                |
| DLGP511007 | 7/64             | .1094   | 1-1/2              | 2-5/8                |
| DLGP511008 | 1/8              | .1250   | 1-5/8              | 2-3/4                |
| DLGP511009 | 9/64             | .1406   | 1-3/4              | 2-7/8                |
| DLGP511010 | 5/32             | .1563   | 2                  | 3-1/8                |
| DLGP511011 | 11/64            | .1719   | 2-1/8              | 3-1/4                |
| DLGP511012 | 3/16             | .1875   | 2-5/16             | 3-1/2                |
| DLGP511013 | 13/64            | .2031   | 2-7/16             | 3-5/8                |
| DLGP511014 | 7/32             | .2188   | 2-1/2              | 3-3/4                |
| DLGP511015 | 15/64            | .2344   | 2-5/8              | 3-7/8                |
| DLGP511016 | 1/4              | .2500   | 2-3/4              | 4                    |
| DLGP511017 | 17/64            | .2656   | 2-7/8              | 4-1/8                |
| DLGP511018 | 9/32             | .2813   | 2-15/16            | 4-1/4                |
| DLGP511019 | 19/64            | .2969   | 3-1/16             | 4-3/8                |
| DLGP511020 | 5/16             | .3125   | 3-3/16             | 4-1/2                |
| DLGP511021 | 21/64            | .3281   | 3-5/16             | 4-5/8                |
| DLGP511022 | 11/32            | .3438   | 3-7/16             | 4-3/4                |
| DLGP511023 | 23/64            | .3594   | 3-1/2              | 4-7/8                |
| DLGP511024 | 3/8              | .3750   | 3-5/8              | 5                    |
| DLGP511025 | 25/64            | .3906   | 3-3/4              | 5-1/8                |
| DLGP511026 | 13/32            | .4063   | 3-7/8              | 5-1/4                |
| DLGP511027 | 27/64            | .4219   | 3-15/16            | 5-3/8                |
| DLGP511028 | 7/16             | .4375   | 4-1/16             | 5-1/2                |
| DLGP511029 | 29/64            | .4531   | 4-3/16             | 5-5/8                |
| DLGP511030 | 15/32            | .4688   | 4-5/16             | 5-3/4                |
| DLGP511031 | 31/64            | .4844   | 4-3/8              | 5-7/8                |
| DLGP511032 | 1/2              | .5000   | 4-1/2              | 6                    |

### ▶ Letter sizes

Unit : Inch

| EDP No.    | Diameter     |         | Flute Length<br>L1 | Overall Length<br>L2 |
|------------|--------------|---------|--------------------|----------------------|
|            | Letter<br>D1 | Decimal |                    |                      |
| DLGP513101 | A            | .2340   | 2-5/8              | 3-7/8                |
| DLGP513102 | B            | .2380   | 2-3/4              | 4                    |
| DLGP513103 | C            | .2420   | 2-3/4              | 4                    |
| DLGP513104 | D            | .2460   | 2-3/4              | 4                    |
| DLGP511105 | E            | .2500   | 2-3/4              | 4                    |
| DLGP513106 | F            | .2570   | 2-7/8              | 4-1/8                |
| DLGP513107 | G            | .2610   | 2-7/8              | 4-1/8                |
| DLGP513108 | H            | .2660   | 2-7/8              | 4-1/8                |
| DLGP513109 | I            | .2720   | 2-7/8              | 4-1/8                |
| DLGP513110 | J            | .2770   | 2-7/8              | 4-1/8                |
| DLGP513111 | K            | .2810   | 2-15/16            | 4-1/4                |
| DLGP513112 | L            | .2900   | 2-15/16            | 4-1/4                |
| DLGP513113 | M            | .2950   | 3-1/16             | 4-3/8                |
| DLGP513114 | N            | .3020   | 3-1/16             | 4-3/8                |
| DLGP513115 | O            | .3160   | 3-3/16             | 4-1/2                |
| DLGP513116 | P            | .3230   | 3-5/16             | 4-5/8                |
| DLGP513117 | Q            | .3320   | 3-7/16             | 4-3/4                |
| DLGP513118 | R            | .3390   | 3-7/16             | 4-3/4                |
| DLGP513119 | S            | .3480   | 3-1/2              | 4-7/8                |
| DLGP513120 | T            | .3580   | 3-1/2              | 4-7/8                |
| DLGP513121 | U            | .3680   | 3-5/8              | 5                    |
| DLGP513122 | V            | .3770   | 3-5/8              | 5                    |
| DLGP513123 | W            | .3860   | 3-3/4              | 5-1/8                |
| DLGP513124 | X            | .3970   | 3-3/4              | 5-1/8                |
| DLGP513125 | Y            | .4040   | 3-7/8              | 5-1/4                |
| DLGP513126 | Z            | .4130   | 3-7/8              | 5-1/4                |

| Tolerance<br>Diameter (Inch)        |            |
|-------------------------------------|------------|
| up to 1/8(.1250)                    | 0 ~ -.0005 |
| over 1/8(.1250)<br>up to 1/4(.2500) | 0 ~ -.0007 |
| over 1/4(.2500)<br>up to 1/2(.5000) | 0 ~ -.0010 |

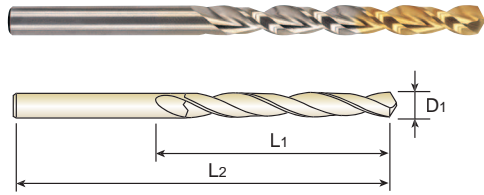
● : Excellent ○ : Good

| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |        | Cast Iron | Aluminum | Stainless Steels | Titanium | Mild Steels | Copper | Bronze |
|---------------|--------------|--------------------|-----------------|--------|-----------|----------|------------------|----------|-------------|--------|--------|
| ~HB225        | HB225~325    | HRC20~40           | HRC45~55        | HRC55~ |           |          |                  |          |             |        |        |
| ●             | ●            |                    |                 |        | ○         | ○        |                  |          | ○           |        |        |





# HSS-E Straight Shank Jobber Length DH100 Type Gold-P Coated Drills(ANSI)



ANSI HSS-E N ≈ 38° h8 130° P.23

- ▶ **Flute Geometry** : Right hand helix, 38° helix, parabolic flute
- ▶ **Point Angle** : 130°, Split point
- ▶ **Surface Treatment** : Bright body TiN coating on working part
- ▶ **Application** : Improved chip removal in most materials, especially in deep drilling applications

**DLGP512**

## ▶ Wire gauge sizes

Unit : Inch

| EDP No.    | Diameter   |         | Flute Length<br>L1 | Overall Length<br>L2 |
|------------|------------|---------|--------------------|----------------------|
|            | Wire gauge | Decimal |                    |                      |
|            | D1         |         |                    |                      |
| DLGP512247 | 1          | .2280   | 2-5/8              | 3-7/8                |
| DLGP512246 | 2          | .2210   | 2-5/8              | 3-7/8                |
| DLGP512245 | 3          | .2130   | 2-1/2              | 3-3/4                |
| DLGP512244 | 4          | .2090   | 2-1/2              | 3-3/4                |
| DLGP512243 | 5          | .2055   | 2-1/2              | 3-3/4                |
| DLGP512242 | 6          | .2040   | 2-1/2              | 3-3/4                |
| DLGP512241 | 7          | .2010   | 2-7/16             | 3-5/8                |
| DLGP512240 | 8          | .1990   | 2-7/16             | 3-5/8                |
| DLGP512239 | 9          | .1960   | 2-7/16             | 3-5/8                |
| DLGP512238 | 10         | .1935   | 2-7/16             | 3-5/8                |
| DLGP512237 | 11         | .1910   | 2-5/16             | 3-1/2                |
| DLGP512236 | 12         | .1890   | 2-5/16             | 3-1/2                |
| DLGP512235 | 13         | .1850   | 2-5/16             | 3-1/2                |
| DLGP512234 | 14         | .1820   | 2-3/16             | 3-3/8                |
| DLGP512233 | 15         | .1800   | 2-3/16             | 3-3/8                |
| DLGP512232 | 16         | .1770   | 2-3/16             | 3-3/8                |
| DLGP512231 | 17         | .1730   | 2-3/16             | 3-3/8                |
| DLGP512230 | 18         | .1695   | 2-1/8              | 3-1/4                |
| DLGP512229 | 19         | .1660   | 2-1/8              | 3-1/4                |
| DLGP512228 | 20         | .1610   | 2-1/8              | 3-1/4                |
| DLGP512227 | 21         | .1590   | 2-1/8              | 3-1/4                |
| DLGP512226 | 22         | .1570   | 2                  | 3-1/8                |
| DLGP512225 | 23         | .1540   | 2                  | 3-1/8                |
| DLGP512224 | 24         | .1520   | 2                  | 3-1/8                |

| EDP No.    | Diameter   |         | Flute Length<br>L1 | Overall Length<br>L2 |
|------------|------------|---------|--------------------|----------------------|
|            | Wire gauge | Decimal |                    |                      |
|            | D1         |         |                    |                      |
| DLGP512223 | 25         | .1495   | 1-7/8              | 3                    |
| DLGP512222 | 26         | .1470   | 1-7/8              | 3                    |
| DLGP512221 | 27         | .1440   | 1-7/8              | 3                    |
| DLGP512220 | 28         | .1405   | 1-3/4              | 2-7/8                |
| DLGP512219 | 29         | .1360   | 1-3/4              | 2-7/8                |
| DLGP512218 | 30         | .1285   | 1-5/8              | 2-3/4                |
| DLGP512217 | 31         | .1200   | 1-5/8              | 2-3/4                |
| DLGP512216 | 32         | .1160   | 1-5/8              | 2-3/4                |
| DLGP512215 | 33         | .1130   | 1-1/2              | 2-5/8                |
| DLGP512214 | 34         | .1110   | 1-1/2              | 2-5/8                |
| DLGP512213 | 35         | .1100   | 1-1/2              | 2-5/8                |
| DLGP512212 | 36         | .1065   | 1-7/16             | 2-1/2                |
| DLGP512211 | 37         | .1040   | 1-7/16             | 2-1/2                |
| DLGP512210 | 38         | .1015   | 1-7/16             | 2-1/2                |
| DLGP512209 | 39         | .0995   | 1-3/8              | 2-3/8                |
| DLGP512208 | 40         | .0980   | 1-3/8              | 2-3/8                |
| DLGP512207 | 41         | .0960   | 1-3/8              | 2-3/8                |
| DLGP512206 | 42         | .0935   | 1-1/4              | 2-1/4                |
| DLGP512205 | 43         | .0890   | 1-1/4              | 2-1/4                |
| DLGP512204 | 44         | .0860   | 1-1/8              | 2-1/8                |
| DLGP512203 | 45         | .0820   | 1-1/8              | 2-1/8                |
| DLGP512202 | 46         | .0810   | 1-1/8              | 2-1/8                |
| DLGP512201 | 47         | .0785   | 1                  | 2                    |

| Tolerance Diameter (Inch)           |            |
|-------------------------------------|------------|
| up to 1/8(.1250)                    | 0 ~ -.0005 |
| over 1/8(.1250)<br>up to 1/4(.2500) | 0 ~ -.0007 |
| over 1/4(.2500)<br>up to 1/2(.5000) | 0 ~ -.0010 |

● : Excellent ○ : Good

| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |        | Cast Iron | Aluminum | Stainless Steels | Titanium | Mild Steels | Copper | Bronze |
|---------------|--------------|--------------------|-----------------|--------|-----------|----------|------------------|----------|-------------|--------|--------|
| ~HB225        | HB225~325    | HRC20~40           | HRC45~55        | HRC55~ |           |          |                  |          |             |        |        |
| ●             | ●            |                    |                 |        | ○         | ○        |                  |          | ○           |        |        |



# Gold-P Coated Drills Set



## DIN338 DRILL SETS JOBBER LENGTH

| SET No.               | DESCRIPTON   | SIZE  | Q'TY   |
|-----------------------|--|---|--------|
| D1GP165SET1           | HSS Straight Shank, Split Point (Ø1.0 & Ø1.5 : NORMAL point)   | 1.0-10.0x0.5mm step                         | 19 pcs |
| D1GP165SET2           | HSS Straight Shank, Split Point (Ø1.0 & Ø1.5 : NORMAL point)   | 1.0-13.0x0.5mm step                         | 25 pcs |
| D1GP165SET3           | HSS Straight Shank, Split Point (Ø1.0 & Ø1.5 : NORMAL point)   | 1.0-10.5x0.5mm step<br>+3.3 +4.2 +6.8 +10.2 | 24 pcs |
| DLGP195SET1           | HSS-E Straight Shank, Split Point (Ø1.0 & Ø1.5 : NORMAL point) | 1.0-10.0x0.5mm step                         | 19 pcs |
| DLGP195SET2           | HSS-E Straight Shank, Split Point (Ø1.0 & Ø1.5 : NORMAL point) | 1.0-13.0x0.5mm step                         | 25 pcs |
| DLGP195SET3           | HSS-E Straight Shank, Split Point (Ø1.0 & Ø1.5 : NORMAL point) | 1.0-10.5x0.5mm step<br>+3.3 +4.2 +6.8 +10.2 | 24 pcs |
| <b>NEW</b> DLGPSET982 | HSS-E Straight Shank, Split Point (Ø1.0 & Ø1.5 : NORMAL point) | 1.0-10.0x0.1mm step                         | 91 pcs |

## JIS DRILL SETS REGULAR LENGTH

| SET No.     | DESCRIPTON  | SIZE                | Q'TY   |
|-------------|---|---------------------|--------|
| D1GP103SET1 | HSS Straight Shank, Normal Point                                | 1.0-10.0x0.5mm step | 19 pcs |
| D1GP103SET2 | HSS Straight Shank, Normal Point                                | 1.0-13.0x0.5mm step | 25 pcs |
| D2GP191SET1 | HSSCo8 Straight Shank, Split Point (Ø1.0 & Ø1.5 : NORMAL point) | 1.0-10.0x0.5mm step | 19 pcs |
| D2GP191SET2 | HSSCo8 Straight Shank, Split Point (Ø1.0 & Ø1.5 : NORMAL point) | 1.0-13.0x0.5mm step | 25 pcs |

## ANSI DRILL SETS JOBBER LENGTH

| SET No.     | Series No.  | DESCRIPTON   | SIZE                    | Q'TY   |
|-------------|-------------|--|-------------------------|--------|
| D1GP138 SET | D1GP SET924 | HSS Straight Shank, Split Point ( # 53 ~ # 56 : NORMAL point)    | # 1~#56(Wire gauge)     | 56 pcs |
| D1GP139 SET | D1GP SET925 | HSS Straight Shank, Split Point                                  | A~Z(Letter)             | 26 pcs |
| D1GP182 SET | D1GP SET926 | HSS Straight Shank, Split Point                                  | Ø1/16~Ø1/2(Fracitional) | 29 pcs |
| D2GP185 SET | D2GP SET927 | HSSCo8 Straight Shank, Split Point                               | Ø1/16~Ø1/2(Fracitional) | 29 pcs |
| D2GP186 SET | D2GP SET928 | HSSCo8 Straight Shank, Split Point                               | A~Z(Letter)             | 26 pcs |
| D2GP187 SET | D2GP SET930 | HSSCo8 Straight Shank, Split Point ( # 53 ~ # 56 : NORMAL point) | # 1~#56(Wire gauge)     | 56 pcs |
| DLGP511 SET | DLGP SET931 | HSSCo5 Straight Shank, Split Point                               | Ø5/64~Ø1/2(Fracitional) | 28 pcs |
| DLGP512 SET | DLGP SET932 | HSSCo5 Straight Shank, Split Point                               | # 1~#47(Wire gauge)     | 47 pcs |
| DLGP513 SET | DLGP SET933 | HSSCo5 Straight Shank, Split Point                               | A~Z(Letter)             | 26 pcs |



# RECOMMENDED CUTTING CONDITIONS

## D1GP125, D1GP165, DLGP195, D1GP103, D2GP191 SERIES

Unit : mm

| 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              | 14000                   | 0.02 | 12500                   | 0.02 | 7700                         | 0.02 | 7000                    | 0.02 | 8050                    | 0.02 | 30000                        | 0.02 | 11500            | 0.03 |
| 2              | 7000                    | 0.06 | 6100                    | 0.06 | 3850                         | 0.06 | 3500                    | 0.06 | 4050                    | 0.06 | 15000                        | 0.06 | 5800             | 0.09 |
| 3              | 4650                    | 0.10 | 4100                    | 0.08 | 2550                         | 0.08 | 2350                    | 0.08 | 2700                    | 0.08 | 9900                         | 0.10 | 3850             | 0.13 |
| 4              | 3500                    | 0.11 | 3050                    | 0.11 | 1950                         | 0.10 | 1750                    | 0.10 | 2000                    | 0.09 | 7450                         | 0.11 | 2900             | 0.15 |
| 5              | 2800                    | 0.12 | 2450                    | 0.11 | 1550                         | 0.10 | 1400                    | 0.10 | 1600                    | 0.10 | 5950                         | 0.12 | 2300             | 0.17 |
| 6              | 2350                    | 0.14 | 2050                    | 0.13 | 1300                         | 0.12 | 1150                    | 0.12 | 1350                    | 0.12 | 4950                         | 0.14 | 1950             | 0.19 |
| 7              | 2000                    | 0.16 | 1750                    | 0.15 | 1100                         | 0.14 | 1000                    | 0.14 | 1150                    | 0.14 | 4250                         | 0.16 | 1650             | 0.22 |
| 8              | 1750                    | 0.18 | 1550                    | 0.18 | 960                          | 0.15 | 875                     | 0.15 | 1000                    | 0.15 | 3700                         | 0.18 | 1450             | 0.24 |
| 9              | 1550                    | 0.20 | 1350                    | 0.22 | 855                          | 0.18 | 780                     | 0.18 | 895                     | 0.17 | 3300                         | 0.20 | 1280             | 0.27 |
| 10             | 1400                    | 0.21 | 1250                    | 0.22 | 770                          | 0.18 | 700                     | 0.18 | 805                     | 0.18 | 3000                         | 0.23 | 1150             | 0.29 |
| 11             | 1250                    | 0.22 | 1100                    | 0.22 | 700                          | 0.18 | 650                     | 0.18 | 730                     | 0.18 | 2700                         | 0.23 | 1050             | 0.30 |
| 12             | 1150                    | 0.23 | 1000                    | 0.22 | 650                          | 0.20 | 585                     | 0.20 | 670                     | 0.20 | 2480                         | 0.23 | 960              | 0.31 |
| 13             | 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.)

## DLGP506 SERIES

Unit : mm

| 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              | 8750                          | 0.02 | 6300                           | 0.02 | 16000               | 0.02 | 9800                | 0.02 |
| 2              | 4400                          | 0.06 | 3150                           | 0.06 | 7900                | 0.07 | 4900                | 0.07 |
| 3              | 2900                          | 0.08 | 2100                           | 0.08 | 5250                | 0.11 | 3250                | 0.11 |
| 4              | 2200                          | 0.09 | 1600                           | 0.09 | 3950                | 0.14 | 2450                | 0.14 |
| 5              | 1750                          | 0.10 | 1250                           | 0.10 | 3150                | 0.14 | 1950                | 0.14 |
| 6              | 1450                          | 0.12 | 1050                           | 0.12 | 2650                | 0.18 | 1650                | 0.18 |
| 7              | 1250                          | 0.14 | 900                            | 0.14 | 2250                | 0.20 | 1400                | 0.20 |
| 8              | 1100                          | 0.15 | 790                            | 0.15 | 1950                | 0.22 | 1250                | 0.22 |
| 9              | 975                           | 0.17 | 700                            | 0.17 | 1750                | 0.24 | 1100                | 0.24 |
| 10             | 875                           | 0.18 | 630                            | 0.18 | 1600                | 0.28 | 980                 | 0.28 |
| 11             | 800                           | 0.20 | 575                            | 0.20 | 1450                | 0.28 | 890                 | 0.28 |
| 12             | 730                           | 0.20 | 525                            | 0.20 | 1300                | 0.28 | 815                 | 0.28 |
| 13             | 675                           | 0.20 | 485                            | 0.20 | 1200                | 0.28 | 755                 | 0.28 |

N = R.P.M

S = Feed per Revolution (mm/rev.)



# RECOMMENDED CUTTING CONDITIONS

## D1GP182, D1GP139, D1GP138, D2GP185, D2GP186, D2GP187 SERIES

| WORK MATERIAL |         |        | CARBON STEELS          |        | CARBON STEELS          |        | ALLOY STEELS              |        | STAINLESS STEELS       |        |
|---------------|---------|--------|------------------------|--------|------------------------|--------|---------------------------|--------|------------------------|--------|
| HARDNESS      |         |        |                        |        | ~ HRC23                |        | HRC23 ~ 34                |        | ~ HRC23                |        |
| STRENGTH      |         |        | ~ 570N/mm <sup>2</sup> |        | ~ 830N/mm <sup>2</sup> |        | 830~1110N/mm <sup>2</sup> |        | ~ 830N/mm <sup>2</sup> |        |
| DIAMETER      |         |        | N                      | S      | N                      | S      | N                         | S      | N                      | S      |
| Inch          | Decimal | Metric |                        |        |                        |        |                           |        |                        |        |
| 3/64          | .0469   | 1.0    | 14000                  | 0.0008 | 12500                  | 0.0008 | 7700                      | 0.0008 | 7000                   | 0.0008 |
| #47           | .0785   | 2.0    | 7000                   | 0.0023 | 6100                   | 0.0024 | 3850                      | 0.0024 | 3500                   | 0.0024 |
| #32           | .1160   | 3.0    | 4650                   | 0.0038 | 4100                   | 0.0031 | 2550                      | 0.0031 | 2350                   | 0.0031 |
| #22           | .1570   | 4.0    | 3500                   | 0.0044 | 3050                   | 0.0043 | 1950                      | 0.0039 | 1750                   | 0.0039 |
| #9            | .1960   | 5.0    | 2800                   | 0.0049 | 2450                   | 0.0043 | 1550                      | 0.0039 | 1400                   | 0.0039 |
| B             | .2380   | 6.0    | 2350                   | 0.0056 | 2050                   | 0.0051 | 1300                      | 0.0047 | 1150                   | 0.0047 |
| J             | .2770   | 7.0    | 2000                   | 0.0064 | 1750                   | 0.0059 | 1100                      | 0.0055 | 1000                   | 0.0055 |
| O             | .3160   | 8.0    | 1750                   | 0.0072 | 1550                   | 0.0071 | 960                       | 0.0059 | 875                    | 0.0059 |
| T             | .3580   | 9.0    | 1550                   | 0.0077 | 1350                   | 0.0087 | 855                       | 0.0071 | 780                    | 0.0071 |
| X             | .3970   | 10.0   | 1400                   | 0.0084 | 1250                   | 0.0087 | 770                       | 0.0071 | 700                    | 0.0071 |
| 7/16          | .4375   | 11.0   | 1250                   | 0.0087 | 1100                   | 0.0087 | 700                       | 0.0071 | 650                    | 0.0071 |
| 15/32         | .4688   | 12.0   | 1150                   | 0.0090 | 1000                   | 0.0087 | 650                       | 0.0079 | 585                    | 0.0079 |
| 1/2           | .5000   | 13.0   | 1050                   | 0.0090 | 950                    | 0.0087 | 595                       | 0.0079 | 540                    | 0.0079 |

| WORK MATERIAL |         |        | TITANIUM ALLOYS       |        | ALUMINUM ALLOYS, ZINC ALLOYS |        | MAGNESIUM ALLOYS |        |
|---------------|---------|--------|-----------------------|--------|------------------------------|--------|------------------|--------|
| HARDNESS      |         |        |                       |        |                              |        |                  |        |
| STRENGTH      |         |        | ~410N/mm <sup>2</sup> |        |                              |        |                  |        |
| DIAMETER      |         |        | N                     | S      | N                            | S      | N                | S      |
| Inch          | Decimal | Metric |                       |        |                              |        |                  |        |
| 3/64          | .0469   | 1.0    | 8050                  | 0.0008 | 30000                        | 0.0008 | 11500            | 0.0012 |
| #47           | .0785   | 2.0    | 4050                  | 0.0024 | 15000                        | 0.0023 | 5800             | 0.0035 |
| #32           | .1160   | 3.0    | 2700                  | 0.0031 | 9900                         | 0.0038 | 3850             | 0.0051 |
| #22           | .1570   | 4.0    | 2000                  | 0.0035 | 7450                         | 0.0044 | 2900             | 0.0059 |
| #9            | .1960   | 5.0    | 1600                  | 0.0039 | 5950                         | 0.0049 | 2300             | 0.0067 |
| B             | .2380   | 6.0    | 1350                  | 0.0047 | 4950                         | 0.0056 | 1950             | 0.0075 |
| J             | .2770   | 7.0    | 1150                  | 0.0055 | 4250                         | 0.0064 | 1650             | 0.0087 |
| O             | .3160   | 8.0    | 1000                  | 0.0059 | 3700                         | 0.0072 | 1450             | 0.0094 |
| T             | .3580   | 9.0    | 895                   | 0.0067 | 3300                         | 0.0079 | 1280             | 0.0106 |
| X             | .3970   | 10.0   | 805                   | 0.0071 | 3000                         | 0.0090 | 1150             | 0.0114 |
| 7/16          | .4375   | 11.0   | 730                   | 0.0071 | 2700                         | 0.0090 | 1050             | 0.0118 |
| 15/32         | .4688   | 12.0   | 670                   | 0.0079 | 2480                         | 0.0090 | 960              | 0.0122 |
| 1/2           | .5000   | 13.0   | 620                   | 0.0079 | 2300                         | 0.0090 | 890              | 0.0122 |

N = R.P.M  
S = Inch per Revolution(inch/rev.)





## RECOMMENDED CUTTING CONDITIONS

### DLGP511, DLGP513, DLGP512 SERIES

| WORK MATERIAL |         |        | CARBON STEELS<br>ALLOY STEELS |        | TOOL STEELS<br>HARDENED STEELS |        | SOFT GREY<br>CAST IRON |        | HARD GREY<br>CAST IRON |        |
|---------------|---------|--------|-------------------------------|--------|--------------------------------|--------|------------------------|--------|------------------------|--------|
| HARDNESS      |         |        | HRc15 ~ 30                    |        | HRc20 ~ 40                     |        |                        |        |                        |        |
| STRENGTH      |         |        | 700 ~ 1000N/mm <sup>2</sup>   |        | 800~1200N/mm <sup>2</sup>      |        |                        |        |                        |        |
| DIAMETER      |         |        | N                             | S      | N                              | S      | N                      | S      | N                      | S      |
| Inch          | Decimal | Metric |                               |        |                                |        |                        |        |                        |        |
| 3/64          | .0469   | 1.0    | 8750                          | 0.0008 | 6300                           | 0.0008 | 16000                  | 0.0008 | 9800                   | 0.0008 |
| #47           | .0785   | 2.0    | 4400                          | 0.0022 | 3150                           | 0.0022 | 7900                   | 0.0027 | 4900                   | 0.0027 |
| #32           | .1160   | 3.0    | 2900                          | 0.0032 | 2100                           | 0.0032 | 5250                   | 0.0043 | 3250                   | 0.0043 |
| #22           | .1570   | 4.0    | 2200                          | 0.0036 | 1600                           | 0.0036 | 3950                   | 0.0054 | 2450                   | 0.0054 |
| #9            | .1960   | 5.0    | 1750                          | 0.0041 | 1250                           | 0.0041 | 3150                   | 0.0054 | 1950                   | 0.0054 |
| B             | .2380   | 6.0    | 1450                          | 0.0047 | 1050                           | 0.0047 | 2650                   | 0.0069 | 1650                   | 0.0069 |
| J             | .2770   | 7.0    | 1250                          | 0.0054 | 900                            | 0.0054 | 2250                   | 0.0078 | 1400                   | 0.0078 |
| O             | .3160   | 8.0    | 1100                          | 0.0060 | 790                            | 0.0060 | 1950                   | 0.0087 | 1250                   | 0.0087 |
| T             | .3580   | 9.0    | 975                           | 0.0066 | 700                            | 0.0066 | 1750                   | 0.0095 | 1100                   | 0.0095 |
| X             | .3970   | 10.0   | 875                           | 0.0071 | 630                            | 0.0071 | 1600                   | 0.0108 | 980                    | 0.0108 |
| 7/16          | .4375   | 11.0   | 800                           | 0.0077 | 575                            | 0.0077 | 1450                   | 0.0108 | 890                    | 0.0108 |
| 15/32         | .4688   | 12.0   | 730                           | 0.0077 | 525                            | 0.0077 | 1300                   | 0.0108 | 815                    | 0.0108 |
| 1/2           | .5000   | 13.0   | 675                           | 0.0077 | 485                            | 0.0077 | 1200                   | 0.0108 | 755                    | 0.0108 |


N = R.P.M  
S = Inch per Revolution(inch/rev.)

# MEMO



# MEMO





*Gold-P Drills*

** YG-1 CO., LTD.**

**HEAD OFFICE**

68, Cheongcheon-Dong, Bupyeong-Gu, Incheon, Korea

PHONE : +82-32-526-0909, FAX : +82-32-526-4373

<http://www.yg1.kr>

E-mail: [yg1@yg1.kr](mailto:yg1@yg1.kr)

Tool specifications are subject to change without notice.