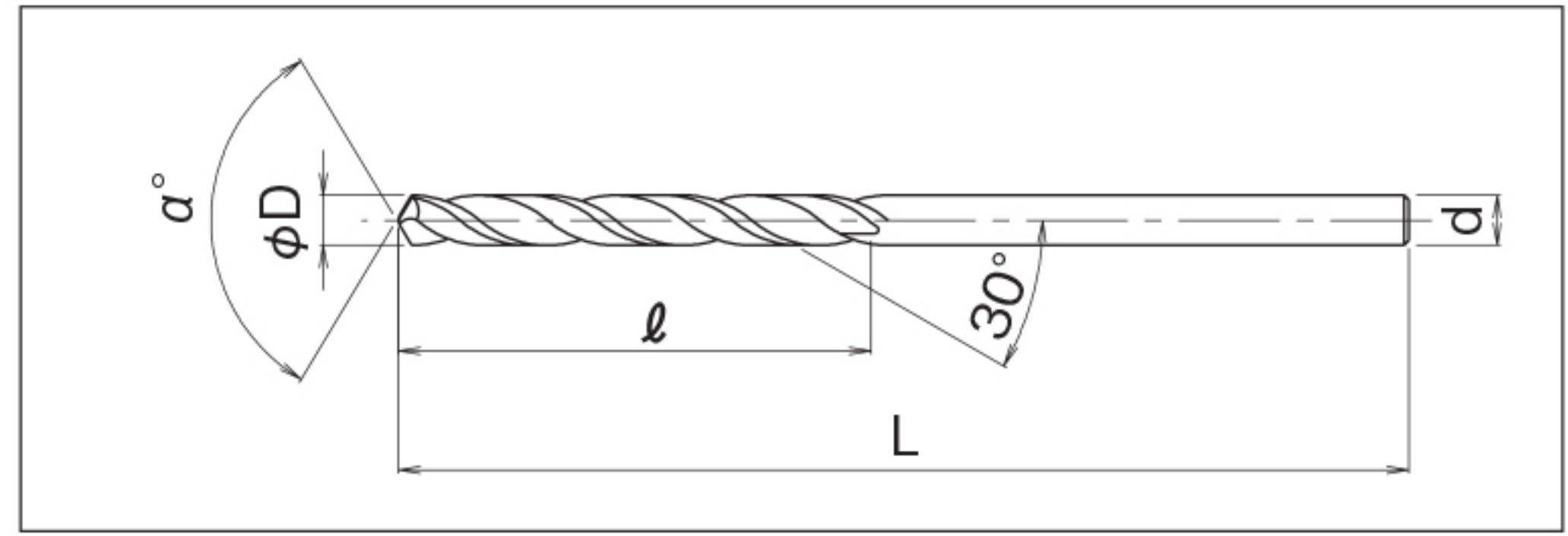


# ソリッド スーパーロングドリル 〈ストレートシャンク〉

Super Long Drill, Straight Shank

## ADLL



■ ADS標準ストレートシャンクドリルのエクストラロングタイプです。

Extra Long type of ADS Standard Straight Shank Drill.



刃径公差：+0~-0.01  
φD Tolerance

φD ≥ 2.1

超硬 CARBIDE

118°

135°

ネジレ 30°

D=d

単位 Unit : mm

| 型番<br>CODE NUMBER | 径<br>φD | 刃長<br>ℓ | 全長<br>L | 定価<br>¥ |
|-------------------|---------|---------|---------|---------|
| ADLL-0030         | 0.3     | 15      | 75      |         |
| ADLL-0035         | 0.35    | 15      | 75      |         |
| ADLL-0040         | 0.4     | 15      | 75      |         |
| ADLL-0045         | 0.45    | 15      | 75      |         |
| ADLL-0050         | 0.5     | 15      | 75      |         |
| ADLL-0055         | 0.55    | 20      | 90      |         |
| ADLL-0060         | 0.6     | 20      | 90      |         |
| ADLL-0065         | 0.65    | 20      | 90      |         |
| ADLL-0070         | 0.7     | 20      | 90      |         |
| ADLL-0075         | 0.75    | 20      | 90      |         |
| ADLL-0080         | 0.8     | 25      | 100     |         |
| ADLL-0085         | 0.85    | 25      | 100     |         |
| ADLL-0090         | 0.9     | 25      | 100     |         |
| ADLL-0095         | 0.95    | 25      | 100     |         |
| ADLL-0100         | 1       | 30      | 100     |         |
| ADLL-0105         | 1.05    | 30      | 100     |         |
| ADLL-0110         | 1.1     | 30      | 100     |         |
| ADLL-0115         | 1.15    | 30      | 100     |         |
| ADLL-0120         | 1.2     | 35      | 100     |         |
| ADLL-0125         | 1.25    | 35      | 100     |         |
| ADLL-0130         | 1.3     | 35      | 100     |         |
| ADLL-0135         | 1.35    | 35      | 100     |         |
| ADLL-0140         | 1.4     | 40      | 100     |         |
| ADLL-0145         | 1.45    | 40      | 100     |         |
| ADLL-0150         | 1.5     | 40      | 100     |         |
| ADLL-0155         | 1.55    | 40      | 100     |         |

| 型番<br>CODE NUMBER | 径<br>φD | 刃長<br>ℓ | 全長<br>L | 定価<br>¥ |
|-------------------|---------|---------|---------|---------|
| ADLL-0160         | 1.6     | 40      | 100     |         |
| ADLL-0165         | 1.65    | 40      | 100     |         |
| ADLL-0170         | 1.7     | 40      | 100     |         |
| ADLL-0175         | 1.75    | 40      | 100     |         |
| ADLL-0180         | 1.8     | 40      | 100     |         |
| ADLL-0185         | 1.85    | 40      | 100     |         |
| ADLL-0190         | 1.9     | 40      | 100     |         |
| ADLL-0195         | 1.95    | 40      | 100     |         |
| ADLL-0200         | 2       | 40      | 100     |         |
| ADLL-0205         | 2.05    | 40      | 100     |         |
| ADLL-0210         | 2.1     | 40      | 100     |         |
| ADLL-0215         | 2.15    | 40      | 100     |         |
| ADLL-0220         | 2.2     | 40      | 100     |         |
| ADLL-0225         | 2.25    | 40      | 100     |         |
| ADLL-0230         | 2.3     | 40      | 100     |         |
| ADLL-0235         | 2.35    | 40      | 100     |         |
| ADLL-0240         | 2.4     | 50      | 150     |         |
| ADLL-0245         | 2.45    | 50      | 150     |         |
| ADLL-0250         | 2.5     | 50      | 150     |         |
| ADLL-0255         | 2.55    | 50      | 150     |         |
| ADLL-0260         | 2.6     | 50      | 150     |         |
| ADLL-0265         | 2.65    | 50      | 150     |         |
| ADLL-0270         | 2.7     | 50      | 150     |         |
| ADLL-0275         | 2.75    | 50      | 150     |         |
| ADLL-0280         | 2.8     | 50      | 150     |         |
| ADLL-0285         | 2.85    | 50      | 150     |         |

ストレートシャンクドリル  
Straight Shank Drill



# ADLL ソリッドスーパーロングドリル (ストレートシャンク)

単位 Unit : mm

| 型番<br>CODE NUMBER | 径<br>φD | 刃長<br>ℓ | 全長<br>L | 定価<br>¥ |
|-------------------|---------|---------|---------|---------|
| ADLL-0290         | 2.9     | 50      | 150     |         |
| ADLL-0295         | 2.95    | 50      | 150     |         |
| ADLL-0300         | 3       | 65      | 150     |         |
| ADLL-0305         | 3.05    | 65      | 150     |         |
| ADLL-0310         | 3.1     | 65      | 150     |         |
| ADLL-0315         | 3.15    | 65      | 150     |         |
| ADLL-0320         | 3.2     | 65      | 150     |         |
| ADLL-0325         | 3.25    | 65      | 150     |         |
| ADLL-0330         | 3.3     | 65      | 150     |         |
| ADLL-0335         | 3.35    | 65      | 150     |         |
| ADLL-0340         | 3.4     | 65      | 150     |         |
| ADLL-0345         | 3.45    | 65      | 150     |         |
| ADLL-0350         | 3.5     | 65      | 150     |         |
| ADLL-0355         | 3.55    | 65      | 150     |         |
| ADLL-0360         | 3.6     | 75      | 150     |         |
| ADLL-0365         | 3.65    | 75      | 150     |         |
| ADLL-0370         | 3.7     | 75      | 150     |         |
| ADLL-0375         | 3.75    | 75      | 150     |         |
| ADLL-0380         | 3.8     | 75      | 150     |         |
| ADLL-0385         | 3.85    | 75      | 150     |         |
| ADLL-0390         | 3.9     | 75      | 150     |         |
| ADLL-0395         | 3.95    | 75      | 150     |         |
| ADLL-0400         | 4       | 75      | 150     |         |
| ADLL-0405         | 4.05    | 75      | 150     |         |
| ADLL-0410         | 4.1     | 75      | 150     |         |
| ADLL-0415         | 4.15    | 75      | 150     |         |
| ADLL-0420         | 4.2     | 75      | 150     |         |
| ADLL-0425         | 4.25    | 75      | 150     |         |
| ADLL-0430         | 4.3     | 75      | 150     |         |
| ADLL-0435         | 4.35    | 75      | 150     |         |
| ADLL-0440         | 4.4     | 75      | 150     |         |
| ADLL-0445         | 4.45    | 75      | 150     |         |
| ADLL-0450         | 4.5     | 75      | 150     |         |
| ADLL-0455         | 4.55    | 75      | 150     |         |
| ADLL-0460         | 4.6     | 75      | 150     |         |
| ADLL-0465         | 4.65    | 75      | 150     |         |
| ADLL-0470         | 4.7     | 75      | 150     |         |
| ADLL-0475         | 4.75    | 75      | 150     |         |
| ADLL-0480         | 4.8     | 75      | 150     |         |
| ADLL-0485         | 4.85    | 75      | 150     |         |
| ADLL-0490         | 4.9     | 75      | 150     |         |
| ADLL-0495         | 4.95    | 75      | 150     |         |
| ADLL-0500         | 5       | 90      | 200     |         |
| ADLL-0505         | 5.05    | 90      | 200     |         |

| 型番<br>CODE NUMBER | 径<br>φD | 刃長<br>ℓ | 全長<br>L | 定価<br>¥ |
|-------------------|---------|---------|---------|---------|
| ADLL-0510         | 5.1     | 90      | 200     |         |
| ADLL-0515         | 5.15    | 90      | 200     |         |
| ADLL-0520         | 5.2     | 90      | 200     |         |
| ADLL-0525         | 5.25    | 90      | 200     |         |
| ADLL-0530         | 5.3     | 90      | 200     |         |
| ADLL-0535         | 5.35    | 90      | 200     |         |
| ADLL-0540         | 5.4     | 90      | 200     |         |
| ADLL-0545         | 5.45    | 90      | 200     |         |
| ADLL-0550         | 5.5     | 90      | 200     |         |
| ADLL-0555         | 5.55    | 90      | 200     |         |
| ADLL-0560         | 5.6     | 90      | 200     |         |
| ADLL-0565         | 5.65    | 90      | 200     |         |
| ADLL-0570         | 5.7     | 90      | 200     |         |
| ADLL-0575         | 5.75    | 90      | 200     |         |
| ADLL-0580         | 5.8     | 90      | 200     |         |
| ADLL-0585         | 5.85    | 90      | 200     |         |
| ADLL-0590         | 5.9     | 90      | 200     |         |
| ADLL-0595         | 5.95    | 90      | 200     |         |
| ADLL-0600         | 6       | 90      | 200     |         |
| ADLL-0610         | 6.1     | 90      | 200     |         |
| ADLL-0620         | 6.2     | 90      | 200     |         |
| ADLL-0630         | 6.3     | 90      | 200     |         |
| ADLL-0640         | 6.4     | 90      | 200     |         |
| ADLL-0650         | 6.5     | 90      | 200     |         |
| ADLL-0660         | 6.6     | 90      | 200     |         |
| ADLL-0670         | 6.7     | 90      | 200     |         |
| ADLL-0680         | 6.8     | 90      | 200     |         |
| ADLL-0690         | 6.9     | 90      | 200     |         |
| ADLL-0700         | 7       | 90      | 200     |         |
| ADLL-0710         | 7.1     | 90      | 200     |         |
| ADLL-0720         | 7.2     | 90      | 200     |         |
| ADLL-0730         | 7.3     | 90      | 200     |         |
| ADLL-0740         | 7.4     | 90      | 200     |         |
| ADLL-0750         | 7.5     | 90      | 200     |         |
| ADLL-0760         | 7.6     | 90      | 200     |         |
| ADLL-0770         | 7.7     | 90      | 200     |         |
| ADLL-0780         | 7.8     | 90      | 200     |         |
| ADLL-0790         | 7.9     | 90      | 200     |         |
| ADLL-0800         | 8       | 90      | 200     |         |
| ADLL-0810         | 8.1     | 90      | 200     |         |
| ADLL-0820         | 8.2     | 90      | 200     |         |
| ADLL-0830         | 8.3     | 90      | 200     |         |
| ADLL-0840         | 8.4     | 90      | 200     |         |
| ADLL-0850         | 8.5     | 90      | 200     |         |

ストレートシャンクドリル  
 Straight Shank Drill







# ADL ソリッド ロングドリル

ADL Long Drill, Straight Shank

# ADLL ソリッドスーパーロングドリル

ADLL Super Long Drill, Straight Shank

| 被削材<br>Work<br>Materials | 炭素鋼<br>Carbon steel<br>SS S50C |   | 合金鋼<br>Alloy Steel<br>SCM SKS |   | 調質鋼<br>Hardened Steel<br>NAK SKD<br>(HRC30~38) |   | 鋳鉄<br>Cast Iron<br>FC25 |   | ステンレス鋼<br>Stainless Steel<br>SUS303, 420 |   |
|--------------------------|--------------------------------|---|-------------------------------|---|--|---|-------------------------|---|--|---|
|                          | ドリル径<br>Drill Dia.<br>(mm)     | 回転数<br>Rotation<br>(min <sup>-1</sup> ) | 送り量<br>Feed<br>(mm/rev)       | 回転数<br>Rotation<br>(min <sup>-1</sup> ) | 送り量<br>Feed<br>(mm/rev)                        | 回転数<br>Rotation<br>(min <sup>-1</sup> ) | 送り量<br>Feed<br>(mm/rev) | 回転数<br>Rotation<br>(min <sup>-1</sup> ) | 送り量<br>Feed<br>(mm/rev)                  | 回転数<br>Rotation<br>(min <sup>-1</sup> ) |
| φ0.3~<br>0.5             | 10,000                         | 0.004                                   | 9,000                         | 0.002                                   | 7,000  | 0.0015                                  | 10,000                  | 0.005                                   | 4,000                                    | 0.001                                   |
| φ0.6~<br>1.0             | 10,000~<br>9,500               | 0.01~<br>0.02                           | 8,000~<br>6,400               | 0.007~<br>0.015                         | 6,400~<br>4,800                                | 0.003~<br>0.01                          | 10,000~<br>9,500        | 0.01~<br>0.04                           | 3,800~<br>4,800                          | 0.001~<br>0.005                         |
| φ1.1~<br>2.0             | 7,200~<br>6,400                | 0.02~<br>0.06                           | 5,800~<br>3,200               | 0.01~<br>0.02                           | 4,400~<br>3,200                                | 0.01~<br>0.015                          | 8,700~<br>7,200         | 0.06~<br>0.15                           | 4,300~<br>3,200                          | 0.005~<br>0.02                          |
| φ2.1~<br>2.9             | 6,100~<br>4,400                | 0.06~<br>0.08                           | 3,000~<br>2800                | 0.02~<br>0.04                           | 3,000~<br>2,800                                | 0.015~<br>0.02                          | 6,800~<br>4,900         | 0.06~<br>0.15                           | 3,000~<br>2,200                          | 0.01~<br>0.03                           |
| φ3.0~<br>5.0             | 4,300~<br>2,600                | 0.08~<br>0.1                            | 2,700~<br>2,000               | 0.04~<br>0.08                           | 2,700~<br>1,900                                | 0.02~<br>0.04                           | 4,800~<br>3,200         | 0.1~<br>0.2                             | 2,100~<br>1,900                          | 0.03~<br>0.05                           |
| φ6.0~<br>8.0             | 2,200~<br>1,900                | 0.1~<br>0.12                            | 1,600~<br>1,400               | 0.05~<br>0.1                            | 1,600~<br>1,400                                | 0.02~<br>0.06                           | 2,600~<br>2,000         | 0.15~<br>0.25                           | 1,600~<br>1,200                          | 0.05~<br>0.1                            |
| φ9.0~<br>13.0            | 1,600~<br>1,200                | 0.1~<br>0.12                            | 1,300~<br>1,000               | 0.05~<br>0.1                            | 1,200~<br>900                                  | 0.04~<br>0.08                           | 1,800~<br>1,500         | 0.2~<br>0.3                             | 1,100~<br>750                            | 0.05~<br>0.1                            |

| 被削材<br>Work<br>Materials   | アルミ・銅合金<br>Aluminium<br>Copper Alloy    |                         |
|----------------------------|---|-------------------------|
| ドリル径<br>Drill Dia.<br>(mm) | 回転数<br>Rotation<br>(min <sup>-1</sup> ) | 送り量<br>Feed<br>(mm/rev) |
| φ0.3~<br>0.5               | 10,000                                  | 0.01~<br>0.02           |
| φ0.6~<br>1.0               | 12,000~<br>20,000                       | 0.06~<br>0.15           |
| φ1.1~<br>2.0               | 16,000~<br>13,000                       | 0.1~<br>0.2             |
| φ2.1~<br>2.9               | 13,000~<br>10,000                       | 0.1~<br>0.2             |
| φ3.0~<br>5.0               | 8,500~<br>6,400                         | 0.2~<br>0.25            |
| φ6.0~<br>8.0               | 5,300~<br>4,000                         | 0.2~<br>0.3             |
| φ9.0~<br>13.0              | 3,000~<br>2,500                         | 0.3~<br>0.4             |

### 備考

- 1) 切削条件は当初上記条件表の低い値より選定し、徐々に高い値にして最適条件でご使用下さい。
- 2) この切削条件はドリルの突出し長さが、刃長の1.1倍を基準としています。この基準以上の突き出し量で使用する場合は回転速度、送り速度を下げてください。
- 3) ロングドリルご使用の場合は、切削条件は当初低い値より設定し、徐々に高い値にして最適加工条件でご使用下さい。
- 4) ロングドリルご使用の場合は、より安定した精度の良い穴あけ加工を可能にするためブッシュの使用をお勧めします。

### Remarks:

- 1) It is generally recommended to start with the lowest speed and feed shown in the table. They may be gradually increased to higher points to obtain the fittest condition.
- 2) This drilling conditions are based on the tool extension length being 1.1 times the flute length. When the extension length from the chuck is longer than 1.1 times of flute length, please reduce the above value for speed and feed appropriately.
- 3) When a long drill used, you are requested to start with the lowest speed and feed shown in the table, They may be gradually increased to higher points to obtain the fittest condition.
- 4) It is recommended to use the drill bush for stable and preciser drilling holes.