



MG

DLC  
Coating

37.5

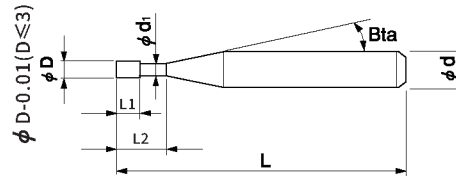
SD  
0-0.003

Highly recommend ★ ○ ○  
/Recommend/Suggest

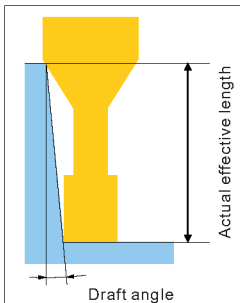
| DIE STEEL                            | Grade |
|--------------------------------------|-------|
| Carbon steels (S45C/S55C)            |       |
| Alloy steels (SK/SCM/SUS)            |       |
| Prehardened steels (NAK/HPM)         |       |
| Hardened steels (~55/~60/~70HRC)     |       |
| SPECIAL MATERIAL                     |       |
| Aluminum alloys                      | ○     |
| Graphite                             |       |
| Copper                               | ★     |
| Plastics                             | ○     |
| Carbon fiber                         |       |
| Titanium alloys                      |       |
| Heat resistant alloys                |       |
| Cemented carbide                     |       |
| Hard brittle (non-metallic) material |       |

## Specialty

- \* Special geometry design, sharp cutting edge, highly efficient milling and chip evacuation;
- \* The coating, with good thermal stability, makes it maintain the hardness and mechanical properties under high temperature;
- \* Lower coefficient of friction reduces wear during cutting and provides better surface quality;



2 Flutes

Long Neck  
Square

Total 24 models

Unit (mm)

| Model Number  | D<br>Outside Diameter | L1<br>Length Of Cut | L2<br>Effective Length | Bta<br>Shank Taper Angle | L<br>Overall Length | T<br>Number Of Flutes | d<br>Shank Diameter | In Stock |
|---------------|-----------------------|---------------------|------------------------|--------------------------|---------------------|-----------------------|---------------------|----------|
| SHDLS4-010040 | 1.0                   | 1.5                 | 4                      | 12°                      | 50                  | 4                     | 4                   | ○        |
| SHDLS4-010060 | 1.0                   | 1.5                 | 6                      | 12°                      | 50                  | 4                     | 4                   | ○        |
| SHDLS4-010080 | 1.0                   | 1.5                 | 8                      | 12°                      | 50                  | 4                     | 4                   | ○        |
| SHDLS4-010100 | 1.0                   | 1.5                 | 10                     | 12°                      | 50                  | 4                     | 4                   | ○        |
| SHDLS4-010120 | 1.0                   | 1.5                 | 12                     | 12°                      | 50                  | 4                     | 4                   | ○        |
| SHDLS4-015040 | 1.5                   | 2.3                 | 4                      | 12°                      | 50                  | 4                     | 4                   | ○        |
| SHDLS4-015060 | 1.5                   | 2.3                 | 6                      | 12°                      | 50                  | 4                     | 4                   | ○        |
| SHDLS4-015080 | 1.5                   | 2.3                 | 8                      | 12°                      | 50                  | 4                     | 4                   | ○        |
| SHDLS4-015100 | 1.5                   | 2.3                 | 10                     | 12°                      | 50                  | 4                     | 4                   | ○        |
| SHDLS4-015120 | 1.5                   | 2.3                 | 12                     | 12°                      | 50                  | 4                     | 4                   | ○        |

Next page →

## Total 24 models

Unit (mm)

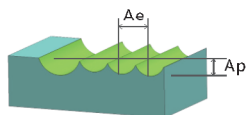
| Model Number    | D Outside Diameter | L1 Length Of Cut | L2 Effective Length | Bta Shank Taper Angle | L Overall Length | T Number Of Flutes | d Shank Diameter | In Stock |
|-----------------|--------------------|------------------|---------------------|-----------------------|------------------|--------------------|------------------|----------|
| SHDLS4-020060   | 2.0                | 3.0              | 6                   | 12°                   | 50               | 4                  | 4                | ○        |
| SHDLS4-020080   | 2.0                | 3.0              | 8                   | 12°                   | 50               | 4                  | 4                | ○        |
| SHDLS4-020100   | 2.0                | 3.0              | 10                  | 12°                   | 50               | 4                  | 4                | ○        |
| SHDLS4-020120   | 2.0                | 3.0              | 12                  | 12°                   | 50               | 4                  | 4                | ○        |
| SHDLS4-020160   | 2.0                | 3.0              | 16                  | 12°                   | 50               | 4                  | 4                | ○        |
| SHDLS4-020200   | 2.0                | 3.0              | 20                  | 12°                   | 50               | 4                  | 4                | ○        |
| SHDLS4-030100   | 3.0                | 4.5              | 10                  | 12°                   | 50               | 4                  | 4                | ○        |
| SHDLS4-030120   | 3.0                | 4.5              | 12                  | 12°                   | 50               | 4                  | 4                | ○        |
| SHDLS4-030160   | 3.0                | 4.5              | 16                  | 12°                   | 50               | 4                  | 4                | ○        |
| SHDLS4-030200   | 3.0                | 4.5              | 20                  | 12°                   | 50               | 4                  | 4                | ○        |
| SHDLS4-030100-6 | 3.0                | 4.5              | 10                  | 12°                   | 50               | 4                  | 6                | ○        |
| SHDLS4-030120-6 | 3.0                | 4.5              | 12                  | 12°                   | 50               | 4                  | 6                | ○        |
| SHDLS4-030160-6 | 3.0                | 4.5              | 16                  | 12°                   | 50               | 4                  | 6                | ○        |
| SHDLS4-030200-6 | 3.0                | 4.5              | 20                  | 12°                   | 50               | 4                  | 6                | ○        |

\*New size added from this series.

○ Stocked items.

2 Flutes

Long Neck Square



| Work Material    |                          | Oxygen-free & Copper |                  |
|------------------|--------------------------|----------------------|------------------|
| (mm)<br>Diameter | (mm)<br>Effective Length | (min-1)<br>Speed     | (mm/min)<br>Feed |
| D1.0             | 4                        | 18000                | 1500             |
| D1.0             | 6                        | 16000                | 1300             |
| D1.0             | 8                        | 12000                | 1000             |
| D1.0             | 10                       | 10000                | 800              |
| D1.0             | 12                       | 8000                 | 500              |
| D1.5             | 4                        | 18000                | 1800             |
| D1.5             | 6                        | 18000                | 1800             |
| D1.5             | 8                        | 16000                | 1500             |
| D1.5             | 10                       | 16000                | 1300             |
| D1.5             | 12                       | 10000                | 800              |
| D2.0             | 6                        | 16000                | 2000             |
| D2.0             | 8                        | 16000                | 2000             |
| D2.0             | 10                       | 16000                | 1800             |
| D2.0             | 12                       | 16000                | 1800             |
| D2.0             | 16                       | 12000                | 1300             |
| D2.0             | 20                       | 8000                 | 800              |
| D3.0             | 10                       | 14000                | 2000             |
| D3.0             | 12                       | 14000                | 2000             |
| D3.0             | 16                       | 12000                | 1800             |
| D3.0             | 20                       | 12000                | 1800             |
| D3.0             | 10                       | 14000                | 2000             |
| D3.0             | 12                       | 14000                | 2000             |
| D3.0             | 16                       | 12000                | 1800             |
| D3.0             | 20                       | 12000                | 1800             |

2 Flutes

Long Neck  
Square

Note:

- \* Decrease both spindle speed and feed rate proportionally when the milling parameters exceed the machine's maximum spindle speed;
- \* Recommend oil coolant for Stainless Steels and Heat Resistance Alloys;
- \* Recommend using a non-contact measuring device to avoid damaging the precision tip point.