



Shouldering

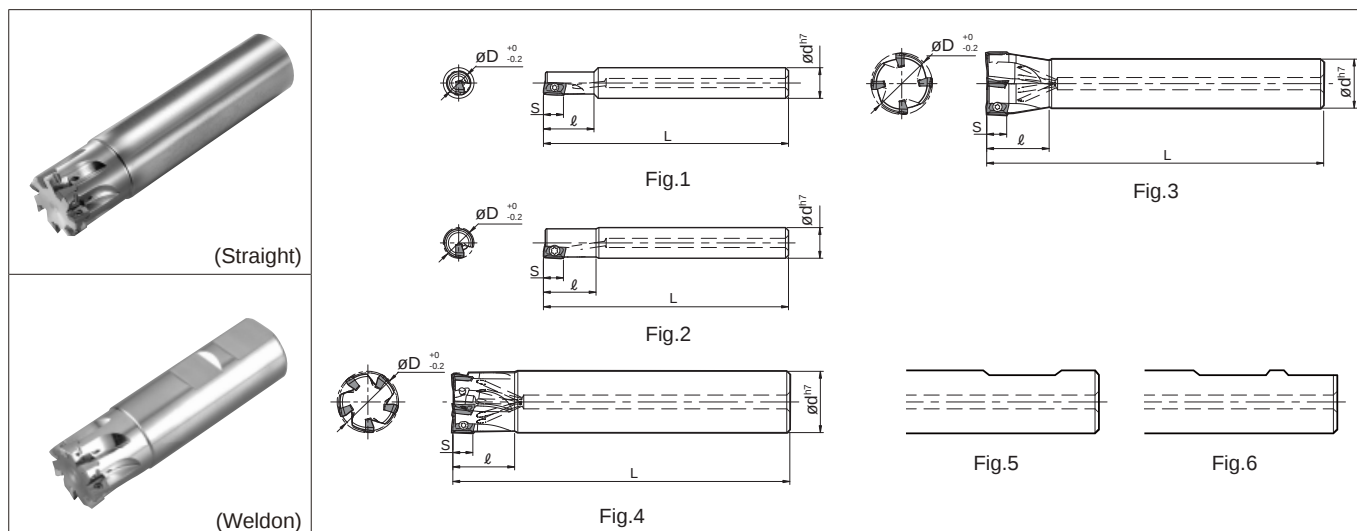


Slotting



Facing

## MECX Endmill



## Toolholder Dimensions

| Description            |            |      | Std.             | No. of Insert | Dimension (mm) |    |     |        |        | Rake Angle (°) |        | Coolant Hole | Drawing | Spare Parts |            | Applicable Inserts<br>➡ M16 | Max. Revolution (min <sup>-1</sup> ) |        |
|------------------------|------------|------|------------------|---------------|----------------|----|-----|--------|--------|----------------|--------|--------------|---------|-------------|------------|-----------------------------|--------------------------------------|--------|
|                        |            |      |                  |               | øD             | ød | L   | ℓ      | S      | A.R. (MAX)     | R.R.   |              |         | Clamp Screw | Wrench     |                             |                                      |        |
|                        |            |      |                  |               |                |    |     |        |        |                |        |              |         |             |            |                             |                                      |        |
| Cylindrical            | Standard   | MECX | 08-S10-07-1T     | ●             | 1              | 8  | 10  | 16     | 6      | 11.7°          | -24.0° | Yes          | Fig.1   | SB-2035TRG  | DTM-6      | BDMT0703                    | 48,100                               |        |
|                        |            |      | 14-S12-07-2T     | ●             | 2              | 14 | 12  | 80     |        | 16.3°          | -12.1° |              | Fig.3   |             |            |                             | 44,800                               |        |
|                        |            |      | 17-S16-07-3T     | ●             | 3              | 17 | 16  | 100    |        | -11.0°         | 42,400 |              |         |             |            |                             |                                      |        |
|                        |            |      | 18-S16-07-3T     | ●             | 3              | 18 |     |        |        | -10.9°         | 41,600 |              |         |             |            |                             |                                      |        |
|                        |            |      | 20-S16-07-4T     | ●             | 4              | 20 | 110 | -10.4° |        | 40,200         |        |              |         |             |            |                             |                                      |        |
|                        |            |      | 21-S20-07-4T     | ●             | 4              | 21 |     | -10.1° |        | 39,500         |        |              |         |             |            |                             |                                      |        |
|                        |            |      | 25-S20-07-5T     | ●             | 5              | 25 | 20  | -9.7°  |        | 37,000         |        |              |         |             |            |                             |                                      |        |
|                        |            |      | 26-S25-07-5T     | ●             | 5              | 26 |     | 25     |        | -9.5°          | 36,500 |              |         |             |            |                             |                                      |        |
|                        |            |      | 33-S32-07-6T     | ●             | 6              | 33 | 32  | 130    |        | 30             | -8.8°  |              | 33,100  |             |            |                             |                                      |        |
|                        | Fine pitch | MECX | 20-S16-07-5T     | ●             | 5              | 20 | 16  | 110    | 20     | 6              | 16.3°  | -10.4°       | Yes     | Fig.3       | SB-2042TRG | DTM-6                       | BDMT0703                             | 40,200 |
| 25-S20-07-7T           |            |      | ●                | 7             | 25             | 20 | 120 | 25     | -9.7°  | 37,000         |        |              |         |             |            |                             |                                      |        |
| Cylindrical            | Standard   | MECX | 10-S10-07-1T     | ●             | 1              | 10 | 10  | 17     | 6      | 12.8°          | -18.7° | Yes          | Fig.2   | SB-2035TRG  | DTM-6      | BDMT0703                    | 47,100                               |        |
|                        |            |      | 12-S12-07-2T     | ●             | 2              | 12 | 12  | 80     |        | 14.3°          | -13.7° |              | Fig.4   |             |            |                             | 46,200                               |        |
|                        |            |      | 16-S16-07-3T     | ●             | 3              | 16 | 16  | 100    |        | 16.3°          | -11.3° |              |         |             |            |                             | SB-2042TRG                           | 43,200 |
|                        |            |      | 20-S20-07-4T     | ●             | 4              | 20 | 20  | 110    |        | -10.4°         | 40,200 |              |         |             |            |                             |                                      |        |
|                        |            |      | 25-S25-07-5T     | ●             | 5              | 25 | 25  | 120    |        | 25             | -9.7°  |              | 37,000  |             |            |                             |                                      |        |
|                        |            |      | 32-S32-07-6T     | ●             | 6              | 32 | 32  | 130    |        | 30             | -8.9°  |              | 33,600  |             |            |                             |                                      |        |
|                        | Fine pitch | MECX | 16-S16-07-4T     | ●             | 4              | 16 | 16  | 100    | 20     | 6              | 16.3°  | -11.3°       | Yes     | Fig.4       | SB-2042TRG | DTM-6                       | BDMT0703                             | 43,200 |
|                        |            |      | 20-S20-07-5T     | ●             | 5              | 20 | 20  | 110    | -10.4° |                |        | 40,200       |         |             |            |                             |                                      |        |
|                        |            |      | 25-S25-07-7T     | ●             | 7              | 25 | 25  | 120    | 25     |                |        | -9.7°        |         |             |            |                             |                                      | 37,000 |
|                        |            |      | 32-S32-07-8T     | ●             | 8              | 32 | 32  | 130    | 30     |                |        | -8.9°        |         |             |            |                             |                                      | 33,600 |
| Cylindrical Long Shank | Standard   | MECX | 17-S16-130-07-3T | ●             | 3              | 17 | 16  | 130    | 6      | 16.3°          | -11.0° | Yes          | Fig.3   | SB-2042TRG  | DTM-6      | BDMT0703                    | 42,400                               |        |
|                        |            |      | 21-S20-140-07-4T | ●             | 4              | 21 | 20  | 140    |        |                | -10.1° |              |         |             |            |                             | 39,500                               |        |
|                        |            |      | 26-S25-160-07-5T | ●             | 5              | 26 | 25  | 160    |        |                | 25     |              |         |             |            |                             | -9.5°                                | 36,500 |
|                        |            |      | 33-S32-200-07-6T | ●             | 6              | 33 | 32  | 200    |        |                | 30     |              |         |             |            |                             | -8.8°                                | 33,100 |
| Weldon                 | Standard   | MECX | 16-W16-07-3T     | ●             | 3              | 16 | 16  | 68     | 6      | 16.3°          | -11.3° | Yes          | Fig.5   | SB-2042TRG  | DTM-6      | BDMT0703                    | 43,200                               |        |
|                        |            |      | 20-W20-07-4T     | ●             | 4              | 20 | 20  | 81     |        |                | -10.4° |              | 40,200  |             |            |                             |                                      |        |
|                        |            |      | 25-W25-07-5T     | ●             | 5              | 25 | 25  | 88     |        |                | 25     |              | -9.7°   |             |            |                             | 37,000                               |        |
|                        | Fine pitch | MECX | 16-W16-07-4T     | ●             | 6              | 16 | 16  | 68     | 6      | 16.3°          | -11.3° | Yes          | Fig.5   | SB-2042TRG  | DTM-6      | BDMT0703                    | 43,200                               |        |
|                        |            |      | 20-W20-07-5T     | ●             | 5              | 20 | 20  | 81     |        |                | -10.4° |              | 40,200  |             |            |                             |                                      |        |
|                        |            |      | 25-W25-07-7T     | ●             | 7              | 25 | 25  | 88     |        |                | 25     |              | -9.7°   |             |            |                             | 37,000                               |        |

## Max. Revolution

When running the endmill and cutter at the maximum revolution, the insert or holder may be damaged by centrifugal force. For more details, see "Warning" below.

## For good shoulder finishes by MECX multistage ap.

In order to obtain smooth cutting wall surface by MECX multistage ap set ap within 5mm for each cut.

## Warning

Please observe below precautions fully. Failure to observe the precautions may cause serious damage to human body.

## Warning about Max. Revolution indicated on main body

- When running the endmill and the facemill at revolutions exceeding the maximum revolution limit, the inserts or toolholder may be damaged due to the centrifugal force.
- For actual practical revolution, please set within recommended machining condition.
- When using at a higher revolution (over 10,000min<sup>-1</sup>), refer to the table to adjust the balance of MECX and suitable arbor.

| Max. Revolution (min <sup>-1</sup> ) | Balance quality grade G ISO 1940-1 / 8821 (JIS B0905) |
|--------------------------------------|-------------------------------------------------------|
| ~20,000                              | G16                                                   |
| ~30,000                              | G6.3                                                  |
| 30,000~                              | G2.5                                                  |

● : Std. Item ○ : Check Availability R : Std. Item (R-hand Only) L : Std. Item (L-hand Only)