

# Hi-ART MILLING CHUCK

Needle-roller type chuck

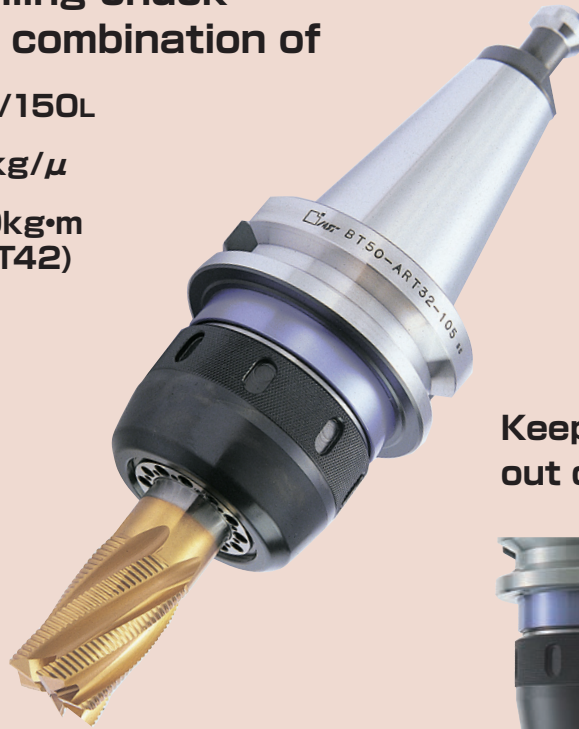
The Hi-ART milling chuck offers a great combination of

**Accuracy** → 10μ/150L

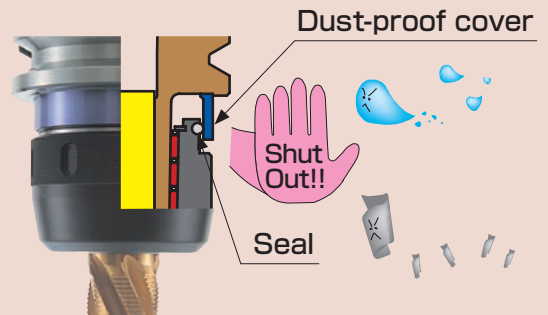
**Rigidity** → 3.0kg/μ

**Torque** → 500kg·m (ART42)

φ32 φ42

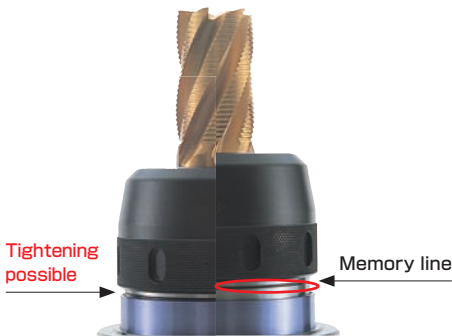


Keeps chips and coolant out completely



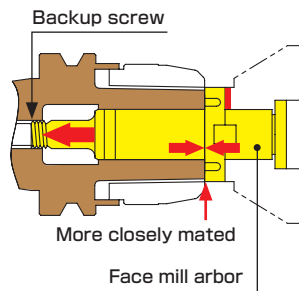
## MEMORY LINE

Memory line clearly confirms tightness of the nut.



## FACE LOCK SYSTEM

The face mill arbor engages with the backup screw and the chuck body assuring optimum rigidity. (ST32B, ST42B)

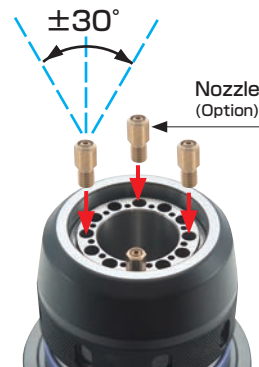


## APPLICABLE FOR COOLANT-THROUGH VERSION

The splash angle can be adjusted within ±30°

3.7 times longer cutter life using through-spindle capability

See→P.87



F Type Straight collet

⚠ A63-ART32 cannot use spindle-through coolant capability when using F-type collets.

## Cutting data

**S55C**

φ32 roughing end mill  
4 flutes

|   |                       |
|---|-----------------------|
| N | 350 min <sup>-1</sup> |
| F | 154 mm/min            |
| V | 35 m/min              |
| f | 0.11 mm/flute         |

BT40-ART32-85

**S55C**

φ32 roughing end mill  
4 flutes

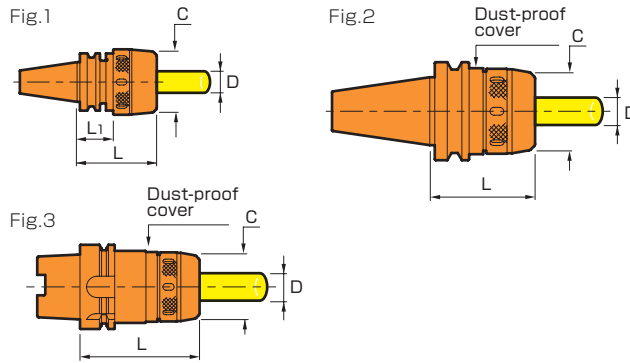
|   |                       |
|---|-----------------------|
| N | 350 min <sup>-1</sup> |
| F | 181 mm/min            |
| V | 35 m/min              |
| f | 0.13 mm/flute         |

BT50-ART32-105

# Hi-ART MILLING CHUCK (ART)



A100-ART32-135



| CODE           | Fig. | φD  | L  | φC  | L <sub>1</sub> | Cutter insertion length | Kg   | MAX. min <sup>-1</sup> |    |   |     |      |      |
|----------------|------|-----|----|-----|----------------|-------------------------|------|------------------------|----|---|-----|------|------|
| BT40-ART32-85  | 1    | 32  | 85 | 72  | 37             | 90                      | 1.9  | 6000                   |    |   |     |      |      |
| -95            |      |     | 47 |     | 2.1            |                         |      |                        |    |   |     |      |      |
| -105           |      |     | 57 |     | 2.3            |                         |      |                        |    |   |     |      |      |
| -135           |      |     | 87 |     | 3.0            |                         |      |                        |    |   |     |      |      |
| BT50-ART32-105 |      |     | 2  |     | 32             |                         | 105  |                        | 82 | - | 100 | 5.1  | 5000 |
| -135           | 135  | 6.4 |    |     |                |                         |      |                        |    |   |     |      |      |
| -165           | 165  | 7.7 |    |     |                |                         |      |                        |    |   |     |      |      |
| -180           | 180  | 8.4 |    |     |                |                         |      |                        |    |   |     |      |      |
| -ART42-105     | 42   | 105 |    | 97  |                | -                       | 110  | 5.4                    |    |   |     | 3000 |      |
| -135           |      |     |    | 135 |                |                         |      | 7.1                    |    |   |     |      |      |
| A50M-ART32-100 |      |     |    | 3   |                |                         |      | 32                     |    |   |     |      |      |
| A63-ART32-100  | 44   | 2.0 |    |     |                |                         |      |                        |    |   |     |      |      |
| A100-ART32-135 | 135  | 82  | -  |     | 98             | 5.3                     | 5000 |                        |    |   |     |      |      |
| -ART42-135     |      | 42  |    | 97  |                | 6.1                     |      | 3000                   |    |   |     |      |      |

- Option
  - Straight collet
  - Nozzle
  - Spanner with ejection hook
  - Adjust screw
  - Retention knob(BT)→P.37
  - Coolant duct(HSK)→P.84
- Standard Accessories
- Note
  - To utilize the coolant-through nozzle capability, the retention knob with hole and nozzle are required.
- Caution
  - For BT40 type, the outer diameter of the nut is larger than that of the V-flange. Therefore, pay close attention to possible interference with the ATC arm.
  - Use S-type auxiliary arbor when using an arbor with BT40 type.
  - To utilize the coolant-through nozzle capability, coolant duct and nozzle (BT40 : A63 : NOZ - M4 , BT50 : A100 : NOZ - M6) and straight collet F-type are required.

BT  
HSK

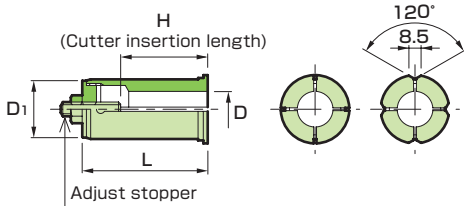
## Straight collet

Standard type



F type

Notch for nozzle

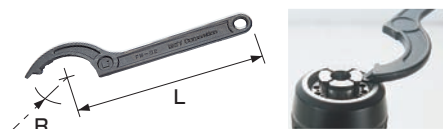


| CODE          |        | φD | Holder type | L  | φD <sub>1</sub> | H     |
|---------------|--------|----|-------------|----|-----------------|-------|
| Standard type | F type |    |             |    |                 |       |
| S32-6         | S32-6F | 6  | ART32       | 75 | 32              | 30~68 |
| -8            | -8F    | 8  |             |    |                 | 40~68 |
| -10           | -10F   | 10 |             |    |                 | 50~68 |
| -12           | -12F   | 12 |             |    |                 |       |
| -16           | -16F   | 16 |             |    |                 |       |
| -20           | -20F   | 20 |             |    |                 |       |
| -25           | -25F   | 25 |             |    |                 |       |
| S42-6         | S42-6F | 6  | ART42       | 80 | 42              | 35~73 |
| -8            | -8F    | 8  |             |    |                 | 45~73 |
| -10           | -10F   | 10 |             |    |                 |       |
| -12           | -12F   | 12 |             |    |                 |       |
| -16           | -16F   | 16 |             |    |                 |       |
| -20           | -20F   | 20 |             |    |                 |       |
| -25           | -25F   | 25 |             |    |                 | 55~73 |
| -32           | -32F   | 32 |             |    |                 |       |

※Remove the adjust stopper when using a straight collet with A63-ART32-100.

## Spanner with ejection hook

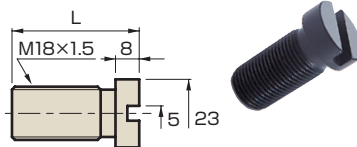
This spanner can be used to both tighten a nut and remove a straight collet.



| CODE  | R    | L   | Holder type      | Clamping torque |
|-------|------|-----|------------------|-----------------|
| FM-72 | 36   | 204 | ART32(BT40,A63)  | 6kgf·m          |
| -82   | 41   | 234 | ART32(BT50,A100) | 7kgf·m          |
| -97   | 48.5 | 239 | ART42            |                 |

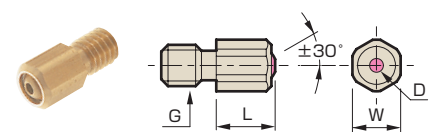
## Adjust screw

The overhang of the cutting tool can be adjusted.



| CODE     | L  | Shank type  |
|----------|----|-------------|
| AJN-M18L | 38 | BT40 , A 63 |
| -M18     | 63 | BT50 , A100 |

## Nozzle



| CODE   | L   | G  | W   | φD  | Shank type |
|--------|-----|----|-----|-----|------------|
| NOZ-M4 | 6.3 | M4 | 4.5 | 1.2 | BT40       |
| -M6    | 8.5 | M6 | 7   | 1.8 | BT50       |

- Packaging
  - 12pcs. + Special wrench 1pc.
  - 60pcs. + Special wrench 1pc.