

## OPERATION MANUAL

Thank you for purchasing **BIG** AUTO TAPPER TYPE A.

Please read these instructions before use and keep them where the operator may refer to them whenever necessary.

### Specifications

Figure.1. Coolant nozzle type "N"

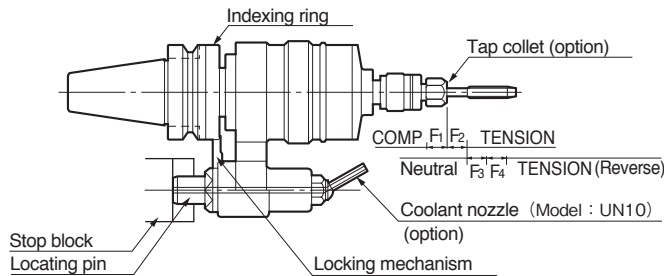
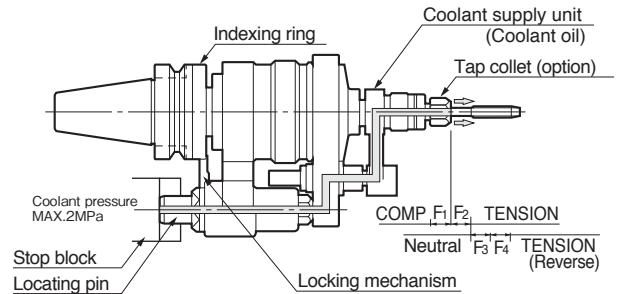


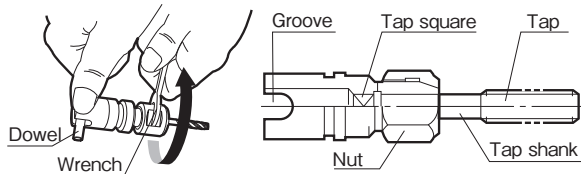
Figure.2. Coolant through spindle type "C"



Model	Figure	Tapping range	MAX. (min <sup>-1</sup> )	F1	F2	F3	F4	Reverse ratio	Adaptable collet		
BT40-AUTO-A 800-187N	1	M3 – M 8	2,500	0.5	5.5	1.5	9.5	1:1	TC 8-d		
-AUTO-A1200-213N		M4 – M12	2,000						8	11.5	TC12-d
BT50-AUTO-A 800-201N		M3 – M 8	2,500						5.5	9.5	TC 8-d
-AUTO-A1200-227N		M4 – M12	2,000						8	11.5	TC12-d
-AUTO-A2000-255N		M8 – M20	1,000						9	11.5	TC20-d
BT40-AUTO-A 800-200C	2	M3 – M 8	2,500	0.5	5.5	1.5	9.5	1:1	TC 8-d		
-AUTO-A1200-225C		M4 – M12	2,000						8	11.5	TC12-d
BT50-AUTO-A 800-214C		M3 – M 8	2,500						5.5	9.5	TC 8-d
-AUTO-A1200-239C		M4 – M12	2,000						8	11.5	TC12-d
-AUTO-A2000-267C		M8 – M20	1,000						9	11.5	TC20-d

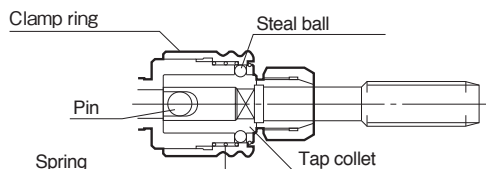
### MOUNTING A TAP

Insert the square of tap shank portion completely into the square hole inside of the TAP COLLET. To hold TAP COLLET while tightening collet nut, put dowel in groove at end of TAP COLLET.



### INSERTING THE TAP COLLET

When inserting the TAP COLLET into the body, pull up the clamp ring on the outer side of the spindle and insert the TAP COLLET.



### MOUNTING A TAPPER TO A MACHINING CENTER

- First, insert the TAPPER into the machine spindle manually after mounting a Stop Block on the machine and a tap into the TAPPER. Then make sure that the Stop Block and the Locating Pin smoothly fit together and the Locating Pin is depressed 6mm so that the locking mechanism is released from the Indexing Ring.
- Second, check the above mentioned process using the ATC to make sure that the operation is smoothly carried out.

### TAPPING OPERATION

- This TAPPER is designed only for the right-handed thread.
- Use boring cycle. (e.g. Fanuc G85) It is possible to tap by dwell (G89), however using boring cycle (G85) extends tapper's life.
- R-point (approach) must be set 15mm above the surface of a work.
- Feed : 95-100% of synchronized feed rate.
- In case of using boring cycle (G85), time lag will occur when the operation of machine shifts from forward to the back, resulting in more feed than the programmed feed. The amount of this 'further feed' varies depending on machines. Therefore, tapping for trial is recommended. For this trial, set the reversing point of the machine at shallower position (i.e. programmed tapping depth-F2mm). After the trial tapping, measure the tapped depth and change the program in order to compensate for difference between the programmed tapping depth and actual depth (programmed depth - actual depth).

TAPPER MODEL	F2mm
A 800	5.5
A1200	8
A2000	9

### CAUTION

- In case of using coolant through spindle type "C", coolant must be supplied from Locating Pin. Do not run a tapper dry.
- Use filters with mesh No.170 (88 μm) or better. In addition, it is recommended to provide as much filtration as possible to the coolant tank in order to assure the long life of seals.
- Do not loosen any screws on the TAPPER.
- When supplying coolant to coolant through spindle type "C", a little coolant will leak from the slide portion of a supply unit for lubrication.
- Contact BIG agent in the case of a problem, such as sticking of the spindle. Never disassemble the unit.