Mechanical feed type tapping unit



Feature

1. Capable of tapping R1(Aluminium)

The powerful motor enables processing large-diameter thread, taper thread and multi-start thread.Capable of tapping R3/4, M20 roll forming tap in S45C steel.

2. Capable of mounting multispindle tapper head on STE.

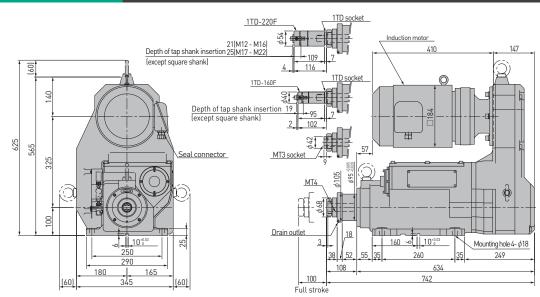
Tapping process cost can be reduced by mounting multi-spindle tapper head.

| SPEC (Stan | dard type) |) | | | | | | | | | | | | | | |
|------------|-------------------|------------------|---------------|------------|---------------|------------|---------------|------------|---------------|----------------|-----------------------|-------------|-------|-----------------|------------------|--------|
| | Rotation speed | Tapping capacity | | | | | | | | Maximum | | | | | | |
| | | 1 spindle | | 2 spindles | | 3 spindles | | 4 spindles | | Full Stroke | tapping cycle time | Motor spec. | | Thread pitch | | Weight |
| Model | | AL* | ST* (S45C) | AL* | ST* (S45C) | AL* | ST* (S45C) | AL* | ST* (S45C) | STICKE | per minute | Power | Poles | Pi | | |
| | min ⁻¹ | m | m | m | m | m | m | m | m | mm | time/min | kW | Р | mm | Therads /inch | kg |
| | | M27 | M16 | M20 | M12 | M16 | M10 | M16 | M10 | | | | | 0.8 | 28 | |
| | 420 | M22 | M12 | M16 | M10 | M12 | M8 | M12 | M8 | | | | | 1 | 24 | |
| | | M33 | M20 | M22 | M16 | M20 | M12 | M16 | M10 | | | | | | 20 | |
| STE-H527 | 310 | | | | | | | | | | 15 | | | 1.25 19 | 19 | |
| - | | M24 | M16 | M16 | M10 | M16 | M10 | M12 | M8 | 20 | | 2.2 | | 1.5 | 18 | |
| | 210 | M36 | M22 | M27 | M16 | M22 | M14 | M22 | M12 | | | | , | 1.75 | 16 | 4.75 |
| | | M27 | M16 | M22 | M12 | M16 | M10 | M16 | M10 | 100 | | 2.2 | 4 | 2 | 14 | 175 |
| | | M45 | M30 | M36 | M22 | M30 | M20 | M27 | M16 | | | | | 2.5 | 12 | |
| | 100 | M39 | M24 | M27 | M18 | M24 | M16 | M22 | M12 | | | | | 3 | 11 | |
| STE-L527 - | | M48 | M36 | M42 | M27 | M33 | M22 | M33 | M20 | | 6 | | | 3.5 | 10 | |
| | 70 | | | | | | | | | | | | | | 9 | |
| | | M45 | M27 | M33 | M22 | M27 | M16 | M24 | M16 | | | | | 4 | 8 | |

Note 1. The upper column of the chart is for a spiral tap and a point tap. The lower column is for hand tap No.2. Tapping capacities are conditional on the depth of tapping being limited to 1.5 times of the tap diameter.
2. Tapping speed is same in both 50hz and 60Hz regions. (Power supplied to the motor by inverter inside the controller is 60Hz.)
3. The speed can be changed by replacing pulleys. But speed changeover between STE-H and STE-L requires a motor and a belt replacement in addition to the pulleys.
4. Allowable weight of multi spinde head to be attached to SYNCHROTAPPER is as follows.

Water proofing and dust proofing must be required when processing upward direction. (when working in a horizontal derection: 100Kg, in a vertically upward direction: 90Kg, ina vertically downward direction: 90Kg)

5.AL*: Aluminium ST*: Steel 6.Motors for 200, 220, 400, 440 voltage are available.

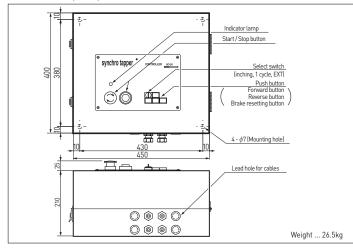


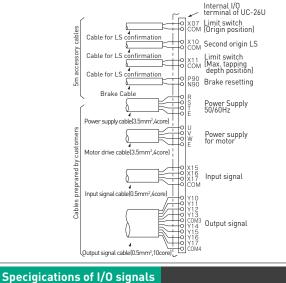
Note 1.A single tapper head can be attached by monting optional 1TD socket. 1TD-160F/220F is optional. 2.Tap holders WFLP340-0/MT4(M16-M38) manufactured by NT Tools, Co. are attachable to MT4 spindle. Tap holder is to be supplied to our customers. 3.WFLP240-0/MT3(M8-M22) can be attached by monting optional MT3 socket. Tap holder is to be supplied to our customers. 4.When SYUNCROTAPPER is attached horizontally, set drain outlet downward direction.

Controller UC-26U model

For STE-H/L527: Controls cw. and ccw. rotation and protects its motor by built-in inverter

Dimensions(mm)





No-voltage contact

Start ... Normally open contact

Start ... Normally open contact Return ... Normally copen contact Stop ... Normally closed contact Use relay contact for extremely light load. i.e. Omron G2A or MY2Z

No-voltage contact output Max. applicable load AC220V (Inductive load)

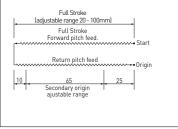
ORIGIN ... Output at original position End of 1 cycle: 0.5 sec. after 1cycle Abnormality: Abnomal output signal (motor, cycle time over)

Brake resetting: DC90V (Inner-unit power supply)

Min.0.1 second Circuit voltage DC24V (Internal supply)

Basic operation

Traveling chart of a cycle



| Operation chart for one cycle | | | | | | | | |
|------------------------------------------------|------------------------------|-------------------------------------------------------------------------|--------------------|--|--|--|--|--|
| 1 cycle oper for SUNCHI | | Forward pitch feed | Max: tapping depth | | | | | |
| Motor Stop | kwise I nter clockwise | | | | | | | |
| Brake | BR ON OFF | | | | | | | |
| Limit switch (Origin positic | n] LS ON OFF | | | | | | | |
| Limit switch (Max. tapping depth positio | IS ON | h | | | | | | |
| The arove di | agram show | ice chart of mechanic vs that the brake mov is on, and on when th | | | | | | |

Input

signal

Output

signal

Note 1.By using LS, which cfomes standard with the unit, seconfdary origin can be set within secondary origin ajustable range. 2.Sequencer operation mode is also available. Fot circuit exanples, please contact your nearest office.





SUGINO MACHINE LIMITED www.sugino.com

Form

Input time

Description

Description

Form

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Wiring of power supply, I/O signals