

Machine Name : Multi-axis through-spindle machine

Brand : TORNOS

**Machine Model : MultiSwitzerland
6×16-13373**

Stock No. : 89355

Ex-factory Date : 2016



Main Technical Parameters:

"Technical Parameters" :

The machining diameter range of bar stock: 4-14 mm

The maximum machining length of the part on spindle side: 40mm

Maximum leftover material length: 70mm

Maximum spindle speed: 8,000 rpm

spindle motor power: 5.6kW

spindle torque: 7.5 Nm

The maximum speed of the secondary spindle is 8,000 rpm

The power of the Subspindle motor is 5 kW

Torque of the Subspindle motor: 6 Nm

The Z-axis travel of the 6 spindle is 50mm

The Z-axis travel of the sub-Spindle is 150 mm

The X-axis travel of the transverse tool holder slide on spindle side is 40 mm

Horizontal slide Y-axis travel (black model machine tool) : 30 mm

The number of sliding Worktables for the machining lateral tool holder at the back end of the secondary spindle side: 1

The X-axis travel of the machining lateral tool holder slide Worktable at the back end of the secondary spindle side is 75mm

**** Scheming Information ****

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Basic machine

273-0002 Basic machine MultiSwitzerland 6x 14,1.00 pieces

It features 6 electric spindle with a maximum power of 5.5 kilowatts and a maximum speed of 8,000 resolutions per point

spindle capacity: 14 mm, Z-axis travel: 50 mm (maximum part: 40 mm)

Six X-axis slides with a travel of 40 millimeters

- 1 counter-operating slide Worktable with a travel of 75 millimeters

The opposing spindle with an integrated motor has a power of 6 kilowatts, a maximum speed of 8,000 resolutions per point, and a travel of 150 millimeters

- FANUC 30i CNC CNC System

An integrated computer with a 17-inch screen

-TB DECO programming CNC System (DCS version) (requires 3001)

273-0054 integrates X-Y CNC axis, position 4, travel ± 15 mm, provides TB-DECO program (incompatible with xxxx), 1.00 pieces

273-0100 parts separator and pneumatic parts slide, suiWorktable for parts with a maximum length of 40mm, with a maximum slide of 70mm, 1.00 pieces

The 273-0200 fixed chuck device installed at position 1 (requiring 0830 and 1200), 1.00 pieces

273-0400 status Turret, 1.00 pieces

273-0503 English Operation Instructions, 1.00 pieces

273-0703 English CNC machine tool language, 1.00 pieces

The voltage of the 273-0751 line is 380-420 volts, 50 Hertz, with an error of $\pm 5\%$, 1.00 pieces

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Equipment

273-0830 One installed re-chuck, for option 0200. The diameter must be specified when placing the order, 2.00 pieces

273-0840 6 clamping pipe groups, diameter 15 (12-14), 1.00 pieces

Six reduced-diameter pipe groups, 273-0849, with diameters of 15 (12-14), 1.00 pieces

273-0900 1 picking chuck, diameter 3-14 mm, including a blank ejector. Please specify the chuck diameter when placing an order. 2.00 pieces

273-1010 rpming tool holder, base (16×16), 5.00 pieces

273-1011 Additional turning tool holder (16×16) (requires 1010) (incompatible with 1200), 1.00 pieces

273-1120 is installed on the cutting tool holder at position 6, 1.00 pieces

Support for two end units from 273 to 1200, with a diameter of 25 (incompatible with 0300, 1011, 1012, and 1240), 5.00 pieces

The clamping flange for the 273-1205 high-frequency spindle, with a diameter of 25 millimeters, requires a function of 1200 + 220, 2.00 pieces

273-1220 fixed end machining drill chuck with chuck, diameter 25, suiWorktable for ESX-16, capacity 10 mm, position 2 to 5 (1200 required), 5.00 pieces

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Support for the 273-1300 counter-operating tool holder, 1.00 pieces

273-1310 counterdirectional operation tool holder, for 16×16 cutting Tool (requiring 1300), 1.00 pieces

Double drill chucks for opposite operation, 273-1400, diameter 6 mm (1310 or 1450 required) (incompatible with 1330), 1.00 pieces

Cross support for the right-angle high-frequency spindle used for counter-directional operation (COP) 273-1470 (requires 1300) (incompatible with 1310 and 1450), 1.00 pieces

Electrical interface for 273-2003 drilled or polygonal accessories (DCS version), 2 accessory positions 3 to 5 (incompatible with 0001), 1.00 pieces

273-2020 cross drilling accessory, transmission ratio 2:1, maximum 8000 resolutions per

point, maximum 4.4 N · m, position 2 to 5 Centerpass coolant (2001 or 2002 or 2003 or 2004 is required) (incompatible with 1010, 1020, 1050, 2010, 2030, 2040) (incompatible with 2300, 2500), 1.00 pieces

Four high-frequency drilling accessory adapter devices from 273 to 2100 (incompatible with 0752, 0753, and 0755), 1.00 pieces

273-2110 high-frequency spindle driver (2100 required), 3.00 pieces

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273-2120 high-frequency spindle, with a rotational speed of 5000-60,000 resolutions per point and a torque of 0.03 N · m (requiring 1050 or 1205 or 1450) (requiring 2110), 2.00 pieces

273-2130 90° high-frequency spindle, rotational speed 3300-13300 resolutions per point, torque 0.04 N · m (required 1470) (required 2110), 1.00 pieces

Container 273-3001, 1.00 pieces

- Electrical cabinet

-1100 liters coolant Water tank

- Coolant pump, flow rate 100 liters per point, pressure 4 bar

-50 MIKRON paper filtration CNC System

-5 MIKRON static pressure circuit filtration CNC System

Static pressure center

Double-loop water-oil heat exchanger

- Water source is needed

Feeding machine, 1.5 meters in length, 4 to 14 millimeters in diameter, pressure reserve 40 to 175 bars (depending on the diameter)

273-3200 Chip conveyor with strap and chip collection pump (incompatible with 3100), 1.00 pieces

Additional filter paper rolls for the 273-3500 filtration device, 2.00 pieces

Replacement of filter elements (5 MIKRONs) for the 273-3510 static pressure group filter, 2.00 pieces

Replacement of filter elements (20 MIKRONs) for the safety filter of the 273-3520 static pressure group, 2.00 pieces

273-4010 electric Tool breakage detector, 2.00 pieces

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Middex type WK2 can detect up to 1 Tool at each position, from positions 1 to 5 (4010, 4020: a total of up to 3 detectors per machine).

273-5200 Tool management CNC System, 1.00 pieces

The C-axis function in the main operation of 273-7651, 6 spindle, increment 0.001 degree, 1.00 pieces

The C-axis function in the 273-7652 counterdirectional operation, 1 spindle, increment 0.001 degree, 1.00 pieces

Special development

273-9510 7 extra-large clamping chucks, 1.00 pieces

273-9511 6 super-large clamping pipe groups, 1.00 pieces

Six extra-large reduced diameter pipe groups from 273 to 9512, 1.00 pieces

273-9513 Super large picking chuck, 2.00 pieces

273-9514 high pressure pump, pressure 80 bar, flow rate 34 liters per point, 1.00 pieces

273-9515 Extended coated slide for part removal, 1.00 pieces

273-9516 Double Cross drilling/mill accessory, 1.00 pieces

273-9517 7 intermediate clamping chucks, diameters 4-14, 1.00 pieces

