

## CNC milling machine with tool changer and complete CNC control package made by Siemens

### Convincing arguments: quality, efficiency and price

- Heavy type
- Main spindle drive due to high-performance servo motor by Siemens
- 3 servo motors by Siemens for the separate drive of the X-, Y and Z- axis
- All guideways with special steel covers
- Automatic central lubrication of the machine
- All axes with recirculating ball spindles
- Built-in machine lamp/coolant equipment
- Automatic tool changing system with 10 tool places
- Tool change is performed automatically or by pushing a button (electro-pneumatic tool clamping device)
- An electronic handwheel reduces the setting time to a minimum
- Limit stop and reference switch of contactless type (no wear of contact in the long run)
- Spindle overload protection
- Compact, precise cross table, largely dimensioned and precisely machined surface
- With T-slots (size 14 mm)

Model	OPTI F 100 TC-CNC
Item No	350 1113
€ (VAT excl.)	43'900.00
<b>Features of performance</b>	
<b>Electrical connection</b>	
Total driving power	15 kW 400 V ~50 Hz
Coolant pump	200 watts
<b>Milling capacity</b>	
Milling capacity cutter head (max.)	Ø 63 mm
Milling capacity end mill cutter (max.)	Ø 20 mm
Milling feed	1 - 5000 mm/min.
Working range	410 mm
Fast motion	10000 mm/min.
<b>Milling accuracy</b>	
Repeating accuracy	0,006 mm
Positioning accuracy	0,009 mm
<b>Spindle holding fixture</b>	
Spindle holding fixture	7:24 BT 40
<b>Drill-mill head</b>	
Z-axis travel	400 mm
Torque motor Z-axis	11 Nm
Distance spindle - table	110 - 510 mm
<b>Speeds</b>	
Spindle speed	100 - 8000 rpm
Driving motor	9 kW
<b>Tool changer</b>	
Drum type	10 tools
Time - tool changing	7 - 12 seconds
<b>Cross table</b>	
Table length x Table width	960 x 280 mm
Y-axis travel	300 mm
Torque motor Y-axis	6 Nm
X-axis travel	450 mm
Torque motor X-axis	6 Nm
T-slot size/distance/number	14 mm/85 mm/3
Load (max.)	300 kg
<b>Dimensions</b>	
Length x Width x Height	1965 x 1650 x 2300 mm
Tank contents coolant	50 liters
Net weight	1700 kg
<b>Extent of supply</b>	
	Seat of milling cutter BT 40/ER 32
	7 collet chucks (3 - 12 mm)
	Connection cable RS 232

### Most modern milling technology using Siemens CNC control: SINUMERIK 802D SL Pro



#### High efficiency and flexibility

by innovative technology in the planning and drives

#### Easy-to-operate and simple programming

by DIN programming, supported by comprehensive programming aids (cycles, profiles)

#### Easy data management

by using commercial CF cards (64 MB to 1 GB) to save, transfer and

work off workpiece programs. Additional option of network integration to directly work off the program.

#### Technical data

- Functional and easy-to-operate control made by Siemens
- User-friendly drilling and milling cycles with graphical display
- Programming according to DIN 66 025
- 3 D operation optional due to CAD/CAM
- USB connection up to 2 GB
- 10.4" TFT flat screen
- 3 Mbyte memory (internal)
- Frame technology
- Look Ahead
- Handwheel function
- Up to 64 tools
- Ethernet onboard
- Up to 4 axes interpolated

#### Comfort supplied as standard


- Integrated calculator function
- Piece counter
- Program operation job calculator
- Onboard help (complete context sensitive operation and programming instructions)
- Onboard language switching
- PLC program templates for a fast commissioning
- Graphic PLC status display
- Tool life and operation monitoring
- External access to control is possible via Ethernet
- The machine is prepared for add-on of an OMP40 machine probe made by the company Renislaw

## F 100 TC-CNC



Milling

Fig.: F 100 TC-CNC

Accessories	Item No	€ (VAT excl.)
· Tool starter kit	353 6105	<b>1'250.00</b>
· Machine vice HCV 105	353 6210	<b>590.00</b>
· Machine vice PNM100	335 5551	<b>630.00</b>
· Machine vice PNM125	335 5553	<b>790.00</b>
Software		
· Optional Software "SYMplus milling" for Siemens control 802 S	358 3850	<b>2'000.00</b>
· Upgrade for SYMplus milling Simulator and postprocessor	358 3851	<b>750.00</b>
 Info software on pages 48 - 51		
Warranty extension		
· <b>Siemens warranty period</b> is increased to two years	900 1012	<b>450.00</b>



- Automatic tool changing system with magazine plate for 10 tools
- Tool changing speed 7 - 12 sec.



- Easy-to-access Ethernet, USB, RS 232 can be easily connected to the machine