DATASHEET

CNC milling machine

OPTImill F 80 CNC

Ideal for parts production, prototype and fixture construction.

OPTIMUM[®] MASCHINEN - GERMANY

Article number >

3501081

Brand ~

Optimum

Availability >

Order-related purchase

Catalog directory >

Metalworking machines » CNC milling machines » OPTImill F 80

Purchase v

Minimum 1 pc(s).



Shipping informations >

Packaging Me	etrics	Weights		Delivery		Other	
Length	2,020 mm	Gross	1,900 kg	Delivery	Special transportation	DualUse	~
Width	1,780 mm	Net	1,900 kg	Content	1 pc(s).	SCIP	n/a
Height	2,220 mm					SVHC	No

Root data v

Country of origin	EAN	Custom number	Quantity unit
China	4030635048494	84596190	pc(s).

Description ~

- Machine in cast iron column design for high rigidity
- Carousel tool changer with 12 tool positions
- All linear guides with stainless steel covers
- Automatic central lubrication
- Siemens main spindle motor
- Siemens servo drive in all axes (closed control loop)
- Maximum spindle speed of 10,000 min-1
- The portable, electronic handwheel with enabling switch and emergency stop switch makes it much easier to run in programs
- Coolant system with 70 liter coolant tank
- Tools are changed automatically or at the touch of a button (electro-pneumatic tool clamping device)
- Solid, precise milling table large dimensions and precise surface finish
- · Access doors very generously designed to reduce cleaning and maintenance time to a minimum
- LED machine light for complete illumination of the work area

SINUMERIK 808 ADVANCED

CNC technology from the technology leader

- The SINUMERIK 808D ADVANCED control is a panel-based CNC control. The compact and user-friendly entrylevel solution is used for simple milling applications. Features such as simple operation, commissioning and maintenance are the perfect basis for equipping CNC machines.
- Thanks to its technology-specific features, the SINUMERIK 808D ADVANCED control is perfectly preconfigured for milling. Thanks to the hardware and software extensions, the SINUMERIK 808D ADVANCED also offers sufficient performance for simple milling functions for mold and tool making.

SINUMERIK 808D on PC

 Control-identical software package that further simplifies the handling of the machine tool. Download free of charge at www.cnc4you.com

Compact and robust

• Thanks to a panel-based CNC design with few interfaces and a control panel in protection class IP65, the SINUMERIK 808D ADVANCED is perfectly prepared for use in harsh environments

Communicative

- Front panel USB (IP65)
- Serial interface RS232C
- RJ45 Ethernet on the rear

User-friendly

- · Technology-specific keyboard layoutHard
- keys with protective membrane

Process-safe

- LED tool number display
- MCP with rotary switch for feed and spindle override

Complete package

- RJ45 Ethernet port
- Prepared for remote maintenance
- AST function; enables simple optimization for higher dynamic and accuracy requirements
- Absolute encoder / no reference run required
- Higher accuracy

Control system

■ 8.4" LCD color display with 800 x 600 resolution

Additional package SIEMENS OSS

- 12 months; article no. 3589010
- 36 months; article no. 3589012

Information on this additional package and conditions for claiming under: Material defects liability and onsite service - SiePortal - Siemens WW

Manufacturer

Optimum Maschinen Germany GmbH Dr.-Robert-Pfleger-Str. 26, 96103 Hallstadt, Germany info@optimum-maschinen.de

Media informations >





Storage compartment

• For tools, in easy reach on the machine



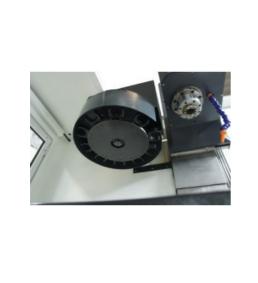
Handwheel

- Portable
- Electronic
- Makes program retraction much easier
- Emergency stop pushbutton
- Enabling switch



Signal lamp

- Visually indicates the condition of the machine
- High brightness and long service life





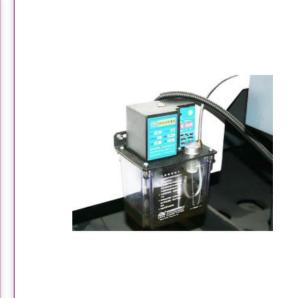
Tool changer

- · Carousel tool changer
- Ten tool slots
- Tool change Time is seven seconds

Control cabinet

- Clearly arranged
- Standard-compliant design
- Drives from Siemens





Linear guide

- Maximum static and dynamic rigidity
- High positioning accuracy
- Smooth, backlash-free movement
- Consistent precision with long service life

Central lubrication system

- Automatic
- Significantly prevents wear, repair costs and unnecessary downtime



Siemens control SINUMERIK 808D ON PC

With SINUMERIK 808D on PC, SIEMENS offers a control-identical software package that further simplifies the handling of the machine tool. Used as practical training software, it can be used to program and simulate workpieces offline. Free to download at www.cnc4you.com

Training and Learning

- Operation of SINUMERIK Operate BASIC can be learned on the PC without additional hardware
- Easy and comfortable learning with controlidentical user interface

Offline CNC programming:

- Increased productivity through programming directly on the PC
- Testing of part programs on the PC with integrated simulation

Professional CNC Presentations:

- Presentation of the user interface SINUMERIK Operate BASIC on the PC - anytime and anywhere without additional hardware
- Presentation of the extensive functions of SINUMERIK Operate BASIC incl. programGUIDE BASIC

Technical data >

Dimensions and weights			
Length (product) approx.	1995 mm	Width/depth (product) approx.	1930 mm
Height (product) approx.	2750 mm	Net weight approx.	2300 kg
Fast motion speed			
Fast motion speed X axis	20 m/min	Fast motion speed Y axis	20 m/min
Fast motion speed Z axis	20 m/min		
Electrical Data			

Supply voltage	400 V	Mains frequency	50 Hz
Milling table horizontal			
Horizontal milling table length	800 mm	Horizontal milling table width	260 mm
Min. clearance vertical spindle - horizontal milling table	100 mm	Max. clearance vertical spindle - horizontal milling table	550 mm
Horizontal milling table T-groove size	16 mm	Horizontal milling table T-groove number	5
Horizontal milling table T-groove spacing	50 mm	Horizontal milling table max. load bearing capacity	200 kg
Precision			
Repetition accuracy	± 0.01 mm	Positioning accuracy	± 0.01 mm
Cooling lubricant system			
Coolant pump(s) drive power	450 W	Cooling lubricant system tank capacity	80 I
Pneumatic connection			
Pneumatic connection operating pressure	7 bar		
Travel			
Travel X axis automatic	450 mm	Travel Y axis automatic	260 mm
Travel Z axis automatic	450 mm	Max. distance spindle to column	370 mm
Vertical spindle			
Vertical spindle spindle chuck	BT 40	Vertical spindle speed range	50 - 10000 min ⁻¹
Vertical spindle spindle chuck Explanation vertical spindle speed range	Please note that the maximum spindle speed must be reduced by approx. 20 % in continuous operation.	Vertical spindle speed range Vertical spindle drive motor output continuous operation S1	50 – 10000 min ⁻¹ 3.7 kW
Explanation vertical spindle speed	Please note that the maximum spindle speed must be reduced by approx. 20 % in	Vertical spindle drive motor output	
Explanation vertical spindle speed range Verticle spindle drive motor output	Please note that the maximum spindle speed must be reduced by approx. 20 % in continuous operation.	Vertical spindle drive motor output continuous operation S1 Vertical spindle torque drive motor	3.7 kW
Explanation vertical spindle speed range Verticle spindle drive motor output S6-30 % operation Verticle spindle torque drive motor	Please note that the maximum spindle speed must be reduced by approx. 20 % in continuous operation. 5.5 kW	Vertical spindle drive motor output continuous operation S1 Vertical spindle torque drive motor	3.7 kW
Explanation vertical spindle speed range Verticle spindle drive motor output S6-30 % operation Verticle spindle torque drive motor S6-30 % operation	Please note that the maximum spindle speed must be reduced by approx. 20 % in continuous operation. 5.5 kW	Vertical spindle drive motor output continuous operation S1 Vertical spindle torque drive motor continuous operation S1	3.7 kW
Explanation vertical spindle speed range Verticle spindle drive motor output S6-30 % operation Verticle spindle torque drive motor S6-30 % operation Feed motor torque Feed motor torque X axis continuous	Please note that the maximum spindle speed must be reduced by approx. 20 % in continuous operation. 5.5 kW 36 Nm	Vertical spindle drive motor output continuous operation S1 Vertical spindle torque drive motor continuous operation S1 Feed motor torque Y axis continuous	3.7 kW
Explanation vertical spindle speed range Verticle spindle drive motor output S6-30 % operation Verticle spindle torque drive motor S6-30 % operation Feed motor torque Feed motor torque X axis continuous operation S1 Feed motor torque Z axis continuous	Please note that the maximum spindle speed must be reduced by approx. 20 % in continuous operation. 5.5 kW 36 Nm	Vertical spindle drive motor output continuous operation S1 Vertical spindle torque drive motor continuous operation S1 Feed motor torque Y axis continuous	3.7 kW
Explanation vertical spindle speed range Verticle spindle drive motor output S6-30 % operation Verticle spindle torque drive motor S6-30 % operation Feed motor torque Feed motor torque X axis continuous operation S1 Feed motor torque Z axis continuous operation S1	Please note that the maximum spindle speed must be reduced by approx. 20 % in continuous operation. 5.5 kW 36 Nm	Vertical spindle drive motor output continuous operation S1 Vertical spindle torque drive motor continuous operation S1 Feed motor torque Y axis continuous	3.7 kW
Explanation vertical spindle speed range Verticle spindle drive motor output S6-30 % operation Verticle spindle torque drive motor S6-30 % operation Feed motor torque Feed motor torque X axis continuous operation S1 Feed motor torque Z axis continuous operation S1 Turret	Please note that the maximum spindle speed must be reduced by approx. 20 % in continuous operation. 5.5 kW 36 Nm 6 Nm	Vertical spindle drive motor output continuous operation S1 Vertical spindle torque drive motor continuous operation S1 Feed motor torque Y axis continuous operation S1	3.7 kW 24 Nm 6 Nm
Explanation vertical spindle speed range Verticle spindle drive motor output S6-30 % operation Verticle spindle torque drive motor S6-30 % operation Feed motor torque Feed motor torque X axis continuous operation S1 Feed motor torque Z axis continuous operation S1 Turret Tool changer design	Please note that the maximum spindle speed must be reduced by approx. 20 % in continuous operation. 5.5 kW 36 Nm 6 Nm 11 Nm	Vertical spindle drive motor output continuous operation S1 Vertical spindle torque drive motor continuous operation S1 Feed motor torque Y axis continuous operation S1 Number of tool slots	3.7 kW 24 Nm 6 Nm
Explanation vertical spindle speed range Verticle spindle drive motor output S6-30 % operation Verticle spindle torque drive motor S6-30 % operation Feed motor torque Feed motor torque X axis continuous operation S1 Feed motor torque Z axis continuous operation S1 Turret Tool changer design Max. tool diameter	Please note that the maximum spindle speed must be reduced by approx. 20 % in continuous operation. 5.5 kW 36 Nm 6 Nm 11 Nm carousel 95 mm	Vertical spindle drive motor output continuous operation S1 Vertical spindle torque drive motor continuous operation S1 Feed motor torque Y axis continuous operation S1 Number of tool slots Max. tool length Tool change time chip to chip (C to	3.7 kW 24 Nm 6 Nm 12 Tools 300 mm
Explanation vertical spindle speed range Verticle spindle drive motor output S6-30 % operation Verticle spindle torque drive motor S6-30 % operation Feed motor torque Feed motor torque X axis continuous operation S1 Feed motor torque Z axis continuous operation S1 Turret Tool changer design Max. tool diameter Max. tool weight	Please note that the maximum spindle speed must be reduced by approx. 20 % in continuous operation. 5.5 kW 36 Nm 6 Nm 11 Nm carousel 95 mm	Vertical spindle drive motor output continuous operation S1 Vertical spindle torque drive motor continuous operation S1 Feed motor torque Y axis continuous operation S1 Number of tool slots Max. tool length Tool change time chip to chip (C to	3.7 kW 24 Nm 6 Nm 12 Tools 300 mm

Options equipment v



Primo set Renishaw

350108580

Article number **∨** Availability **∨** Order-related purchase

Purchase 🗸 Minimum 1 pc(s).

Price informations > Ask for price



Motor upgrade 3-D printing

Article number >

350108590

Availability
Order-related purchase

Purchase ✓ Minimum 1 pc(s). Price informations ✓
Ask for price



3D printing interface

3-D printing

Article number Availability Order-related purchase

Purchase ✓ Minimum 1 pc(s).

Purchase >

Minimum 1 pc(s).

Price informations

OPTIMUM[®]

Ask for price



Starter kit

BT 40 / set 2

Article number

Availability

3536108

No stock available Information:

Next availability

Expected on
calendar week

OPTIMUM®
MASCHINEN - GERMANY

Price informations ✓
Ask for price



Preparation for the fourth axis

Availability Vorder-related purchase

09/2025

Purchase ✓ Minimum 1 pc(s). OPTIMUM®
MASCHINEN - GERMANY

Price informations ✓
Ask for price



4-axis complete set

OPTImill F80

Article number Availability Order-related purchase

Purchase ✓ Minimum 1 pc(s). OPTIMUM[®]
MASCHINEN - GERMANY

Price informations ✓
Ask for price



Swing bridge

Article number **→** 350108504

Availability Vorder-related purchase

Purchase ✓ Minimum 1 pc(s). OPTIMUM®
MASCHINEN - GERMANY

Price informations

Ask for price

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