

CNC machine with step controller



Illustration:
FlatCom P
 with frame, protective cover
 Milling spindle and control
 panel

Illustration:
FlatCom P
 with milling spindle

General

FlatCom®-CNC machines are set-up modular (with and without baseframe), with high operating comfort for a multitude of automatable tasks and applications at an ideal price/performance ratio.

The basis is a sturdy aluminum steel frame with linear units. The clearance free ball screws used in the linear axes ensure high precision, accuracy and smooth running.

FlatCom®-CNC machines are available as compact units in 4 standard sizes with traverse paths of

- X = 400 / 800 mm,
- Y = 300 / 600 / 600 / 1.200 mm,
- Z = 150 mm

in open and closed design with protective cover.

The linear units with stepper motors are ideally adjusted to the control and the software. The stepper motor controller with safety circuit is located at the back side of the **FlatCom®**.

The P series has the step controller iMC-MP. (refer to section "Controls".)

Operation is done from the front with function keys or optionally with the control panel.

For all CNC machines (standard color: grey) extensive accessories and software applications as well as designs with other traverse ranges are available.

CNC machine

with step controller

FLATCom®
Series P

systems

Applications

Flat-Com®-CNC machines of the P series are the basis for the set-up of machines for:

- Drilling and milling
- Assembling and mounting
- Imprinting and engraving
- Metering and fastening
- Buring and polishing
- Bonding and casting
- Soldering and welding
- Measuring and testing
- Scanning and scaling
- ... etc.

Options

For Flat-Com®- CNC machines of the A series have special devices and tools for different requirements and applications are available:

- Drilling and milling spindle
- Frequency converter
- Tool changer
- Cooling/spraying device
- Rotary unit
- T-Groove table milled
- Extraction
- Vacuum clamping plates
- FlatCom

- Baseframe
- Protective cover
- CNC Joystick
- I/O Module
- Applications
- Control panel

We are able to design and manufacture for OEM customers, in collaboration, special machines.

Technical Data

	<i>FLATCom</i> P 30	<i>FLATCom</i> P 60	<i>FLATCom</i> P 70	<i>FLATCom</i> P 120
Traversing range X/Y/Z (mm)	400 x 300 x 150	400 x 600 x 150	800 x 600 x 150	800 x 1,200 x 150
Table clamping area WxD (mm)	550 x 750	550 x 1,000	950 x 1,000	950 x 1,750
Opening (mm)	200			
Dimensions WxDxH (mm) without base frame	850 x 820 x 730	850 x 1,070 x 730	1,250 x 1,070 x 730	1,250 x 1,820 x 730
with base frame	850 x 820 x 1,310	850 x 1,070 x 1,310	1,250 x 1,070 x 1,310	1,250 x 1,820 x 1,310
Guides	Linear units with precision steelshafts and ball circulation skid, clearance free adjustable			
Process speed X/Y/Z (mm/s)	100			
Repeat accuracy (mm)	≤ 0,02			
Drive motors	Stepper motors			
Drive elements X/Y/Z	Ball screw drive, clearance free adjustable			
Control	Step controller iMC-M with 4 final stages 48V/4.2A and power supply 500W with CPU board, alternatively with clock direction interface module			
Operation	Function key, Emergency OFF (optional: control panel)			
Software	PAL-PC, Remote, Windows, ProNC, isy-CAD/CAM, Galaad, Win PC-NC, EdiTask, EMC (Linux)			
Weight without base frame (kg) *	approx.110	approx. 120	approx. 170	approx. 255
Item no. without base frame*	275409 55665	275419 55665	275429 55665	275439 55665
with base frame*	275408 55665	275418 55665	275428 55665	275438 55665

* without protective cover

Technical specifications subject to change.

Updated information available at www.systems.isel.com