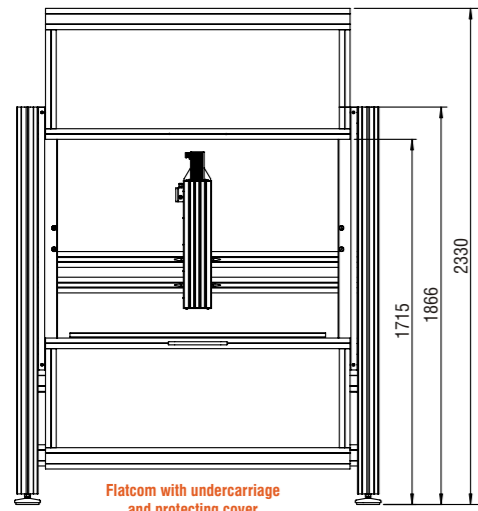
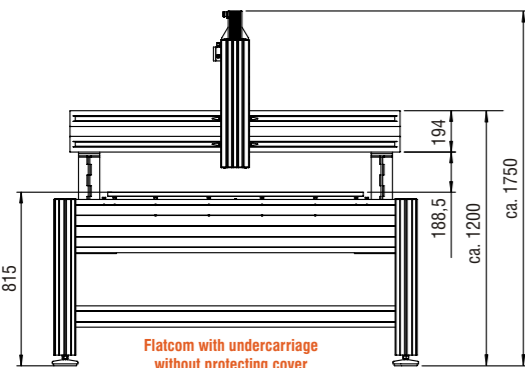


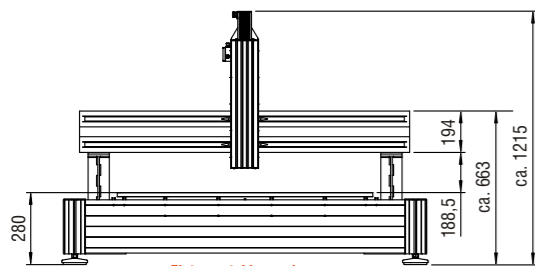
Dimensioned Drawings/Dimensions



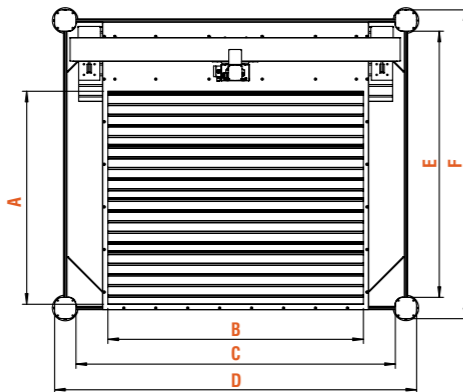
Flatcom with undercarriage and protecting cover



Flatcom with undercarriage without protecting cover



Flatcom, table version (available only with stepper motor drive)



	A	B	C	D	E	F
FLATCOM 10-S/V	500	750	1000	1200	650	850
FLATCOM 20-S/V	750	700	1000	1200	950	1150
FLATCOM 30-S/V	750	1200	1500	1700	950	1150
FLATCOM 40-S/V	1000	1200	1500	1700	1250	1450
FLATCOM 50-S/V	1500	1200	1500	1700	1750	1950

Technical data are subject to change without notice

Order Information

Item no.	Description
275013 12155	CNC base unit FLATCOM 10-SH , with undercarriage and protecting cover, feed range 700 x 350 mm
275023 12155	CNC base unit FLATCOM 20-SH , with undercarriage and protecting cover, feed range 700 x 600 mm
275033 12155	CNC base unit FLATCOM 30-SH , with undercarriage and protecting cover, feed range 1200 x 600 mm
275043 12155	CNC base unit FLATCOM 40-SH , with undercarriage and protecting cover, feed range 1200 x 850 mm
275053 12155	CNC base unit FLATCOM 50-SH , with undercarriage and protecting cover, feed range 1200 x 1350 mm
275012 12155	CNC base unit FLATCOM 10-SU , with undercarriage, without protecting cover, feed range 700 x 350 mm
275022 12155	CNC base unit FLATCOM 20-SU , with undercarriage, without protecting cover, feed range 700 x 600 mm
275032 12155	CNC base unit FLATCOM 30-SU , with undercarriage, without protecting cover, feed range 1200 x 600 mm
275042 12155	CNC base unit FLATCOM 40-SU , with undercarriage, without protecting cover, feed range 1200 x 850 mm
275052 12155	CNC base unit FLATCOM 50-SU , with undercarriage, without protecting cover, feed range 1200 x 1350 mm
275010 12155	CNC base unit FLATCOM 10-ST , table version, feed range 700 x 350 mm
275020 12155	CNC base unit FLATCOM 20-ST , table version, feed range 700 x 600 mm
275030 12155	CNC base unit FLATCOM 30-ST , table version, feed range 1200 x 600 mm
275040 12155	CNC base unit FLATCOM 40-ST , table version, feed range 1200 x 850 mm
275050 12155	CNC base unit FLATCOM 50-ST , table version, feed range 1200 x 1350 mm

Stepper motor drive

Item no.	Description
275013 32155	CNC base unit FLATCOM 10-VH , with undercarriage and protecting cover, feed range 700 x 350 mm
275023 32155	CNC base unit FLATCOM 20-VH , with undercarriage and protecting cover, feed range 700 x 600 mm
275033 32155	CNC base unit FLATCOM 30-VH , with undercarriage and protecting cover, feed range 1200 x 600 mm
275043 32155	CNC base unit FLATCOM 40-VH , with undercarriage and protecting cover, feed range 1200 x 850 mm
275053 32155	CNC base unit FLATCOM 50-VH , with undercarriage and protecting cover, feed range 1200 x 1350 mm
275012 32155	CNC base unit FLATCOM 10-VU , with undercarriage, without protecting cover, feed range 700 x 350 mm
275022 32155	CNC base unit FLATCOM 20-VU , with undercarriage, without protecting cover, feed range 700 x 600 mm
275032 32155	CNC base unit FLATCOM 30-VU , with undercarriage, without protecting cover, feed range 1200 x 600 mm
275042 32155	CNC base unit FLATCOM 40-VU , with undercarriage, without protecting cover, feed range 1200 x 850 mm
275052 32155	CNC base unit FLATCOM 50-VU , with undercarriage, without protecting cover, feed range 1200 x 1350 mm

Servo motor drive

Further types (f. e. without undercarriage and protecting cover) on request!

Technical data are subject to change without notice



FLATCOM®
Base Units *K Series*

...with servo or stepper motor drive



Composition and layout: iselmedia

General Features

FLATCOM base units are modular multiple axis units up to max. 5 axes that are low in vibration and constructed as machining facilities and positioning units with feed ranges from 350 to 1.350 mm. The standard throughput is 200 mm (optionally 300 mm).

The anodized aluminium profiles used for the construction are **isel** special profiles which allow good stiffness at little weight.

The Z-axis with a T-slot profile (pitch dimension 25 mm) allows to directly attach various applications.

The **FLATCOM** base units are delivered in five basic rack design sizes. They come with or without protecting cover, with an add-on control cabinet as well as the **isel** CNC control panel.

Space-saving sliding doors are installed in the protecting covers.

Ball screws with servo or stepper motors offering a repeatability of +/- 0.01 mm serve as axis drives.

The linear units being used are exact and torsion-resistant with tight fit ball bearings and ball threaded nuts being prestressed.

All units are equipped with two limit switches per axis.

The **FLATCOM** base units are available within the scope of standardised components in custom-made types and various intermediate sizes, characterized by their smooth running and high flow velocity.

FLATCOM with undercarriage, without protecting cover

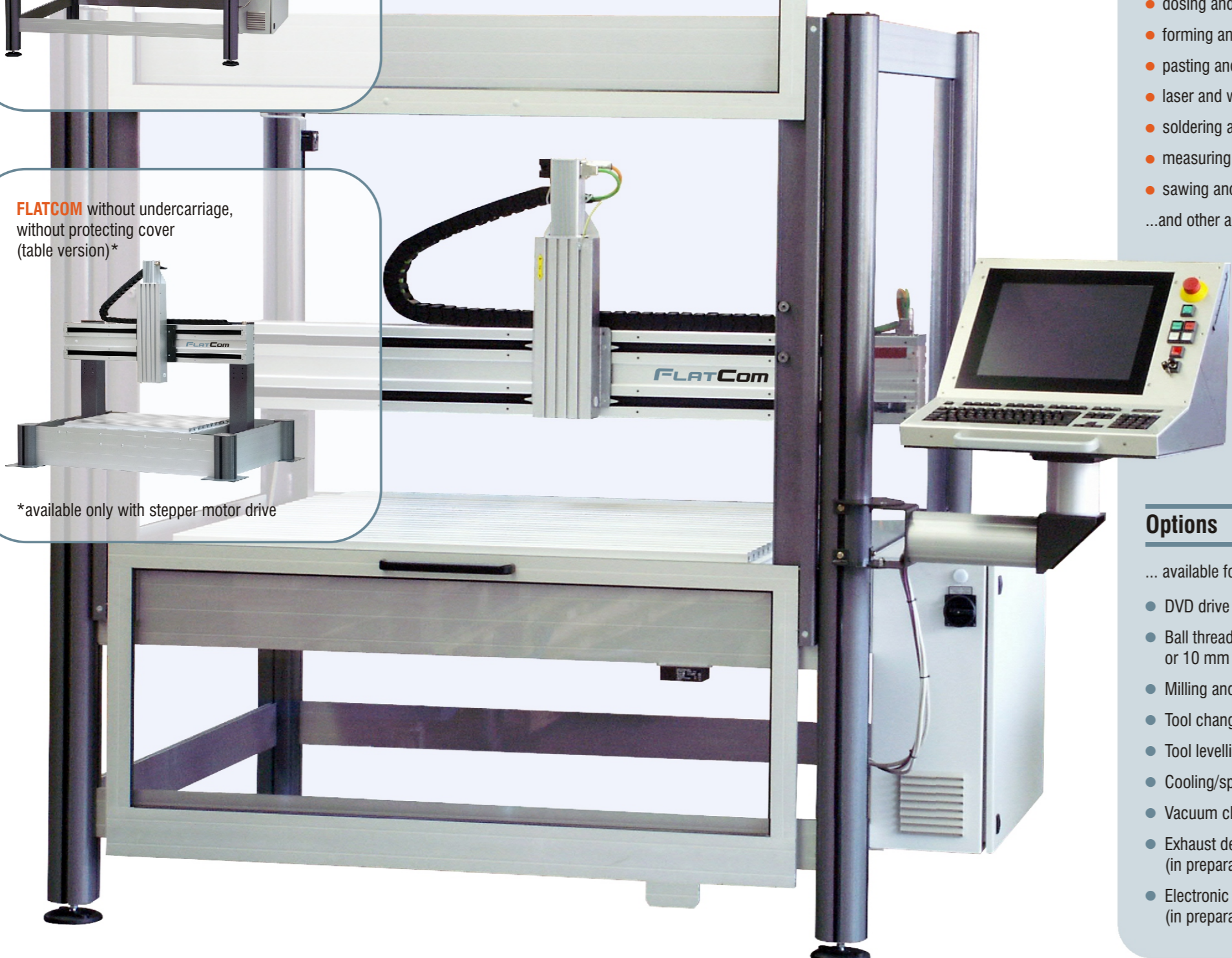


FLATCOM without undercarriage, without protecting cover (table version)*



*available only with stepper motor drive

FLATCOM 40-VH with undercarriage, protecting cover and operator's console



Fields of Application

FLATCOM base units constitute the basis for the composition of machines and constructions for:

- assembling and mounting
- printing and engraving
- drilling and milling
- dosing and screwing
- forming and modelling
- pasting and casting
- laser and water jet cutting
- soldering and welding
- measuring and verifying
- sawing and cutting
- ...and other applications

Options

... available for the **FLATCOM** base units:

- DVD drive
- Ball threaded spindle, pitches 2,5 mm or 10 mm (standard: 5 mm)
- Milling and engraving spindles
- Tool changing station
- Tool levelling
- Cooling/spray units
- Vacuum clamping table
- Exhaust device (in preparation)
- Electronic handwheel (in preparation)

Machine Control CNC-SERVO and CNC-STEP

Apart from the solid mechanical construction, the multiple axis control plays a decisive role as the connecting link between the production and the automation software.

Common features of the machine control **CNC-SERVO** and **CNC-STEP** are:

- Efficient drive control for the operation of up to 5 axes
- Variable number of axis by means of modular power-output stages
- Regulated 1.000 VA power supply with PFC and input range of wide range voltage
 - Easy-to-integrate superior safety circuits
- Type of enclosure IP44 (high-level types of enclosure on request)
- Dimensions of the control cabinet (W x D x H): 800 x 600 x 250 mm
 - Control software: ProNc, Remote

The essential features of the servo machine control **CNC-SERVO** are:

- Servo power-output stages with incremental encoder interpretation (RS 422), all-digital, short-circuit proof, surveillance of the encoding signals, overtemperature, overcurrent, commissioning and parameter setting of the output stages by means of the field bus
- 25 A peak current at max. 85 V supply voltage
- NC control by field bus
- Integrated main spindle control
- I/O module with additional inputs and outputs (analog +/- 10 V and PMW output optional)
- Programmable safety circuit module (prepared programming for emergency stop chain, protective cover locking)

The essential features of the stepper machine control **CNC-STEP** are:

- Microstep power-output stages for the bipolar control of two-phase stepper motors
- adjustable phase current up to a maximum of 7 A at a supply voltage of 80 V
- Control of the power-output stages by means of clock/direction signals (optional with clock multiplication)
- Integrated main spindle control
- Additional inputs and outputs for controlling peripheral equipment
- Integrated safety circuit for the emergency stop chain and protecting cover lock, design according to safety category 3

Technical Data

	FLATCOM 10	FLATCOM 20	FLATCOM 30	FLATCOM 40	FLATCOM 50
Feed range (X / Y) [mm]	700 / 350	700 / 600	1.200 / 600	1.200 / 850	1.200 / 1.350
Surface clamping table [mm]	700 / 500	700 / 750	1.200 / 750	1.200 / 1.000	1.200 / 1.500
Z-travel [mm]	150 (optionally 250, each without machining facility)				
Z-throughput [mm]	200 (optionally 300, each without machining facility)				
Dimensions with control cabinet and cover (W / H / D) [mm]	1.420 / 850 / 1.870	1.420 / 1.150 / 1.870	1.920 / 1.150 / 1.870	1.920 / 1.450 / 1.870	1.920 / 1.950 / 1.870