

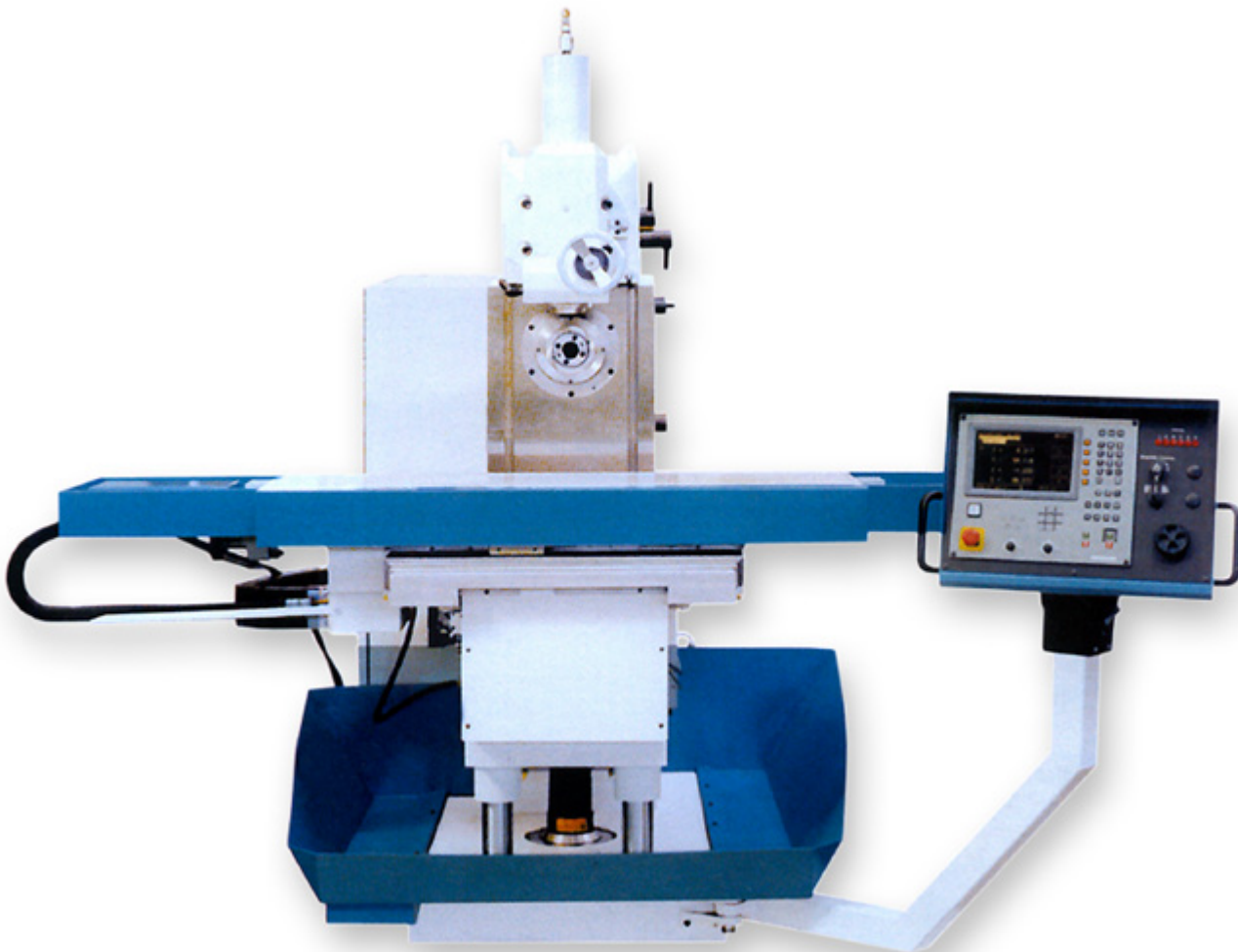


CNC

The **CNC machine** from our List designed for various milling, drilling and boring operations. These types of milling machines can be used for machining of small and heavy work pieces, for single, small and big series productions. The design of the machines provides possibilities for high precision machining with high productivity in operations with work pieces with dimensions up to 1600 mm, and weight up to 1000 kg. By customer's request the machines can be equipped with a big variety of accessories and cutting tools. Choosing the smallest or the heaviest milling machine you always choose quality, which we guarantee.

CNC horizontal milling machine.

- Two independently driven milling spindles;
- Vertical milling unit manually adjustable by 450 mm;
- Vertical milling head manually swivelling +/- 90 ;
- Brushless servomotor for feeds and rapid traverses X-,Y- and Z- axes;
- Ball screw for X-,Y- and Z- axes;
- Hydraulic tool clamping on both spindles;
- Automatic clamping for X-,Y- and Z- axes;





Technical characteristics		FM 1000
Table size	mm	400x1370 (1570-option)
T - slots- number and size	mm	5x18
Center distance	mm	70
Max load	Kg	500
Longitudinal table travelx table L= 1370 (L = 1570 - option)	mm	1000 (1200-option)
Cross table travel - y	mm	370
Vertical table travel - z	mm	450
Quill stroke vertical	mm	120
Distance center line of horizontal spindle		
- to table	mm	0 450
- to bottom surface of overarm	mm	145
Distance center line of vertical spindle		
- to table	mm	100 550
- to vertical guideways	mm	50 - 500
Tool carrier taper DIN 2080		ISO 40
Spindle diameter:		
- horizontal	mm	90
- vertical	mm	60
Angle adjustment of vertical milling head	deg	+/- 90
Main drive rating each spindle	kW	6,1 / 7,4
Spindle speeds:		
- horizontal (16 speed)	Rpm	32-1400 (48-2100)
- vertical (16 speed)	Rpm	48-2100 (63-2750)
Feeds infinitely variable longitudinal and cross	Mm/min	10 - 1000
- vertical	Mm/min	4 - 400
Rapid traverse longitudinal and cross / vertical	Mm/min	5000 / 2000
Feed power: - X / Y / Z axis	N	20 000 / 10 000 / 15000
Space required - table length 1370 / 1570	mm	3300x2800 / 3700x2800
Machine weight, approx.	kg	4000

Vertical CNC milling machines





Technical characteristics		FV 321 03	FV 361 03
Table size	mm	320 x 1000 (1350)*	360 x 1000 (1500)*
T - slots- number and size	mm	5 x 18 x 63	5 x 18 x 63
Longitudinal table travel - x	mm	750 (1000)*	750 (1150)*
Cross table travel - y	mm	340	340
Vertical table travel - z	mm	440	440
Max. distance from table top to spindle nose	mm	127/77**	127/77**
- min	mm	567/517**	567/517**
- max			
Spindle nose taper:	ISO	40 (50)	(50)
Milling head rotation around 2 axes	deg.	360	360
Number of spindle speeds:		12	12
Spindle speed range	min ⁻¹	45...2000	45...2000
Table feed rate:			
- x,y	mm/min	2...10000	2...10000
- z	mm/min	2...6000	2...6000
Table rapid traverse:			
- x,y	m/min	10	10
- z	m/min	6	6
Main motor power:	kW	5,5	5,5
Machine weight, approx.	kg	3000	3100

* - option ** - for spindle nose taper ISO 50

STANDARD FEATURES	OPTIONS
<ul style="list-style-type: none"> • Automatic lubrication • Precision ball screws for X, Y and Z axis • Chip pan • Safety guard • Cooling system • Working lighting • Automatic tool clamping • Control system Heidenhain TNC 310 	<ul style="list-style-type: none"> • Linear incremental measuring scales on x, y and z axes • Control system: Heidenhain TNC 124, TNC 410, TNC 426

NOTE: All the milling machines could be manufactured with control of the movement of the axes by joystick, and frequency adjustment of the feeds