

TECHNICAL DATASHEET
CNC-Travelling Column Milling Machine

Manufacturer	SORALUCE
Type	FP 8000
Control	HEIDENHAIN iTNC530
Built	2010



Travels

Longitudinal movement (X-axis)	8.000 mm
Transverse movement (Y-axis)	1.500 mm
Vertical movement (Z-axis)	2.600 mm

NC –Rotary sliding table, Fabr. FIBRO

Clamping surface	3.000 x 2.500	mm
V-Axis (translational movement)	2.000	mm
Max. workpiece load	40.000	kg



Floor plate

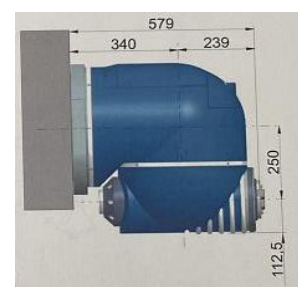
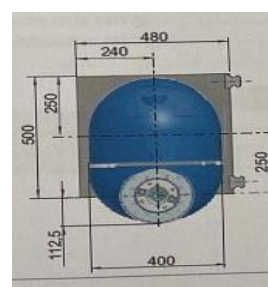
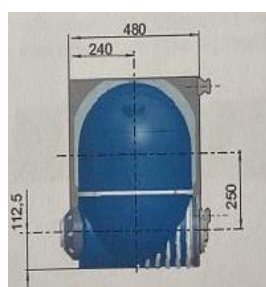
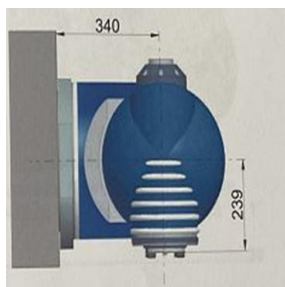
Clamping surface	4.500 x 2.000	mm
Max. workpiece load	10.000	kg/m ²

Feeds

X-, Y- and Z-Axis, stepless	2 - 20.000	mm/min.
Rapid traverse in X / Y / Z	35	m/min

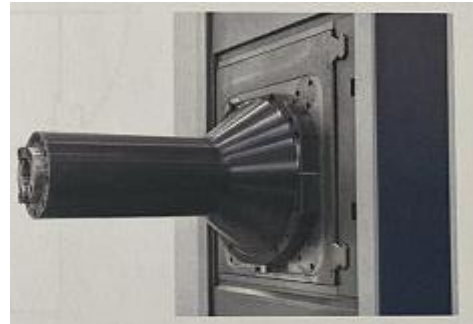
Orthogonal Milling head H41

Swiveling area front/rear section	1°/1°	360 x 1° +/- 135°
Power at 100 % S1	32	kW
Speed range, stepless	40 - 4.000	min-1
Max. torque	900	Nm
Tool taper	SK 50 – DIN 69871-AD	
Pull stud according DIN 69872-A		



Fixed spindle extension

length	950	mm
Tool change	manually	
Tool clamping	automatically	
Speed range, stepless	40 - 4.000	min-1
Tool taper	SK 50 – DIN 69871-AD	
Spindle extension suitable for finishing works		



Boring and facing head D'Andrea, UT5

Electronic boring and facing head, mod. UT5-630, which is controlled by the U axis of the machine. Use for boring and drilling, threading, radius production by interpolation with other axes of the machine.

Diameter of the faceplate	630	mm	lateral flattened
stroke of the tool slide	200	mm	
max. boring diameter	1.250	mm	
max. speed	250	mm	
max. feed force	500	daN	
Manual tool change			



Automatic tool changer ATC

Tool places	40	Plätze
Tool diameter max.	125/250	mm
Tool length max.	400	mm
Tool weight max.	20	kg
Change positions	Horizontal/Vertical	
Tool changer mounted at the column side and travelling together with the spindle		

Guideways, drive and measuring systems

- All axis drives with digital drives Fabr. HEIDENHAIN
- Direct measuring systems for X, Y and Z axes Fabr. HEIDENHAIN
- X-, Y- and Z-axis guidance by means of high-precision linear guides for maximum precision and dynamics
- Precision ball screws with preloaded nuts in X, Y and Z axes

Coolant system with chip conveyor

- Coolant outlet at the front of the milling head via manually swiveling nozzles.
- Internal coolant supply through the spindle center
- Tank volume approx. 1,500 l
- Normal coolant supply 25 l/min 5 bar
- High pressure pump for internal coolant 20 l/min 15 bar
- Coolant tank incl. magnetic separator and paper belt filter
- Hinged belt chip conveyor along the X - axis of the machine,
- 1 cross conveyor on the right side

CNC-Control HEIDENHAIN iTNC 530

Digital numerical sequence control, including digital drive control, hard disk memory, 15" TFT - color screen,

Machining cycles:

Standard drilling and milling cycles, deep drilling, tapping with and without compensation chuck, milling of slots, rectangular and circular pockets, rectangular and circular tenons, boring, drilling milling (helical path), line-off, drilling patterns, head tilting, backward tilting, shifting and/or rotation of the coordinate system, mirroring, dimensional factor also axis specific, Linear interpolation on 3 axes, circular interpolation on 2 axes and on 3 axes with rotated working plane, tilt working plane, circular milling for rotary tables.

HR 410 - Electronic handwheel for operation of all axes.

Dimensions and weight

Machine footprint	ca. 14,5 x 6,0	m
Total height	ca. 4,90	m
Machine weight ca.	40.000	kg

Electrical Power supply

Total power	80	kW
Operating voltage	3 x 400	V
Operating frequency	50	Hz
Current	144	A

Equipment and Accessories

- Machine bed, column and vertical saddle as cast iron construction, heat-treated for stress-relieve
- Milling slide as cast iron construction, heat-treated for stress-relieve
- Universal milling head, positioning via Hirth toothing, front plane 1°, rear plane 1° - changeable automatically
Milling head was overhauled by the manufacturer
- Facing head D'Andrea UT 5 - changeable automatically
- spindle extension L = 950 mm - changeable automatically
- oil cooling unit for cooling of milling spindle motor and milling head
- spindle drive 32 kW
- spindle speed max. 4.000 min⁻¹
- Axis drives by means of precision ball screw spindles and digital servo motors
- 3-D measuring touch probe system with radio transmission
- CNC control HEIDENHAIN iTNC 530 incl. digital drive technology
- Portable electric handwheel HEIDENHAIN HR 410
- Travelling operator platform
- Automatic tool changer with 40 magazine positions, change position horizontal/vertical
- Coolant system with external shower ring and IKZ through the spindle, magnetic separator and paper belt filter
- 1 pc. chip conveyor lengthwise in the working area, 1 pcs. cross conveyor on the right side
- Precision linear guides in all axes
- Precision ball screws in all axes
- Direct measuring system in all axes
- Hydraulic counterbalance in the vertical axis
- Fully refurbished telescopic steel covers of the X-axis
- Fully refurbished telescopic covers for the rotary table
- NEW rolling belts at top and bottom of the milling RAM top to protect the vertical axis
- FIBRO rotary transfer table, clamping surface 3.000 x 2.500 mm, max. 40.000 kg workpiece weight.
- 1 pc. panel field 4.500 x 2.000 x 300 mm
- 1 pc. pick-up station for automatic milling head change.
Milling head, spindle extension and D'Andrea facing head are automatically changed in and out via CNC program
- Air conditioning for electrical cabinet
- hydraulic system
- workspace lighting
- Painting RAL 7035 grey white/RAL 5011 steel blue
- Operating hours: Machine ON approx. 31,000 h, program run approx. 12,000 h