

**TECHNICAL DATASHEET**

**CNC-BED MILLING MACHINE**

manufacturer	<b>SORALUCE</b>
type	<b>TA-35 A</b>
control	<b>HEIDENHAIN iTNC 530</b>
built	<b>2007</b>



**Travels**

X-axis (longitudinal)	3.500 mm
Y-axis (vertical)	1.250 mm
Z-axis (cross)	1.000 mm

**Clamping table**

Clamping surface	3.700 x 850 mm
Max. workpiece weight	2.500 kg/m <sup>2</sup>
Width of t-slots	6 x 24 mm H12
Distance between t-slots	140 mm

### Feeds

Working feed X-, Y- and Z-axis	10.000	mm/min.
Rapid feed X / Y / Z	25.000	mm/min
Max. thrust of shaft to cutting unit	10.000	N

### Universal Milling Head

Swiveling area vertical/diagonal level	2,5 x 2,5 °	144 x 144 positions
Power on 100% ED	32	kW
Speed, stepless	15-3.000	Min-1
Tool taper	SK50	According ISO 7388/1
Tightening bolt		DIN 69872 Form A
Prepared for internal cooling		

### Automatic Tool Changer ATC

Tool places	20	Places
Tool diam. max.	125/200	mm
Tool length max.	250	mm
Tool weight max.	15	kg
Change position		vertical

### Guides, drive and measuring systems

- All axis drives with digital drives manufacturer HEIDENHAIN
- Direct measuring systems for X, Y, and Z axis manufacturer HEIDENHAIN
- X-, Y- and Z-axis guidance using high-precision linear recirculating roller bearing and guideway assemblies for maximum precision and dynamics
- Precision ball screw with preloaded nuts in X-, Y- and Z-axis

### Coolant system with belt filter

- Large-volume tank with integrated paper belt filter Tank volume approx. 150 l
- Two cooling circuits to supply the machine with cooling lubricant
- External coolant supply with low pressure and coolant outlet at the front of the milling head via manually swiveling nozzles
- Internal coolant supply with increased pressure through the spindle center

### 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 studs, 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

### HR 410 - Electronic handwheel for operation of all axes

#### Measurement, weight

Floor space required	ca. 10,4 x 4,5	m
Machine height	ca. 4,00	m
Machine weight	ca. 21.500	kg

#### Electrical supply data

Installation power	46	KVA
Nominal current	88	A
Operating voltage	3 x 400	V
Cable section	35	mm <sup>2</sup>
Operating frequency	50	Hz

#### Equipment & Accessories

- Universal milling head, positioning via Hirth toothing, diagonal and vertical plane 2.5°
- Servo spindle motor HEIDENHAIN 32kW, spindle speed max. 3.000 min<sup>-1</sup>
- Axis drives via precision ball screws and digital servo motors
- CNC control HEIDENHAIN iTNC 530
- HEIDENHAIN HR 410 electronic handwheel
- Swiveling control panel for machine operation in front of or behind the machine
- Automatic tool changer with 20 magazine positions
- Coolant system with two cooling circuits and paper belt filter
- Chip conveyor in the working area, ejection on the right, height approx. 1.000 mm
- Precision ball screws in all axes
- Telescopic steel cover of the X-axis, overhauled
- Vertical guide at the bottom covered with steel curtain, NEW
- Work area enclosure closed on the sides.
- Manual sliding doors at the front of the machine can be opened along the entire length of the clamping table.
- Hydraulic system
- Lighting of the working area
- Painting RAL 7035 light gray / RAL 5011 steel blue