TECHNICAL DATASHEET

CNC–Bed-Milling-Machine

manufacturer	**MTE**
type	**RT 25/16**
control	**HEIDENHAIN iTNC 530**
built	**2013**

Travels		
X-axis (longitudinal)	2.500	mm
Y-axis (vertical)	1.500	mm
Z-axis (cross)	1.200	mm

NC-Rotary-Tasble –integrated-		
Clamping surface	1.600 x 1.400	mm
T-slot size	28 H 10	mm
Workpiece weigth max.	15.000	Kg
Bearing AD	1.095	mm
Pitch Accuracy	2,5	sec

Feeds			
X-, Y- and Z-axis, stepless	5 - 15.000	mm/min.	
Max. feed power X-, Y- and Z-axis	24.000	N	
Rapid feed in X / Y / Z	25	m/min	

Working spindle with automatic milling head			
AC-main drive with gear box			
power 100% ED	30	kW	From 198 min-1 on
Gear steps	3		
Speed, stepless	0 – 4.000	1/min	
Max. torque	1.460	Nm	Up to 198 min-1
Tool taper		SK 50 – DIN 69871 Form AD	
Clamping bolt		DIN 69872 Form A	
Milling head tilting in both levels	2,5	°	144 pos. each level
Auto. Tool clamping	15.000	N	Clamping force

Automatic Tool Changer ATC			
Tool places in magazine	40	Places	
Changing positions	Vertical + horizotal		
Tool diam. max.	250 / 125	mm	Neighbour places free /occupied
Tool length max.	380	mm	
Tool weight max.	20	kg	

CNC-control

HEIDENHAIN, iTNC 530
Combined with digital drive control, hard disk storage,15“ TFT – color screen,
6 GB hard disc, external machine control panel, standard drilling and milling cycles, threading without compensation chuck, linear interpolation, circular interpolation, processing level swivel, helical curve etc. HEIDENHAIN tool management for managing tools and tool magazine, electronical handwheel HR 410, USB-interface, diagnostic system, Various milling-cycles

Chip conveyor

- Chip conveyor No. 1 installed between machine column and work piece table
- Chip conveyor No. 2 installed in front of the work piece table
- Cross conveyor on the left side of the machine for reducing the machine length
- Discharge high ca. 1.250 mm
- Integrated coolant tank with lifting pump

Guides, drive and measuring system

- All axis drives with digital servomotors SIEMENS
- Direct measuring system for X-, Y- and Z-axis HEIDENHAIN
- X-, Y- and Z-axis with INA high-precision linear guides for maximum precision and dynamics
- Precision ball screws in all axis with with pretension nut´s

Coolant equipment

- Cooling through spindle including paper band filter
- Clean water tank ca. 500 l,
- Normal coolant supply 50 l/min 5 bar
- High pressure pump 20 bar
- Internal coolant through spindle centre taper DIN 69871 Form AD
- Clamping bolt DIN 69872 Form A

Measurement, weight

Floor space required	ca. 8,3 x 6,7	m
Machine height	ca. 3,92	m
Machine weight	ca. 18.500	kg

Electrical supply data

Total connected load	45	kVA
Operating voltage	400	V
Operating frequency	50	Hz

equipment

- Autom. Milling head 2,5° positioning
- Gear-box 3-fold
- Cooling unit for gear-box
- 3-D-Compensation for thermal extension of the milling unit
- Spindle drive 30 kW, SIEMENS
- X-, Y- and Z-axis with INA high-precision linear guides
- Direct measuring system for X-, Y- and Z-axis HEIDENHAIN
- Precision ball screws in all axis with pretension nut´s
- NC-Rotary-Table 1.600 x 1.400 mm –enhanced-
- Radio touch probe manufacturer M&H, RWP 38.41 incl. autom. measuring cycles
- CNC-Control HEIDENHAIN iTNC 530 with digital drive control
- Electronical handwheel HR 410
- Autom. Tool changer 40-fold
- Coolant equipment with external coolant circuits and internal coolant through spindle
- 3 pc. Chip conveyor
- Ca. working hours: Main switch ON: 13.300h, Machine ON: 16.300 h, Operating: 5.500 h