

### TECHNICAL DATASHEET

#### CNC – heavy duty BED TYPE MILLING MACHINE with 4th axis

Manufacturer	<b>ZAYER</b>
Type	<b>KFCU-5000-AR</b>
Control	<b>HEIDENHAIN iTNC 530</b>
Built   Retrofit-Level	<b>2007   RECONDITIONING</b>



#### Travels

Table movement (X-Axis)	4.700 mm
Head cross movement (Y-Axis)	1.250 mm
Head vertical movement (Z-Axis)	1.500 mm

#### Clamping table

Clamping surface	5.000 x 1.000 mm
Max. workpiece weight	10.000 kg
Number and size of T-slots	7 x 22 mm H12
Distance of T-slots	140 mm

### Feeds

X-, Y- and Z-Axis, stepless	6 - 15.000	mm/min.
Rapid traverse in X / Y / Z	25.000	mm/min

### Zayer-NC-Milling Head stepless

Swiveling front/rear section	automatically
Indexing	0,001 x 0,001 °
Power	37 kW
Max. torque	880 Nm
Gearbox steps	2
Speed range, stepless	35 - 4.500 min-1
Tool taper	SK50 DIN 69871
Tightening bolts	DIN 69872
Head lubrication	Grease lubrication for bevel gear pairs
Cooling system for spindle bearings	Yes
Cooling system for gearbox	Yes
Internal coolant supply	Yes
Automatic change of water/air via M function for external and internal coolant supply	

### Automatic Toolchanger

Tool positions	60	pockets
Max. tool diameter	125 / 240	mm
Max. tool length	300	mm
Max. tool weight	25	kg

### Guides, drives and measuring systems

- All axis drives with digital drives manufactured by SIEMENS
- Direct measuring systems for X, Y, and Z axes manufactured by HEIDENHAIN
- X, Y, and Z axis guidance using a combination of hardened steel strips and INA roller shoes on each running surface for maximum precision and load capacity. The counter guides of all axes are coated with plastic for optimum damping.
- Table drive (X-axis) using a gear rack and two backlash-free drive pinions, driven by servo motors.
- Precision ball screws with preloaded nuts in Y and Z axes.

### Coolant unit

- Coolant system with belt filter and two coolant circuits
- Coolant outlet on the front of the milling head
- High-pressure pump for internal coolant supply, approx. 40 bars
- Tank volume approx. 1,100 l

### Chip conveyor

- 2 pieces chip conveyor in front and back of the machine table
- 1 vertical conveyor on the left side of the machine, rear discharge at height approx. 1,000 mm

### Dimensions and weight

Footprint Maschine	approx. 12,7 x 5,6	m
Total height	approx. 4,2	m
Machine weight	approx. 35.000	kg

### CNC-Steuerung HEIDENHAIN iTNC 530

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

### Machining cycles:

Standard drilling and milling cycles, deep drilling, thread cutting with and without compensation chuck, milling of grooves, rectangular and circular pockets, rectangular and circular journals, boring, drill milling (helical path), lining, drilling patterns, head swiveling, reverse countersinking, displacement 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, swiveling the machining plane

### HR 410 – Electronic handwheel for operating all axes

### Connection data

Operating voltage	3 x 400	V
Operating frequency	50	Hz
Prefuse	197	A

### Equipment and Accessories

Heavy-duty bed-type milling machine ZAYER KFCU-5000 AR with large clamping table and HEIDENHAIN iTNC 530 CNC control

- Zayer universal milling head, 0.001 × 0.001°, 37 kW, SK50, max. spindle speed 4,500 rpm
- Table drive via rack and pinion with electronically preloaded twin pinions
- All other linear axes driven by preloaded precision ball screws and digital servo motors
- Thermal compensation for the milling ram on 3 axes
- HEIDENHAIN HR 410 electronic handwheel
- 3D touch probe
- Swiveling operator control panel, operable from the front or rear of the machine
- Increased distance between column and machine bed by 200 mm
- Automatic tool changer with 60 magazine positions
- Dual-circuit coolant system with belt filter and 1,100-liter capacity, high-pressure pump 40 bar and internal coolant supply through the spindle
- Three chip conveyors: two chip conveyors located in the working area in front of and behind the machine table; one discharge chip conveyor on the left side of the machine with rear discharge
- Telescopic steel covers on the table axis
- Vertical guideways: lower section protected by lamella curtain, upper section covered by bellows

Technical Datasheet

CNC-Bed Type Milling Machine with 4<sup>th</sup> Axis

ZAYER KFCU-5000

- Fully enclosed working area, closed on the sides, including large viewing windows
- Manual sliding doors at the front of the machine can be opened over the entire length of the clamping table
- Preparation for 4th axis including feed rate controller, hydraulic valves, electrics, etc. for integration of a rotary table on the machine table
- Horizontal add-on rotary table PEISELER AWU800, fully integrated into the control system as a 4th axis
- Hydraulic unit for adjustment of the power chuck and tailstock quill
- Preparation for teleservice
- Working area lighting

### Service package „RECONDITIONING“ – Included scope of supply

- Complete disassembly of the machine into its individual components
- Extensive and thorough cleaning of the machine and all accessory components
- Technical inspection and verification of the machine and all individual parts by our qualified service technicians
- Any identifiable defects or faulty components detected during inspection are professionally repaired or replaced by our experienced service team
- Overhaul of the telescopic covers
- Replacement of all wipers
- Inspection and overhaul of the milling head, including spindle bearings
- A visual highlight for your production – new paint finish using high-quality, robust 2K machine paint to protect the machine structure and ensure an attractive appearance
- Testing of all machine movements and functions under power in our showroom prior to delivery
- 

→ You will receive a fully inspected and fully operational machine, ready for immediate production use!

Machines that have undergone our "RECONDITIONING" package cannot be compared to standard used machines on the market, either technically or visually!

Your address for  
high quality machine tools

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## Werkzeugmaschinen

Technical Datasheet

CNC-Bed Type Milling Machine with 4<sup>th</sup> Axis

ZAYER KFCU-5000



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page 5 of 6

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## Werkzeugmaschinen

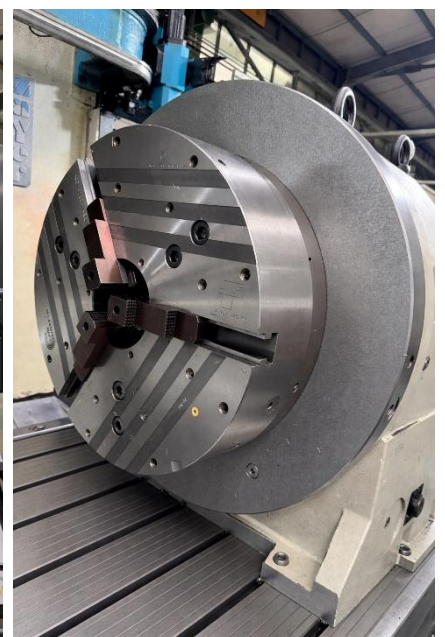
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Add-on rotary table PEISELER AWU800:



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page 6 of 6