

TECHNICAL DATASHEET

CNC – Heavy Duty BED TYPE MILLING MACHINE

manufacturer	ANAYAK
type	VH Plus-4000 HS
control	HEIDENHAIN iTNC 530
built	2008



Travels

Longitudinal movement (X-axis)	4.000	mm
Lateral movement (Y-axis)	1.700	mm
Vertical movement (Z-axis)	1.500	mm

Clamping table

Clamping surface	4.200 x 1.100	mm
Max. work piece weight	10.000	kg
Number and size of T-slots	7 x 22	mm H12
Spacing of the T-slots	150	mm

Feeds

X-, Y- and Z-axis, stepless	2 - 10.000	mm/min.
Rapid feed X / Y / Z	22.500	mm/min
Max. feed forces X-Y-Z axis	31.400	N

Universal-NC-Milling Head UAD

Swivelling front/rear plane	automatic
Indexing	0,002 x 0,002 °
Motor power	30 kW
Max. torque	1.500 Nm
Number of gear steps	2
Max. gear reduction	1:5,5
Speed range, stepless	60 - 6.000 min-1
Tool holder	SK50 DIN 69871
Pull stud	DIN 69872-A
Head lubrication	Air-oil mixture with separate automatic lubrication pump
Cooling system for spindle bearings	yes
Cooling system for gearbox	yes

Automatic Tool Changer ATC

Tool places	60	Plätze
Tool diam. max	125/200	mm
Tool length max..	400	mm
Tool weight max.	25	kg

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 guides for maximum precision and dynamics
- Precision ball screw with preloaded nuts in X-, Y- and Z-axis

Coolant equipment with band filter

- Coolant exit at the front of the milling head
- Internal coolant supply, approx. 36 bar and 30 l/min
- Tank capacity approx. 350 l
- Coolant pump with delivery capacity approx. 20 l/min at 4 bar

Chip conveyor

- 2 chip conveyors along the machine table
- ascending conveyor with coolant tank and lifting pump to the left of the machine, ejection at the rear, ejection height approx. 1,000 mm

Measurement, weight

Floor space required	ca. 11,0 x 5,0	m
Machine height	ca. 4,5	m
Machine weight	ca. 30.000	kg

cnc-control HEIDENHAIN iTNC 530

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

Machining cycles:

Standard drilling and milling cycles, deep drilling, thread cutting with and without compensating chuck, milling of slots, rectangular and circular pockets, rectangular and circular journals, boring, drilling milling (helical path), chamfering, drilling patterns, head swivelling, reverse countersinking, shifting and/or rotation of the coordinate system, mirroring, dimension factor also axis-specific,

Linear interpolation on 3 axes, circular interpolation on 2 axes and on 3 axes with rotated working plane, swivelling working plane, shell milling

HR 410 - Electronic handwheel for operating all axes

Electrical supply data

Operating voltage	3 x 400	V
Operating frequency	50	Hz

Equipment / Accessories

Universal milling head UAD, 0.002x0.002°, positioning via internal Hirth serration

Spindle speed max. 6,000 min-1

Axis drives via precision ball screws and digital servo motors

CNC control HEIDENHAIN iTNC 530

Electronic handwheel HEIDENHAIN HR 410

3D touch probe m&h

Swivelling control panel for machine operation in front of or behind the machine

Automatic tool changer with 60 magazine positions

Dual-circuit coolant system with belt filter and 350 liter capacity, 36 bar high-pressure pump and internal coolant supply through the spindle

Three chip conveyors, including two chip conveyors in the work area

Telescopic steel cover for the X-axis

Vertical guide at the bottom covered with steel curtain

Work area paneling closed on the sides.

The manual sliding doors at the front of the machine can be opened along the entire length of the clamping table.

Hydraulic system

Preparation of 4th axis for placing a rotary table on the machine table
Lighting of the work area
Paintwork RAL 7035 light grey / RAL 7016 anthracite
Delivery incl. additional top-mounted rotary table possible upon request

Technical inspection and repair by our own FLECKENSTEIN technicians

- Complete cleaning and technical inspection of the machine
- Replacement of the scrapers
- Overhaul of the telescopic covers
- New bellows in the vertical axis
- Overhaul of the milling head: New spindle bearings, new seal set, etc.
- New paint finish with high-quality and robust 2K machine paint
- Functional test under power in our showroom

Any visible defects or defective parts found during the inspection will be professionally repaired or replaced by our experienced service team.
You will receive a thoroughly cleaned and fully functional machine from us