

5 AXES HIGH SPEED PORTAL MILLING MACHINE FPT DINOMAX 1 – Year 2013 Installed machine can be seen in operation



TECHNICAL DATA

CNC Heidenhain iTNC 530 S.P.

WORKING AREA

Longitudinal X-axis travel:	mm 4.000
Transversal Y-axis travel:	mm 2.200
Vertical Z-axis travel:	mm 1.100
Maximum speed with interpolating axes:	m/min 50

WORKTABLE

Dimensions:	mm 4.000 x 2.000
Height:	mm 300
Load capacity:	T/m ² 15
T-slots for workpiece clamping mm 28 DIN 650 (H12), complete with leveling elements.	
T-slot direction parallel to X-axis movement.	

AXIS CHARACTERISTICS

Axis feed rate:	mm/min 50.000
Acceleration:	m/s ² 4

WORKING AREA (CLEARANCES)

Maximum horizontal clearance:	mm 3.200
Maximum vertical clearance under crossbeam:	mm 1.926
Height of worktable from floor:	mm 330

CONTINUOUS POSITIONING UNIVERSAL HEAD WITH ELECTROSPINDLE

Automatic universal head indexed to 360,000 positions (every 0.001°). Rotation is driven by direct drive motors and controlled by the CNC as a positioning axis. Automatic tool clamping. Allows 10° undercut machining. Internal cooling system for bearings and axis motors.

B-axis rotation range:	± 185°
A-axis rotation range:	± 185°
Maximum axis rotation speed:	rpm 30
Maximum torque available on A/C axes:	Nm 450
Axis clamping torque:	Nm 1.400
Spindle power (S1/S6):	kW 22/33
Spindle torque (S1/S6):	Nm 84/128
Maximum spindle speed:	rpm 22.000
Tool interface:	HSK-A63 DIN 69893

The head is supplied complete with a cradle for handling and storage. The cradle is used outside the working area and therefore does not reduce the machine's actual working capacity.

CHAIN TOOL MAGAZINE – 30 POSITIONS (HSK)

30-position automatic chain tool changer located at the rear side of the working area, fully protected from dust and chips.

Tool type:	HSK-A63 DIN 69893
Max tool diameter (adjacent pockets occupied):	mm 90
Max tool length:	mm 300
Max tool weight:	kg 10

MEASURING SCALE PRESSURIZATION

Pneumatic system complete with control unit for pressurizing the measuring scales.

SPRAY-MIST TOOL LUBRICATION/COOLING

Mist lubrication system. The mist is generated by mixing air and oil and is controlled via M-function. The spray-mist improves cutting quality, prevents built-up edge formation, keeps the cutting area clean, and provides cooling.

Highly effective for improving surface finish quality.

EXTERNAL TOOL COOLING

Coolant distribution system controlled by the CNC, with nozzles positioned on the flange around the spindle. Complete with a tank (1,200-liter capacity) for coolant collection and filtration.

Flow rate: 30 l/min, pressure: 4 bar.

REQUIRED CONNECTIONS

Maximum installed power:

kW 150

Maximum current required:

A 235

MACHINE EQUIPPED WITH:

- Heidenhain HR550 remote electronic handwheel
- Various tooling included with the machine
- Renishaw probe
- BLUM laser presetting system
- AUTOCAL automatic head calibration system
- Visormax subscription for remote monitoring
- Electrical cabinet air conditioning unit
- Cooling system for all axes and the electrospindle
- No. 2 chip conveyors positioned on both sides of the worktable
- User and maintenance manual and CE declaration of conformity