

- High performance
- High strength and rigidity
- High dynamic and thermal stability
- Long-lasting high accuracy
- High reliability
- Model flexibility
- Ecologically friendly

# H 500

The horizontal machining centre in the H 500 version is a highly productive machine for the complex chip machining of parts from the steel, grey cast iron and soft metal alloys clamped on the rotary table. It enables to perform the milling operations in three mutually perpendicular X, Y, Z coordinate axes and in the rotary B axis. It also enables to perform the drilling, boring, reaming and thread cutting operations as well as the usage of the screw die heads without aligning bush in the Z axis.

## SPECIFICATIONS

### Travels

X-axis (column)	560 mm
Y-axis (spindle head)	560 mm
Z-axis (table)	560 mm
Max. working feed	15 m/min
Rapid traverse	50 m/min
Acceleration	5 m/sec <sup>2</sup>

### Spindle

Clamping taper	ISO 40	ISO 40	HSK-A63
Maximum speed	10 000 rpm	15 000 rpm*	18 000 rpm*
Continuous output/overload S6 – 40 %	20/30 kW	25/31 kW	25/31 kW
Torque/overloading S6 – 40 %	76/115 Nm	159/197 Nm	159/197 Nm
Transmission type	belt drive	electrospindle	

### Rotary table with pallet

Pallet dimensions	500 × 500 mm
Range of turning	360 °
Pallet max. load	300 kg
Workpiece max. size (dia × height)	∅ 600 × 750 mm
Pallet change time	10 sec

### Measuring accuracy (VDI/DGQ 3441) direct / indirect

Positioning accuracy (P)	0.008/0.010 mm
Repeatability (Ps max.)	0.005/0.006 mm
Pallet change accuracy	0.01 mm
NC table positioning accuracy (P)	6/22 arch sec

### Distances

Spindle nose to rotary table axis	130 – 690 mm
Spindle axis to pallet clamping surface	50 – 610 mm
Working pallet to floor	1 010 mm

### Tool magazine

Number of tool pots in magazine	45
Tool interchange time	3.5 sec
Tool maximum diameter:	
– fully occupied magazine	90 mm
– without adjacent tools	125 mm
Tool maximum length	300 mm
Tool maximum weight	7 kg

### Power supplies

Nominal voltage of mains	3 × 400 V/50 Hz
Operational power input	35 kVA
Compressed air	0,6 – 0,8 MPa

### Complementary data

Machine floor layout	5 066 (5 332) × 2 663 mm
Machine maximum height	2 871 mm
Machine weight	10 000 kg

### Control system

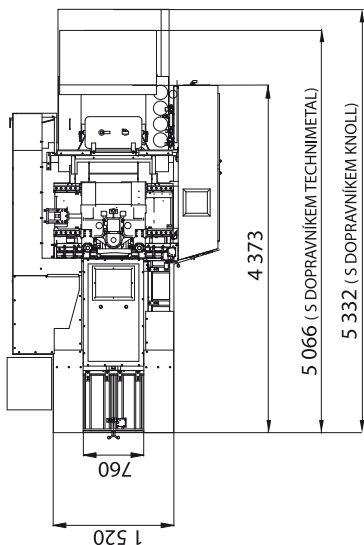
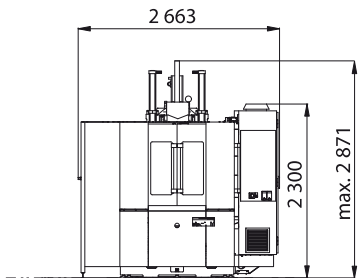
SINUMERIK, HEIDENHAIN\*, FANUC\*

### STANDARD EQUIPMENT

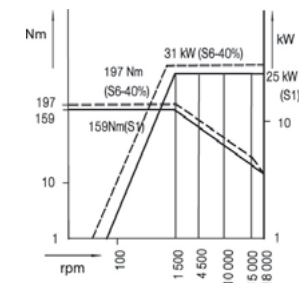
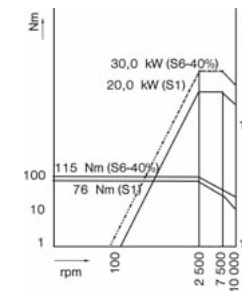
- SIEMENS digital drives
- Direct measuring in all axes
- Continuous rotary table, B-axis
- Automatic pallet changer, 2 pallets 500 × 500 mm
- Electronic compensation of thermal dilatations
- Automatic tool changer, 45 tool pots
- Coolant unit with tool cooling system
- Tool holder automatic blasting with air
- Worm-type chip conveyors
- Steelbelt chip conveyor with integrated coolant tank

### OPTIONAL EQUIPMENT\*

- Indirect measuring
- Tool cooling with coolant through spindle axis
- Tool cooling with air through spindle axis
- Coolant unit with filtration unit for tool cooling through spindle axis
- Tool cooling with oil mist
- Automatic tool changer with capacity of 75 or 99 tools
- Clamping taper CAT 40, BT 40
- Workpiece dimension checking probe
- Tool dimension checking probe
- Work zone washing-off
- Rake-type chip conveyor
- Chip bucket (300 kg)
- Vapour exhaustion from work zone
- Work zone manual washing-off
- Machine 5-axis version
- Climatization of electrical cabinets
- Remote diagnostics



### Power/Torque/Speed diagram



Descriptions of illustrations and specifications may not always correspond with the machine latest version.