

TECHNICAL DATA CNC – Horizontal – Machining Centre

manufacturer	STARRAG HECKERT
type	HEC 800 ATHLETIC
built	2009
control	FANUC Series 31i Model A5



Travels

X-Axis (headstock cross)	1.450	mm
Y-Axis (headstock vertical)	1.300	mm
Z-Axis (table longitudinal)	1.300	mm
B-Axis (NC – rotary table)	360.000	°
Max. work piece size (Ø x height)	Ø1.750 x 1.400	mm

NC – rotary table

Pallet size	800 x 1.000 mm	Threaded holes DIN55201
Smallest increment	0,001 °	
Reduced moment of inertia for payload	250 kgm ²	
Max. Table load in center	2.000 kg	

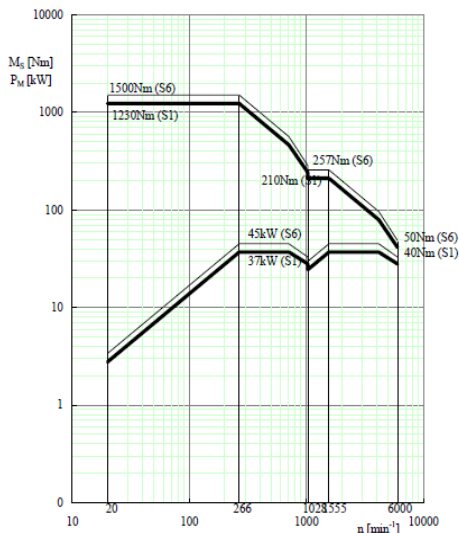
Feed, Rapid traverse

Feed range in X-Y-Z axis	1 – 60.000 mm/min
Feed force in X-Y-Z axis 100% ED	20 / 18 / 20 kN
Rapid traverse rate in X-Y-Z axis	60 m/min
Rapid traverse B axis (NC - rotary table)	60 m/min

Main spindle

Diameter in front bearing	100 mm
Max. Power, ED 100/60%	37/45 kW
Max. Torque, ED 100/60%	1.230/1.500 Nm
Max. Speed	6.000 min-1 2 gear steps
Tool holder	HSK-A 100 DIN 69893

Drehmoment-Leistungs-Diagramm



Coolant system

Connection to central coolant supply system
Cooling lubricant unit with backwash filter
Low pressure circuit
Internal cooling through the spindle centre

ca. 2,5 bar	ca. 125 l/min
ca. 80 bar	ca. 30 l/min

Tool magazine, tool changer

Tower magazine with 180 storage locations in 3 towers

15 memory locations for extra-long tools between 450 and 800mm realized in the storage.

This reduces the total number of storage units by 15 to 165.

Max. Tool Ø	110 mm	Secondary pitch occupied
Tool holder	HSK-A 100	
Tool Ø with restriction	250 mm	Secondary pitch free
Tool length max.	450 / 800 mm	
Tool weight max.	35 kg	
Max. Tool weight per tower	600 kg	
Chip-to-chip time up to 12kg / over 12kg	ca. 5,0 / ca. 8,2 sec	
Pallet change time	ca. 20 sec	

Machine Dimensions & Connection Data

Space requirement	ca. 8,2 x 6,0 x 4,6 m	
Machine weight	ca. 31.000 kg	
Connected load	90 kW	
Supply fuse	160 A	
Operating frequency	50 Hz	
Operating voltage	400 V	3AC

Equipment, Accessories

- 2-fold pallet changer without working space protection
- 3 separate set-up stations with threaded hole pallets 800 x 1,000 mm
- Tool magazine with 165 places HSK-A 100, own operating terminal on the magazine side, make SIEMENS
- NC rotary table, increment 0.001
- Main spindle 6,000 min-1, 2 gear steps
- 3D measuring probe make RENISHAW
- Electronic handwheel
- Machine enclosure with completely closed working area
- Chip conveyor, ejection under floor
- Coolant unit with filter and booster pumps, internal coolant feed (machine was connected to central coolant supply)
- Exhaust mounted on the machine cover
- Program running hours approx. 18,200 h