

GRINDING

LAPPING

SATIN-FINISHING

ABRASIVE BELT

MILLING

DRILLING

COMPACT CNC FINISHING CENTRE MANY MACHINING POSSIBILITIES IN ONE SINGLE CLAMPING



MACHINE ADVANTAGES & SPECIFIC POINTS

- ▶ Multi-function termination centre
- ▶ 5-axis kinematics - easy to programme
- ▶ Work on all types of watch components, medical, aeronautical, telephony, ...
- ▶ All satin finishing : linear, circular, horizontal between lugs, 6 axis simultaneous
- ▶ High rigidity allowing to machine hard material such as: Ceramic, sapphire, carbide, ...
- ▶ Powerful and dynamic axis motion allowing to reduce cycle time
- ▶ Proven reliability
- ▶ Many automation options for loading
- ▶ Thermal control on the machine for precision parts and cutting oil
- ▶ Simple, user-friendly RECO interface - uniform design over the entire machine range



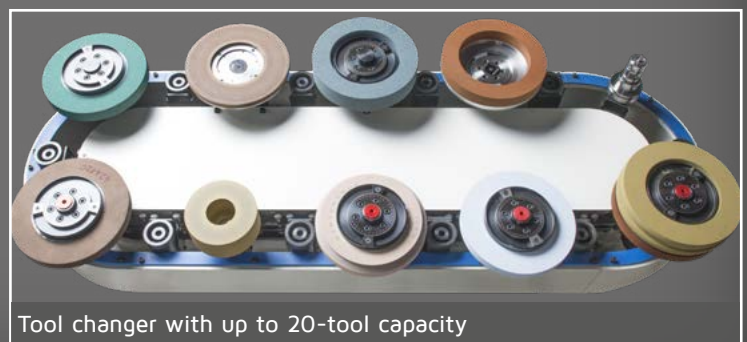
Machining zone



Double pivoting abrasive belt



Coolant on the digital axis



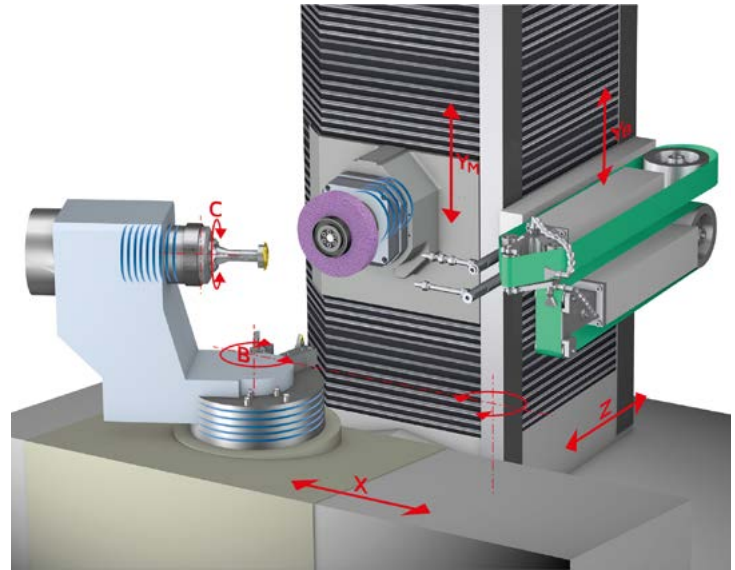
Tool changer with up to 20-tool capacity

MAIN FUNCTIONALITIES

- 6 digital axes 5 of which are simultaneous
- Asynchronous HSK motor spindle-tool: 18'000 min⁻¹ / 16.5 kW or 60'000 min⁻¹ / 6.5 kW
- Tool changer with up to 20-tool capacity
- Double pivoting abrasive belt (50 mm x 1500 mm)
- Automatic wheel dressing in the machine
- Double coolant flow system, control and position managed through part program
- Through tool and from upper machine housing coolant flow

TECHNICAL CHARACTERISTICS

	18'000 min ⁻¹	60'000 min ⁻¹
Parts		
Part Ø : MIN - MAX	20 - 80 mm	
Tool spindles		
Ø MAX of grinding wheel	250 mm	150 mm
Overall maximum tool length	150 mm	
Nominal spindle power	16.5 kW	6.5 kW
MAX spindle speed	18'000 min ⁻¹	60'000 min ⁻¹
Automatic clamping	HSK-F80	HSK-E32
Cooling system	Water	
Tool changer capacity	Up to 20	
Type of tools	Lapping disks, grinding wheels, mill, drill, ...	
Double belt system		
Type of band	50 x 1500 mm	
Option	50 x 3000 mm	
Working angle	0° - 90°: manually adjustable	
Working speed	0 - 19 m/s	
Type of tools	A) Flat or shape plate in hard metal B) Rollers Ø10-49 mm (bigger on demand)	
Axes		
Number of (simultaneous) axes	6 (5)	
X-axis travel	565 mm	
YM-axis travel	360 mm (spindle)	
YB-axis travel	350 mm (belts)	
Z-axis travel	280 mm	
B-axis travel	270° (dependent on the tool)	
C-axis travel	360° (spindle)	
X Y M Y B Z linear axes		
MAX speed of the axis	30 m/min	
Rotary axes B + C		
Type of drive	Torque motor	
Theoretical accuracy / repeatability	± 4 sec / ± 1 sec	
C axis speed	1'400 min ⁻¹	
Peripheral equipment		
Cutting fluid	Oil (without sulfur)	
Part loading (option)	Manual (robot)	
Digital control		
Type	CNC Fanuc 30iB	
Programming	ISO with macros assistance	
Installation		
Overall dimensions: Length x Width x Height	2.15 x 2.10 x 2.40 m (machine only)	
Weight	4'600 Kg	
Installed power	22 kVA	
Air pressure	6 bar	



OPTIONS

