

LAPPING

GRINDING

CNC LAPPING & GRINDING MACHINE FINISHING SINGLE PART WITH CONVEX GEOMETRY



MACHINE ADVANTAGES & SPECIF POINTS

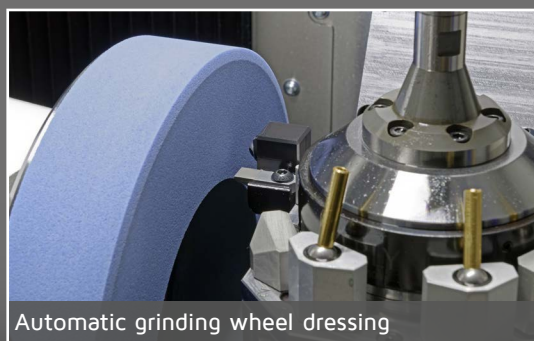
- Highly versatile machine on which grinding wheels or abrasive papers can be used
- 5-axis kinematics - easy to program
- High rigidity allowing to machine hard material such as: Ceramic, sapphire, carbide, ...
- Powerful and dynamic axis motion to reduce cycle time
- High precision - latest generation Direct Drive Technology and Fanuc CNC
- Several automation options for loading
- Simple, user-friendly RECO interface - uniform design over the entire machine range



Machining zone



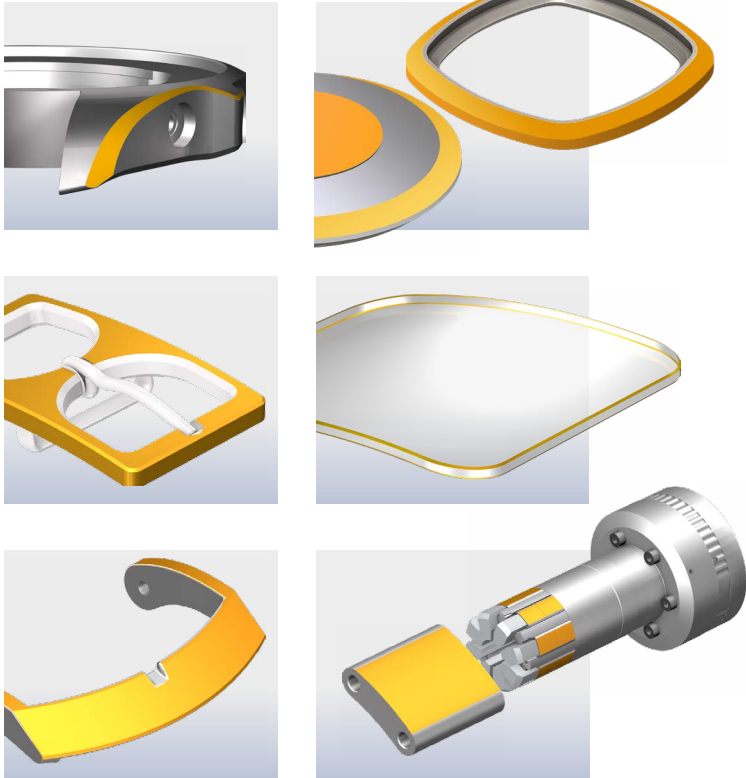
Quick tool change system



Automatic grinding wheel dressing

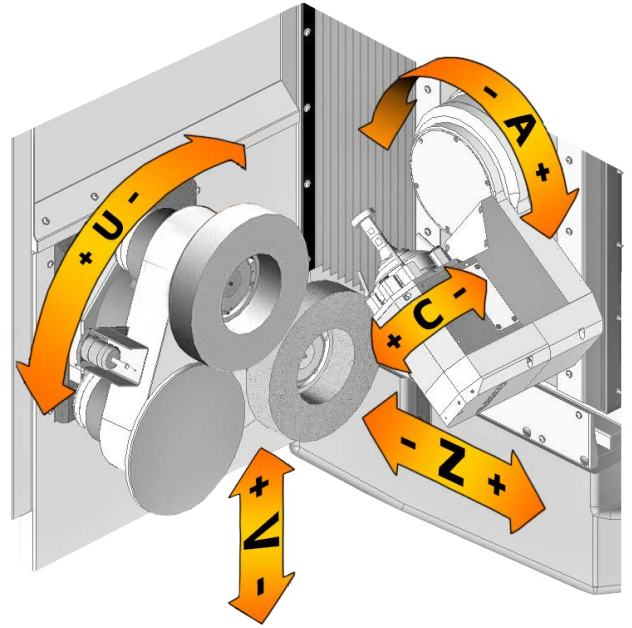


Technology Direct Drive on C-axis (spindle axis)



MAIN FUNCTIONS

- 5 digital axes, 4 of which are simultaneous
- Swivel tower fitted with 3 tool spindles, maximum speed up to 4'000 min⁻¹
- Quick tool change system
- Grinding wheel automatically dressed inside the machine
- Integrated coolant lifting pump and heat exchanger



TECHNICAL CHARACTERISTICS RECO-MR430

Parts		
Part Ø : MIN - MAX	Ø 20 - 80 mm	
3 tool spindles		
Ø MAX of grinding wheel	250 mm	
Clamping system	Recomatic	
Motor	Synchronous	
MAX speed S1	4'000 min ⁻¹	
MAX speed S2 + S3	2'500 min ⁻¹	
Power	2.2 kW	
Axes		
Number of (simultaneous) axes	5 (4)	
	Axes travel	Axes max speed
V linear axis	180 mm	20 m/min
Z linear axis	155 mm	30 m/min
U rotating axis	360°	41 min ⁻¹
A rotating axis	231° (+136°/-95°)	27 min ⁻¹
C rotating axis	360°	1'400 min ⁻¹
Peripheral equipment		
Cutting fluid	Oil	
Part loading	Manual (Basic)	
Automatic loader (option)	RECO-CP430 loader and robotic cell	
Digital control		
Type	CNC Fanuc Oi MF	
Programming	HMI Recomatic	
Installation		
Dimensions : Length x Width x Height	1.57 x 1.56 x 2.19 m (machine only)	
Weight	~2'800 Kg	
Installed power	21 kVA	
Air pressure	6 bar	

OPTIONS

- System for rapid part tooling changes (Yerly, Mecatool)
- Renishaw measurement system
- Automatic loader, with either RECO-CP430 or with robotic cell
- Electrostatic or mechanical air purifiers
- Cutting fluid filtration system

SPACE REQUIREMENTS

-Machine only

-With RECO-CP430 loader

