

IBARMIA.

TURNING CENTERS

IN PORTAL STRUCTURE

FOR LARGE CIRCULAR PIECES

Turning centers with one or two heads over a central rotary table which allow to cover any range of work from the center of the table to a maximum diameter $\varnothing 8500$ mm.



C SERIES



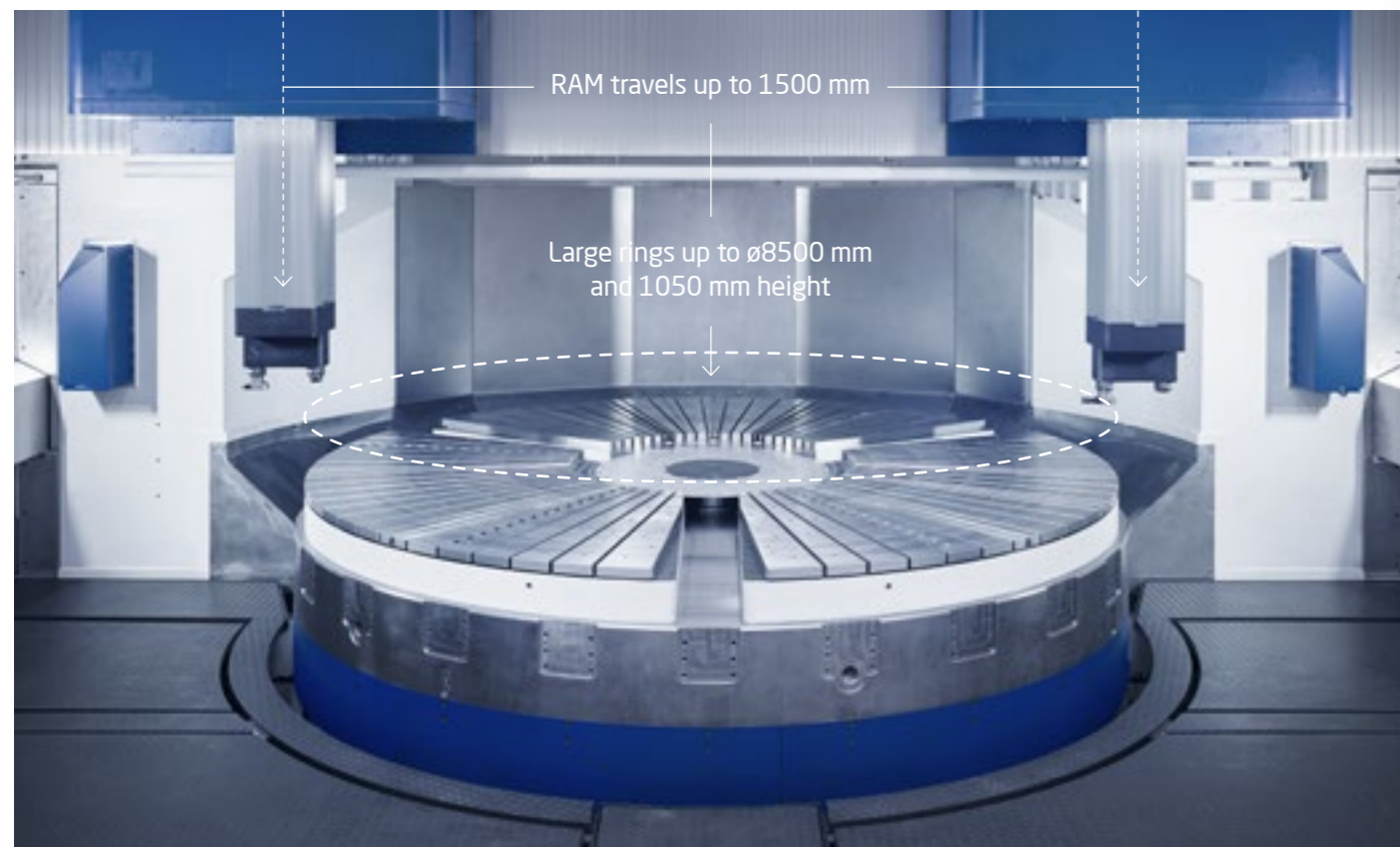
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TURNING CENTERS

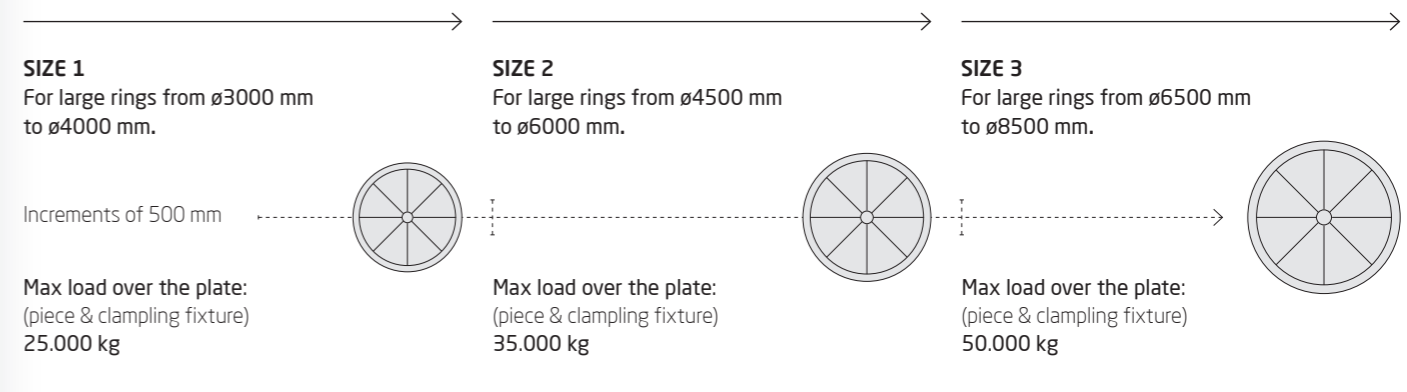


THE NEW RANGE OF TURNING CENTERS

The new range of IBARMIA turning centers can be configured to accommodate all the processes required in the complete machining of large circular pieces: turning, milling, drilling, threading, boring and grinding. The finishing operations in this type of pieces are critical, reducing the number of set-ups avoiding errors is vital. The new IBARMIA turning centers have been designed to respond to these real market needs.



TURNING CENTERS_ MAIN SPINDLE



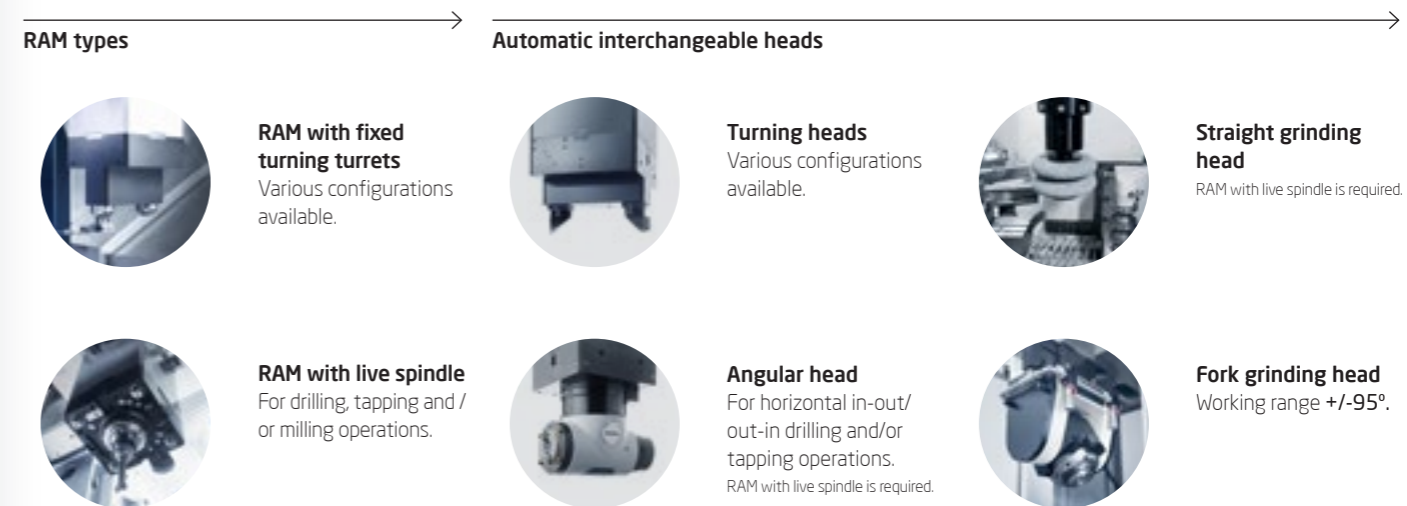
Transmission by a very powerful double motor moving two gears which are preloaded electronically. In the turning / milling option, the measurement is realized by a hollow encoder mounted directly without any transmission.

- Drive system: Double motor.
- Transmission: 2 gears & crown.
- Up to 60 rpm.

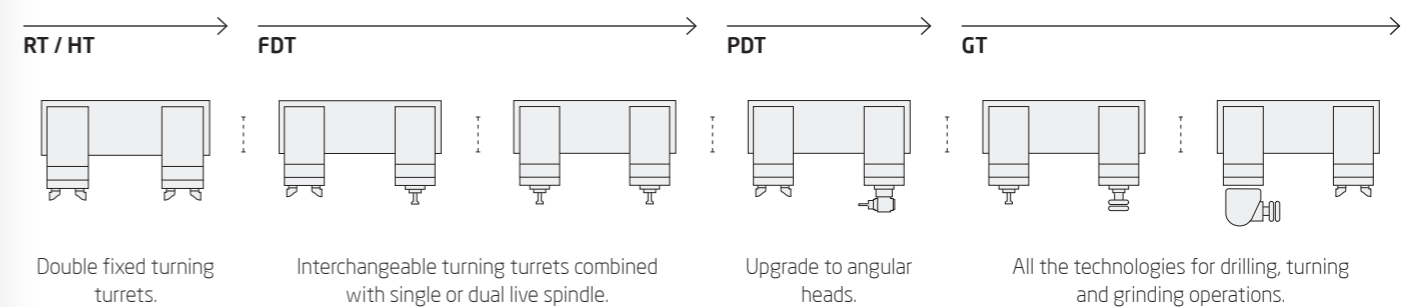


Very high load capacity and properly speed thanks to the radial load bearing and hydrostatic system in the guiding of the upper turning plate.

TURNING CENTERS_ SPINDLE HEADS



TURNING CENTERS_ CONFIGURATION EXAMPLES





TURNING CENTERS_ CONSTRUCTION FEATURES



Main spindle_ The guiding of the upper plate during the rotation is realized by a radial load bearing and hydrostatic system.



Cross-beam_ The high rigidity fixed cross-beam is made of casting GG-30 for hydrodynamic guiding system or in steel-welded for hydrostatic guiding system as option.

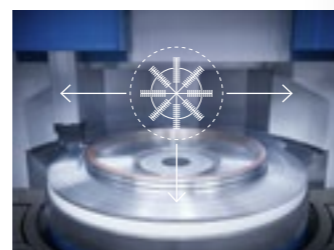
CL Structure_

The portal structure of the machine include a fixed cross-beam an a double saddle with headstocks which houses the RAM. The rigid cross-beam ties the columns to form a closed system & single unit to ensure rigidity. Transversal movement of the saddle (X) is realized through hydrodynamic guiding system (option hydrostatic) and a ball screw by belt/rack-pinion transmission.

Columns, saddles and headstocks are made in normalized cast iron GG-30 and stabilized in furnace. Those elements are very rigid to absorb loads and efforts; computer-using calculation of finite elemens designs them. In option, the columns will be produced in samen material as cross-beam.



RAM_ Made in forged steel to optimize the balance between rigidity, damping capacity and dynamic behavior. Sections available: 320 x 320 / 400 x 400 mm. Travels up to 1500 mm.



Measuring systems_ Direct measuring in axis X by linear scales. Direct measuring system in Z axis by encoder (linear scale as option).

TURNING CENTERS_ STANDARD CHARACTERISTICS



Cast iron made turning plate with radial T-slots (clamping fixtures not included in the standard configuration).



Totally encapsulated working area and safety windows.



- Working area lightning with lamps inside the working area and led under crossbeam.
- Watter and air guns.



Chip Conveyor with integrated coolant tank. The chip extraction is realized by paddle turning around the rotary table.



- Climatised electrical cabinet.
- Automatic programable central lubrication system.



Fix and rotating control panel in the left side for an optimum interaction with the operator. 19" touch screen.

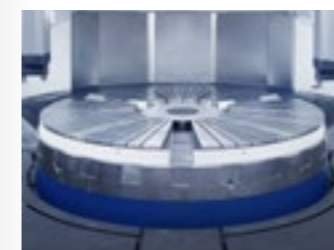


Different tool magazines available depending on the machine configuration.



External coolant system and coolant through spindle up to 70 bar.

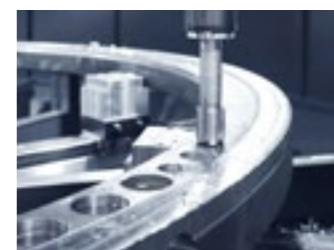
TURNING CENTERS_ MAIN CONFIGURATION OPTIONS



Three clamping system available: 1: Manual clamping fixture; 2: automatic & hydraulic sefl centering clamping fixture; 3: magnetic clamping fixture (in the picture).



Floor opening system that is kept open while the machine is operating, to facilitate the chip evacuation and reduce cleaning times.



Depending on the configuration:
 • V-H Drilling capacity.
 • M Tapping capacity.



Depending on the rotary table characteristics:
 • Milling capacity.



Depending on the configuration:
 • Grinding capacity.



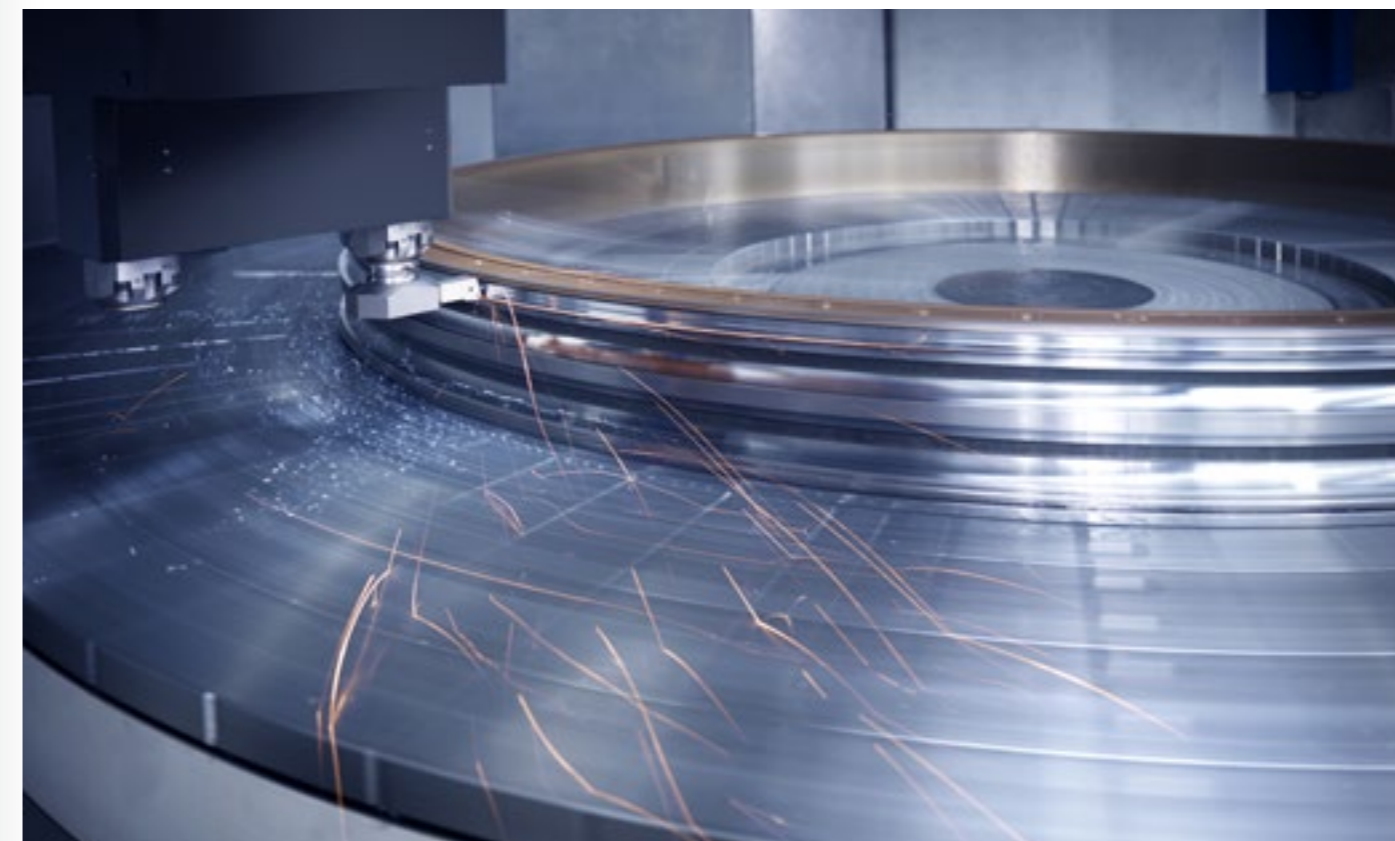
Different steam and mist aspiration systems on demand.



Different tool measuring, spindle control and piece inspection systems integrated in the machine.



- Surveillance cameras within the working area controlled from the dashboard console.
- Full stainless steel lined working area, including protection bellows.



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YOUR MACHINE TOOL POINT

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