



Scan the QR code to see the machine working



OMEGA

SUITABLE FOR SLIDING-HEAD CNC LATHES WITH SPINDLE CAPACITY FROM 12 mm TO 32 mm, FOR MACHINING BARS FROM Ø3 mm TO Ø32 mm*.

OMEGA FEATURES A QUICK COUPLING/DECOUPLING SYSTEM FOR FAST REPLACEMENT OF THE BAR GUIDE CHANNELS.

IT IS EQUIPPED WITH A PLC-CONTROLLED SELF-CENTERING FRONT SUPPORT, AUTOMATICALLY ADJUSTED TO THE BAR DIAMETER, MAINTAINING DECIMAL TOLERANCE TO ENSURE HIGH STABILITY AND MAXIMUM PERFORMANCE AT HIGH OPERATING SPEEDS. SUITABLE FOR SLIDING-HEAD CNC LATHES IN ALL CONFIGURATIONS, WITH OR WITHOUT GUIDE BUSHING.

AVAILABLE IN STANDARD SINGLE-LEVEL BAR LOADING VERSION, WITH INTEGRATED 3-METER STEP-BY-STEP SYSTEM

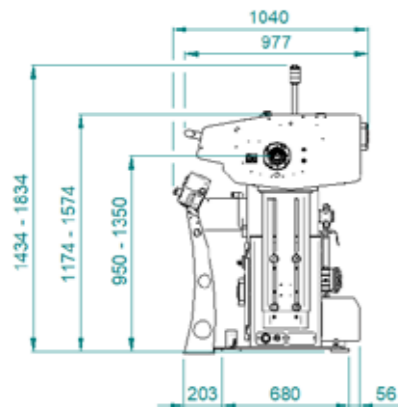
*Minimum and maximum values depends on the lathe model.



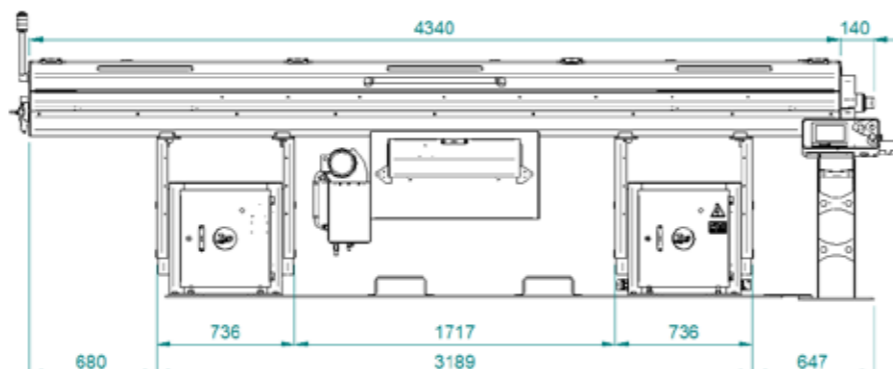
LENGHT	VERSIONE
3 meters	Dx - Sx



BAR FEEDER LAYOUT



OMEGA 3 mt SINGLE LEVEL MAGAZINE



TECHNICAL DATA

	OMEGA
Ø ROUND BARS	3 mm - 38 mm / 0.12" - 1.49"
⊠ HEXAGONAL BARS	3 mm - 32 mm / 0.12" - 1.29"
□ SQUARE BARS	3 mm - 27 mm / 0.12" - 1.06"
↔ BAR LENGTH	1200 mm - 3200 mm / 47.24" - 125.98"
⌚ MAX FEED SPEED	100 m/min / 328,08'/min
↔ MAX REMNANT LENGTH	400 mm / 15,74"
⊕ AIR PRESSURE REQUIRED	6.5 - 7.5 bar

7" GRAPHIC TOUCH-SCREEN PLC WITH INTEGRATED REMOTE CONNECTION

The graphic touch-screen PLC with Codesys3 programming protocol ensures instantaneous page changes in the graphic interface, developed and patented by Top Automazioni.

The interface allows real-time management of: axis position data, loader-lathe signals, proximity status, sensors, pneumatic valves and actuators, as well as work phase and piece counting. The 7" color touch screen offers intuitive control of the loader's functions and parameters. The system includes advanced diagnostics and alarm management, also available remotely.



OPENABLE COVER SECTIONS FOR PUSHER PASSAGE

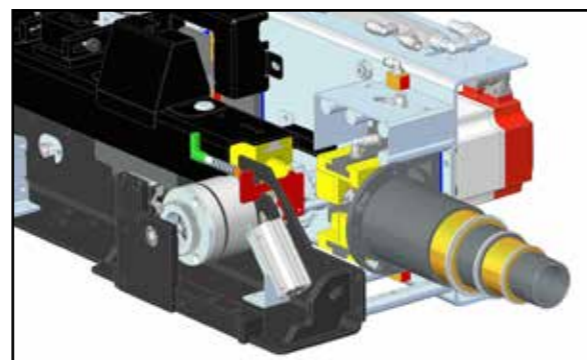
OMEGA is equipped with an innovative system for machining small-diameter bars ($\varnothing 3$, $\varnothing 4$, $\varnothing 5$, $\varnothing 6$ mm), which independently manages the opening of the cover sections.

These sections open only after the bar pusher has passed, ensuring a fully closed semi-circular chamber, completely immersed in oil throughout the entire bar rotation.



BAR MEASUREMENT SYSTEM WITH MECHANICAL PROBE

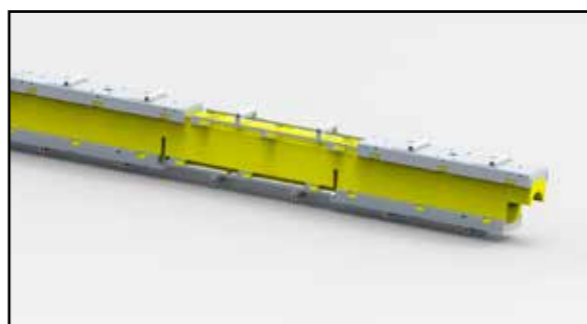
The OMEGA mechanical measuring device (flap) accurately detects the bar length and ensures high reliability under all operating conditions, including: presence of oil on the bar or in the reading area; different bar sections or materials; variations in light or reflectance in the reading area.



QUICK-CHANGE GUIDE CHANNEL SYSTEM

OMEGA is equipped with a quick coupling/decoupling guide channel change system, significantly reducing setup times when guide channel replacement is required.

Available guide channels for this model: $\varnothing 12$, $\varnothing 15$, $\varnothing 18$, $\varnothing 20$, $\varnothing 22$, $\varnothing 23$, $\varnothing 25$, $\varnothing 28$, $\varnothing 30$, $\varnothing 32$, $\varnothing 34$, $\varnothing 35$, $\varnothing 37$, $\varnothing 38$.



TOP® PATENTS: CENTERING DEVICE AND 5/6-STAGE TELESCOPIC SYSTEM

OMEGA can be equipped with the following innovative solutions patented by Top Automazioni:

Self-centering mobile centering device: with 6 rollers, mounted integrally at the rear of the sliding headstock carriage. It replicates the carriage movements to support the bar up to the spindle entrance, reducing vibrations and improving surface finish and cycle times.

Compact telescopic system: available in 5 or 6-stage versions, installed between the bar feeder front plate and the rear of the lathe spindle. It extends and retracts following the sliding headstock movements, protecting the rotating bar and supporting the pusher. Both versions measure 130 mm when retracted, with a stroke of 315 mm (5 stages) or 425 mm (6 stages).



RETRACTABLE SCRAP DISCHARGE BOX AND CONTINUOUS GUIDE CHANNEL

OMEGA integrates an ergonomic and functional retractable bar end discharge drawer, which disappears into the bodywork during operation. The drawer has a usable volume of 40 cm³ and a maximum load capacity of 120 kg, and can be manually opened from the front for easy removal of unprocessed bar ends.

The OMEGA guide channel is made of oil-bath polyurethane and is completely continuous, even in the scrap discharge area, where a pneumatically operated tilting guide system allows bar ends up to 400 mm to be discharged smoothly and safely.



SINGLE-LEVEL MAGAZINE

OMEGA features a single-level magazine that can be used in two modes:

- Inclined loading tray:** capacity of 315 mm + 1 bar of the set diameter, ideal for bars from $\varnothing 5$ to $\varnothing 38$ mm.
- Step-by-step system** (22 positions) for safely machining bars from $\varnothing 3$ to $\varnothing 6$ mm.

Switching between the inclined tray and the step-by-step configuration requires manual adjustment of the bar supports to the high or low position and tightening of the locking screws. This simple and quick operation can be completed in approximately 2 minutes.

