



Scan the QR code to see the machine working

SUITABLE FOR SLIDING-HEAD CNC LATHES WITH SPINDLE CAPACITY FROM 12 mm TO 38 mm FOR MACHINING BARS FROM 5 mm TO 38 mm IN DIAMETER*.

SELF-CENTERING SUPPORTS, BAR GUIDE ADJUSTABLE VIA PLC WITH DECIMAL PRECISION. ON THE DIAMETER, THEY ARE DISTRIBUTED EVERY 300 MM INSIDE THE BARFEEDER GUIDE CHANNEL.

SUITABLE FOR SLIDING HEAD CNC LATHES IN ALL CONFIGURATIONS, BUSHING/NON-BUSHING.

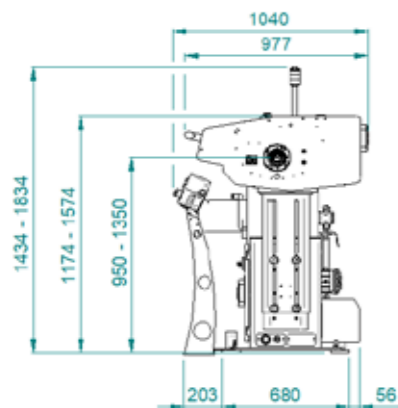
AVAILABLE IN STANDARD VERSION, SINGLE-LEVEL BAR LOADING WITH INTEGRATED 3-METER STEP-BY-STEP SYSTEM.



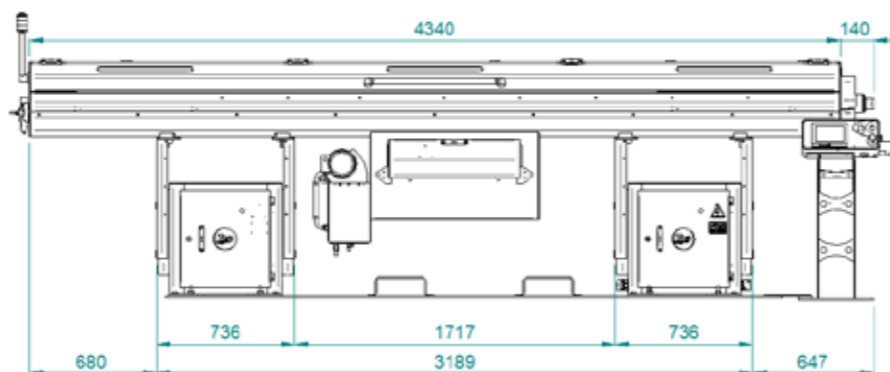
*The minimum and maximum values are set according to the lathe model.

LENGHT	VERSIONE
3 meters	Dx - Sx

BAR FEEDER LAYOUT



INFINITY PRO 3 mt SINGLE LEVEL MAGAZINE



TECHNICAL DATA

	INFINITY PRO
∅ ROUND BARS	5 mm - 38 mm / 0.15" - 1.49"
∅ HEXAGONAL BARS	5 mm - 32 mm / 0.19" - 1.29"
∅ SQUARE BARS	5 mm - 27 mm / 0.19" - 1.06"
↔ BAR LENGTH	1200 mm - 3200 mm / 47.24" - 125.98"
⌚ MAX FEED SPEED	>100m/min / 328.08'/min
↔ MAX REMNANT LENGTH	400 mm / 15.74"
🌀 AIR PRESSURE REQUIRED	6.5 - 7.5 bar

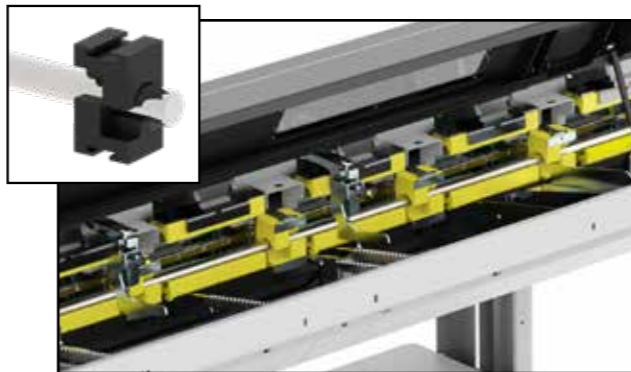
7" GRAPHIC TOUCH-SCREEN PLC WITH INTEGRATED REMOTE CONNECTION

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 the 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, even remotely.



CHANNEL WITH ADJUSTABLE BUSHINGS mm X mm

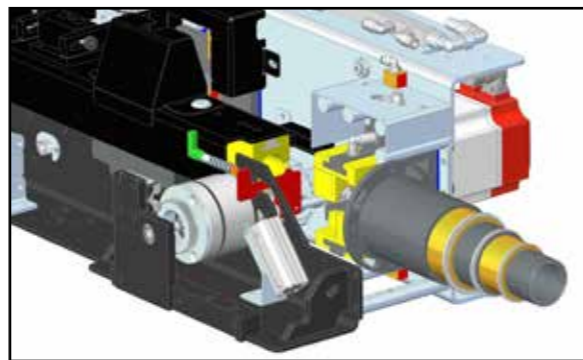
INFINITY PRO is equipped with five fully adjustable Vulkollan bushings, (mm x mm) managed by the PLC and equidistant from each other. This configuration ensures maximum bar stability and vibration-free machining.



BAR MEASUREMENT SYSTEM WITH MECHANICAL PROBE

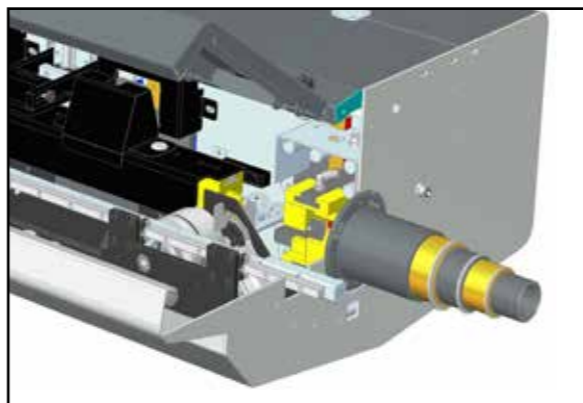
The INFINITY PRO mechanical measurement device (flap) accurately detects the bar length and ensures high reliability in all operating conditions, including:

- presence of oil on the bar or in the reading area;
- different bar section or material;
- variations in light or reflectance in the reading area.



SLIDING HEADSTOCK SYNCHRONIZATION

INFINITY PRO synchronizes the movements of the lathe spindle with the bar feeder axis (pusher) using a mechanical arm connected to the sliding headstock carriage. The PLC controls the engagement and disengagement of the bar feeder axis from the spindle movements, activating or deactivating a pneumatic toothed clutch in a fraction of a second, ensuring precise synchronization.



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

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

- **Self-centering mobile centering device:** Featuring 6 rollers, it is mounted integrally at the rear of the sliding headstock carriage. It replicates the carriage's movements to support the bar all the way to the spindle entrance, reducing vibrations and improving both part finish and cycle times.
- **Compact telescopic system:** Available in 5 or 6-stage versions, it is installed between the front plate of the bar feeder and the rear of the lathe spindle. The system extends and retracts in sync with the sliding headstock's movements, protecting the rotating bar and supporting the pusher. Both 5-stage and 6-stage versions measure 130 mm when retracted, with strokes of 315 mm (5 stages) and 425 mm (6 stages).



RETRACTABLE SCRAP DISCHARGE BOX AND CONTINUOUS GUIDE CHANNEL

INFINITY PRO features 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 guide channel of INFINITY PRO is made of oil-bath polyurethane and is uninterrupted, even in the bar end discharge area. Here, a pneumatically operated tilting guide system allows for the discharge of bar ends up to 400 mm, gently guiding them as they fall.



SINGLE-LEVEL MAGAZINE

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

1. **Inclined loading tray:** With a capacity of 315 mm + 1 bar of the set diameter, ideal for bars ranging from Ø6 to Ø38 mm.
2. **Ratchet:** A 22-position setup for safely working with bars from Ø4 to Ø6 mm.

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

