

# CENTERLESS GRINDING



Cold-drawn and cold-rolled tubes require grinding of the outer surface to remove surface defects and to achieve a high surface quality. The tube is inserted into an infeed conveyor with driven radial rollers, which imparts rotation to the tube and moves the tube into the grinding machine. The tube passes along a series of up to 14 grinding stations equipped with grinding belts. Each grinding station is equipped with its own pressure which can be adjusted by the operator. Grinding can be carried out wet or dry. Wet grinding grinds the material with a constant supply of coolant. The ground material is rinsed into the tub and conveyed out of the tub by a worm shaft. The water with the abraded material is filtered in three stages. Magnetic filter, fabric filter, and mechanical separator. The solid residues are stored in an attached pallet and the filtered water is reused for grinding.

When dry, the grinding stations are equipped with suction with a filter station. Furthermore, the grinding stations are located in a dust-tight cabin.

At the outlet of the grinding station, the tube exits into an exit conveyor and radial rollers. This is followed by tipping the pipe onto the downstream technology.

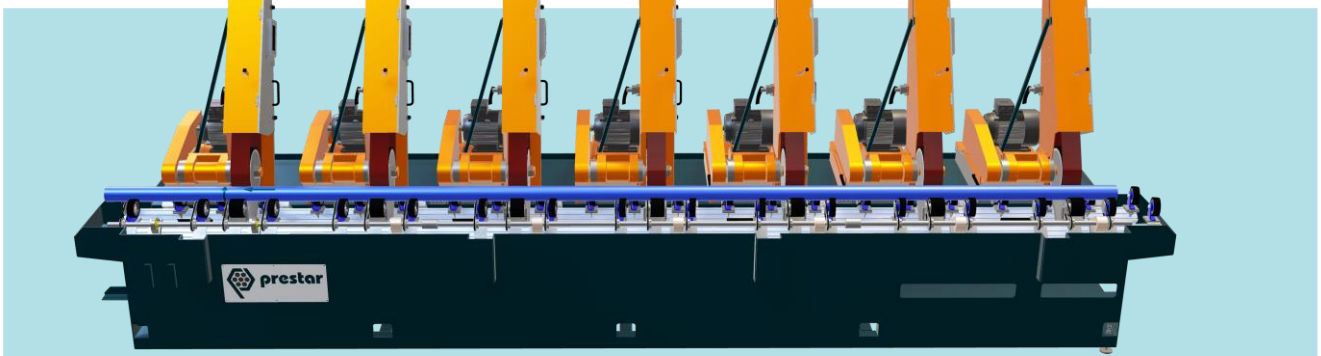


## Technical parameters of the machine:

Tube diameter:	6 – 90 mm
Tube length:	1,5 – 40 m
Surface quality after grinding:	Up to Ra 0,4
Grinding belts:	150 x 3 000 mm or according to the user's range of belts
Grinding method:	Wet or dry
Grinding belt pressure:	Pneumatic
Napínání brusných pásů:	Pneumatic
Grinding belt speed:	30 m/s
Pipe axial feed speed:	2 – 40 m/min with infinitely variable control
Sanding belt change:	Easy access to sanding belts



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## Other equipment of the machine

- Continuously adjustable belt grinding speed.
- The grinder is equipped with a magnetic separator and a fabric filter for wet grinding.
- For dry grinding, the grinder is equipped with extraction and filter stations.
- Transport and handling technology in front of and behind the grinder
- The grinder can be equipped with continuous monitoring of the material removal from the pipe surface to measure material removal
- For tube profile measurement, the grinder can be equipped with continuous ovality measurement
- The grinder can be equipped with a non-contact length measurement to measure the length of the processed tubes.
- Enhanced visualization with emphasis on the intuitive and detailed display of operating conditions and the location of the grinding machine fault.
- Enhanced service with the ability to display manuals, service guides, and other necessary documentation on the machine's HMI to minimize service times.
- Collection of agreed production parameters with automatic storage, display, and export of data

