Portal Wheel Lathe PN 190





The PN 190 portal wheel lathe represents a pioneering design in the field of wheel-set maintenance. Its combination of the portal frame with the friction roller drive opens up new dimensions in the technology of wheel-set turning in terms of productivity and machining quality.

The portal design is the ideal way of creating sufficient clearance for loading (wheel-set roll-through) and operating the machine. This yields high productivity and economy. In addition, thanks to this design principle, the tool posts are positioned overhead, thus permitting unobstructed swarf removal.

Owing to its design advantages, the friction roller drive ensures a two- to three-fold improvement in rotational accuracy and lateral wobble over conventional machines with clamping. Clamping marks are eliminated. Machining with mounted axle boxes is possible irrespective of their size.

Economy

- High degree of automation
- Rapid loading and unloading
- High productivity thanks to an optimized cutting process
- Quick change tooling
- Heavy-duty drive systems
- Long service life

Equipment make-up

- High performance machine capable of medium and heavy depth of cuts
- Portal type bed allowing roll-through of wheel sets
- Equipment installation on shop floor level
- Fully automatic machine control system

Machine Specifications PN 190	
Machine dimensions	
Machine Footprint (L x W x H)	6.2 m x 3.5 m x 3.7 m
Pit Dimensions (L x W x H)	8 m x 5.0 m x 2.0 m
Machine Weight	38000 kg
General Specification	
Maximum Diameter Difference between Wheels of a Wheel Set*	≤ 0.1 mm
Maximum Radial Runout on Wheel Set*	≤ 0.1 mm
Maximum Chip Cross Section	18 mm²
Optional Equipment	 Machining of Brake Disks Machining of Wheel Rim Face Reference Groove Re-cutting C-Dimension measuring Smoke Extraction System Data Acquisition System
Utility Requirements	
Rated Power	190 KVA
Wheel Set Dimensions	
Maximum Wheel Tread Diameter*	1400 mm
Minimum Wheel Tread Diameter*	500 mm

^{*} Pending engineering review





