

SOLID WHEEL AND WHEEL DISK ROLLING MACHINE

Type DRAW



BENEFITS AT A GLANCE

- Laser measuring device for contact-free determination of the wheel diameter.
- Process control with automatic generation of all process parameters.
- Rigid machine structure for closest tolerances.
- Increased availability and productivity due to quick tool changes.
- Technology for the efficient production of railroad wheels.

CUSTOMER-SPECIFIC SOLUTIONS

for outstanding service

SMS group Ring and Wheel Rolling division is highly specialised in machines and lines for the efficient production of railroad wheels. About 20 wheel rolling machines were supplied all around the world. Over the years, our market share developed to about 2/3 of all installations of this kind. Concentrated in SMS group's Ring and Wheel Rolling division is the machine-building expertise and the technology know-how of three world brand names for wheel rolling machines and lines: Wagner, Banning and Schloemann.

As the global market leader, we consider it both a duty and a challenge to contribute to our customer's success by providing comprehensive know-how, advanced technology and outstanding service – now and in future.

MAIN TECHNICAL DATA

Data of the rolled wheel (hot dimensions)

Rim diameter	700 – 1,450 mm
Rim width	80 – 200 mm

Rolling data

Force of pressure roller, max.	1,800 kN
Force of web rolls, each max.	1,800 kN
Drive power of web rolls, each	550 kW
Force of conical lateral rolls, each max.	800 kN
Rolling speed of web rolls, max.	2.4 m/s
nominal	0.4 – 1.6 m/s

Tool data

Web rolls, nominal diameter, max.	400 mm
Pressure roller, nominal diameter	1,400 mm
max. diameter	1,500 mm
max. height	240 mm



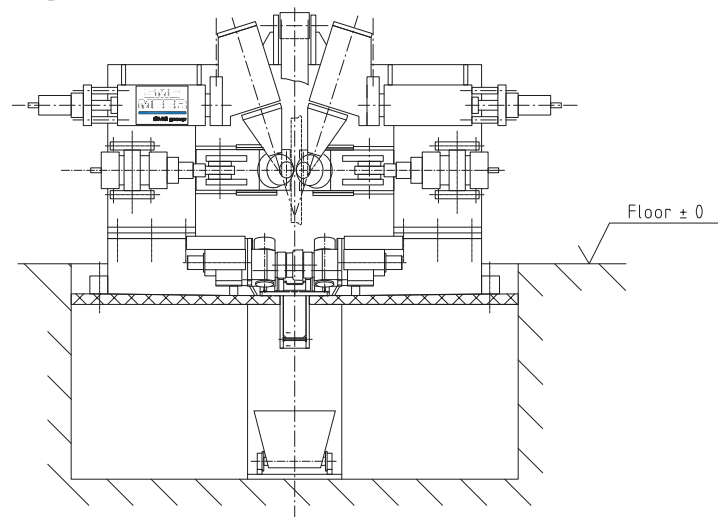


MAIN FEATURES

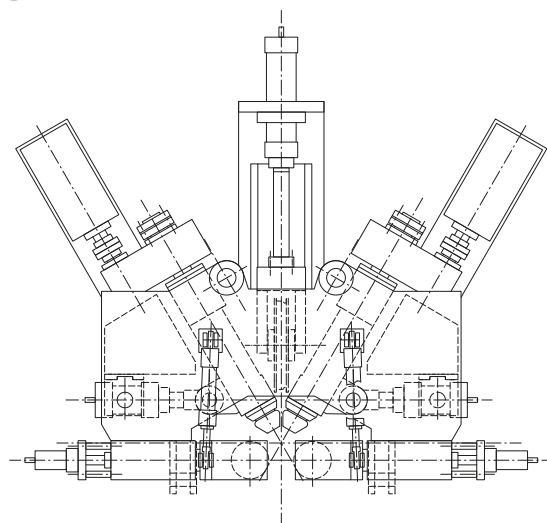
- Advancement based on proven machine designs
- Rigid machine structure, points of force application as near as possible to the forming zones
- All tools supported in antifriction bearings
- Individual drive for each web roll with frequency controlled AC-drives
- All feed axes of the tools are not coupled mechanically and the adjustment is co-ordinated by the machine control, displacement measurement via absolute digital displacement measuring systems integrated in the corresponding hydraulic cylinders
- The process control co-ordinates 15 machine axes:
 - Pressure roller: (1 x)
 - Web rolls: Adjustment (2 x) and tool displacement (2 x)
 - Lateral rolls: Start rolling position (2 x), adjustment (2 x) and swivelling (2 x)
 - Centering rolls (2 x)
 - Guide rolls (2 x)
- Laser measuring device for contact-free determination of the wheel diameter
- Process control with automatic generation of all process parameters depending on the set product data
- All tool settings at the control desk, no setting at the machine
- Lateral rolls guided to wheel center in an optimum way
- Tools arranged in cassettes for quicker tool change
- Auxiliary device to facilitate handling of the web rolls during tool change

Our proprietary technology software ROLLTECH WHEELS ensures successful and efficient wheel production with new or even upgraded equipment!

FRONT VIEW



TOP VIEW



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Ring and Wheel Rolling

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