

Seven-Roll Bar Straightening Machine

This vertical straightening machine utilizes multiple skew rolls, typically seven, to correct bends in metal bars. It includes a straightening mechanism and feeder system, along with electric control, hydraulic, pneumatic, and lubrication components.



Product Overview

High-Precision Seven-Roll Straightening

The SMV7 series utilizes an optimized complex rolling system that integrates the advantages of two-roll and traditional multiple skew roll straighteners to achieve superior precision. Equipped with a flexible load-controllable frame and Siemens-based full-digital drive systems, this machine provides constant torque and power for high-efficiency operation. Integrated PLC automation with PROFIBUS-DP connectivity allows for comprehensive process control, from feeding to unloading, ensuring consistent quality and mechanical protection.

Key Features

Technology & Controls

- Optimized quasi-double curve and deep/shallow concave rolling system
- Flexible, load-controllable double-roll pressing principle
- SIMENS full-digital DC/AC transmission with stepless speed control
- Self-adaptive (AGC) control for balanced speed and torque
- PLC system with PROFIBUS-DP field bus communications
- Hydraulic overload unloading with constant-pressure protection

Performance Specifications

Process Metrics

Bar Diameter (mm)	Speed (m/min)	Motor Power (kW)
6-20	10-60	30*2
12-60	10-75	75*2
20-80	10-75	90*2
30-100	10-75	132*2
50-150	10-60	230*2
80-200	10-60	480*2
130-250	10-45	520*2

Common Parameters

1100 N/mm²

Max Yield Strength

20 mm/m

Max Original Curvature

1 mm/m

Straightening Precision