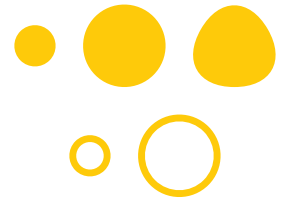


STEELMASTER SMS 100-SX Series

For Diameters/Dimensions up to approx. 80 mm (3.2 in.) (Static)

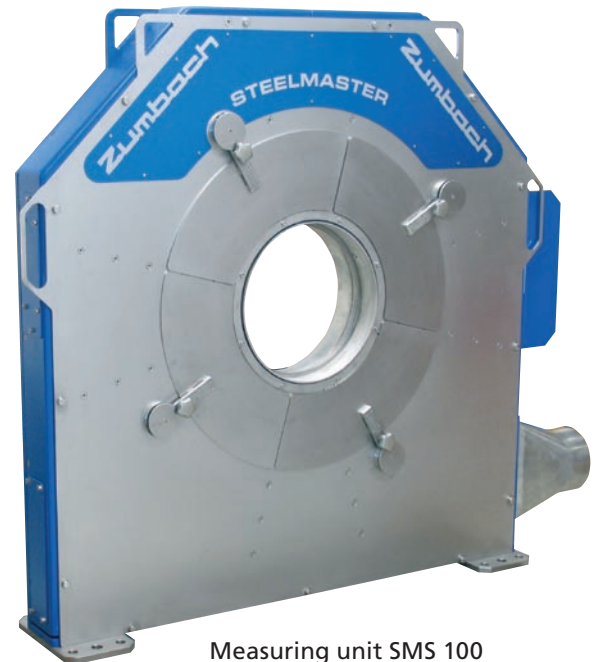


Fully Static Diameter Gauges for Hot Rolling of Rod, Bar, Tube

Latest technology for top accuracy. Especially for round products.

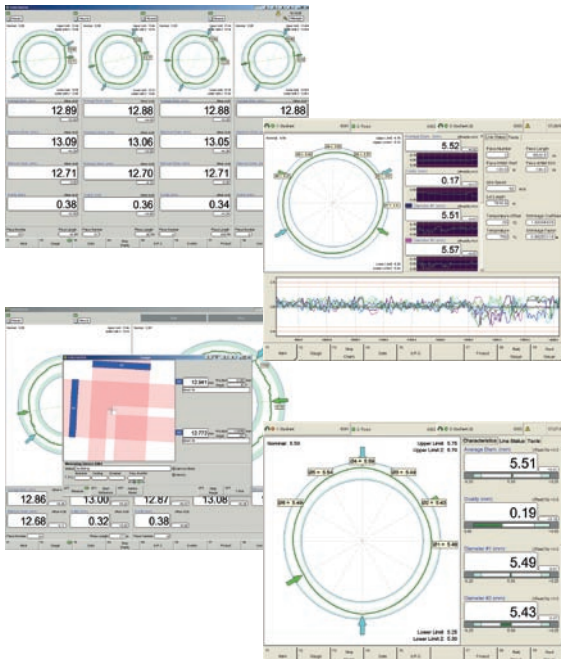
Standard Versions:

- **SMS 100-S2**
Basic model with 2 axes.
- **SMS 100-S4**
Model with 4 axes for intermediate or finishing.
- **SMS 100-S6**
High performance model with 6 axes. For rod and bar mills, also for 3-roll blocks.



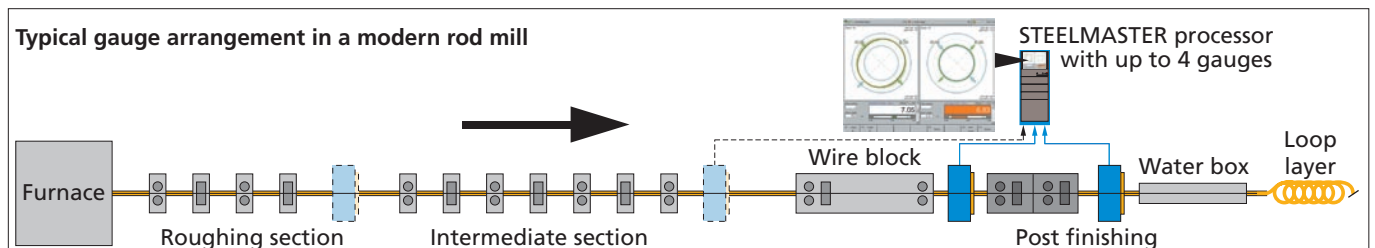
Measuring unit SMS 100

Typical Screens



Outstanding Advantages

- Up to 6000 measurements/s (1000/scanner)
- Extremely compact, only 125 mm (5 in.) thick
- No moving parts
- Automatic shutter
- Very reliable, thanks to unique protection design
- Up to 6 measuring heads in same plane i.e. ovality is known at all times and up to 6 diameters are captured simultaneously
- Large measuring field, uncritical guiding
- Extremely short distance between readings in axial direction
- Industrial PC, works without hard disk
- Fibre optics cable between measuring unit and processor
- No wear, minimum maintenance



Standard System

Measuring Unit

A robust, welded structure ensures protection of the laser heads against dust, scale, splashes and heat.

- Central automatic shutter
- Protection glasses with thermal coating
- Temperature control system
- Cooling for ODs up to approx. 30 mm (1.2 in.) by air only
- Air purging and cooling by blower GE 5

Up to 6 Measuring Heads ODAC 100

- 1 emitter / 1 receiver for each unit
- Principle: Laser scanning 1000/s
- Light source: Solid state laser, class II
- Fully synchronized scanning of all lasers

STEELMASTER Processing and Display System

- Industrial PC (operation without Hard Disk)
- Telephone modem
- High resolution 17" flat screen, keyboard
- 1 x RS-422 for giant displays, 1 for optional use
- ETHERNET TCP/IP
- UBS printer port

Filter / Blower Unit GE 5

Providing filtered air at high volume to purge the laser shutter and for cooling of the measuring unit (3 kW, 135 m³/h [4.7 cu.ft./h]).

STEELMASTER Software

- Pre-processing of the readings
- Suppression of ends
- Computation of diameters, ovality
- Min./Max. alarms
- Statistics, printed protocols
- Optional software
- 10 major languages, others on request
- Special software for polygonal shapes
- Section screens
- Trend screens
- Configurable screens
- Split screens (MULTIGAUGE)
- Configuration, calibration screens

Options

MULTIGAUGE Extension

For the connection of up to 4 gauges to the same processor.

Pyrometer

For conversion to cold values (20° C / 68° F).

Traversing System

For positioning or withdrawing of the measuring unit.

Remote Repeater Screens

For mounting and operation up to 150 m (490 ft.) away.

Remote Giant Display

2 or 3 groups of 5 digits for AVG. OVALITY, MIN or MAX.

Air Coolers or Heaters

For cooling and/or heating of blower air.

Additional Water Cooling

Attachment for products of a diameter exceeding approx. 30 mm (1.2 in.).

STEELDATABASE Software

For archiving and reviewing of measuring data.

STEELMASTER REMOTE Software

For communication with up to 10 PC workstations.

SPC Software

For SPC statistics, programmable.

POLYGON Software

Special FPS (Full Profile Synthesis) software for polygonal, hexagonal and special shapes and for out of round computation.

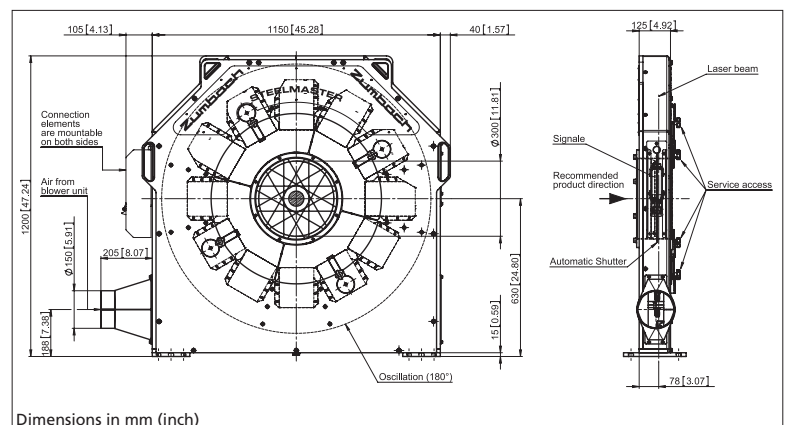
Main Data

Measuring field	100 mm (4 in.)
Product diameter*	4 up to approx. 80 mm (.16 up to approx. 3.2 in.)
Measuring rate	1000/s, each axis
Resolution	+/- 0.001 mm (.00004 in.)
Accuracy (Repeatability)	+/- 0.01 mm (.0004 in.)
Measuring interval	1 ms (screen update = min. 0.5 s)
Power consumption	Blower: 3 x 400 V~, 3 kW Measuring unit: Single phase, max. 2 kW

*Depends on guiding

► For larger dimensions see data of SMO 151 or SMO 310.

Dimensions



▪ Technical specifications are subject to change without notice

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