ROLLING INGOT DIMENSION MEASURING SYSTEMS FOR ALUMINIUM HOT ROLLING MILLS

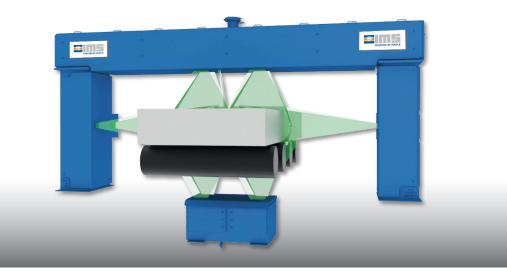


Rolling Ingot Dimension Measurement

Rolling ingots are usually produced in an ingot casting process, resulting in high-quality ingots with precise dimensions. Nevertheless, it is still necessary to prepare these ingots for the actual rolling process.

Measurement of the outer contour serves as a guide for the next production step. The so-called rolling skin of the ingot surfaces is removed by a peeling / milling process, and the head and side surfaces are trimmed to the final dimensions required by an edge cut.

After subsequent heating / homogenisation in deep and / or pusher furnaces, the rolling ingots are fed to the further rolling process.



Measurement Task

 rolling ingot measurement as specification / result for further production steps

Special Features

- adjustable design and software
- remote maintainability
- calculation of volume and weight

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Material Data

Typical thickness range:	400 up to 600 mm (but not limited to)
Width:	800 up to 2,700 mm (but not limited to)
Length:	up to 9 m (but not limited to)

Measuring System Data

Gauge type:	fixed mounted, non-traversable measuring point
Sensor type:	3D sensors consisting of line lasers and CMOS cameras

Measuring Dynamics

Sampling speed:

25 ms / scan

Measuring Accuracy

Width of material (2-Sigma):	+/- 1mm
Length of material (2-Sigma) speed sensor + two:	± 5 mm plus 0,05% of ingot length
Material thickness profile / contour (2-Sigma):	+/- 1mm