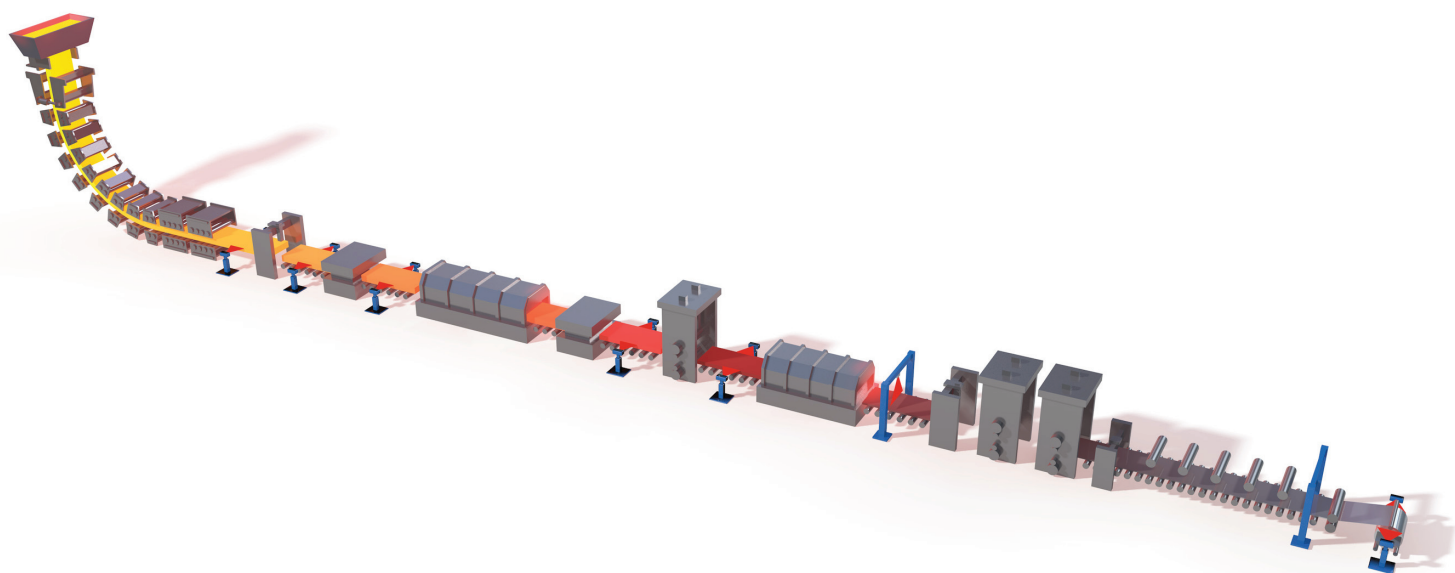
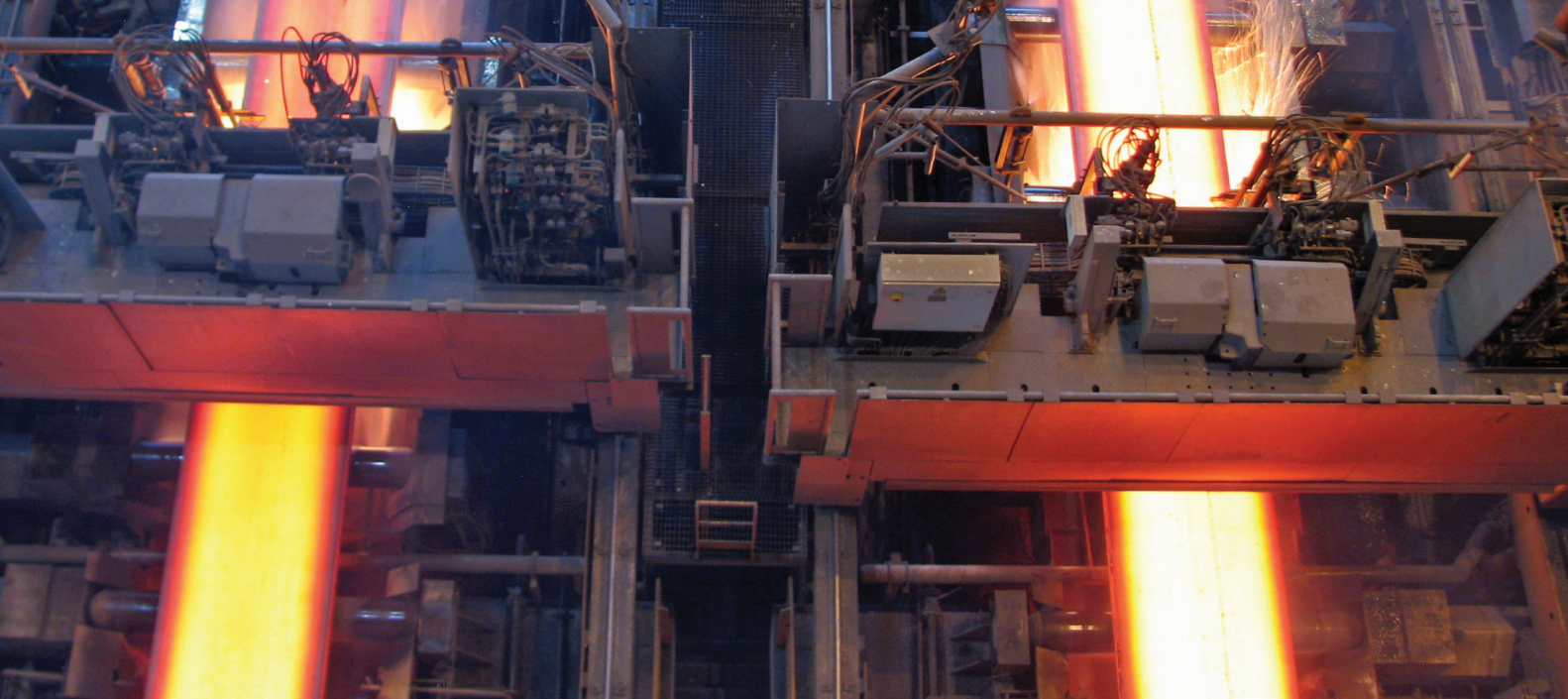


# SlabProfiler 3D™

## Slab measurement system



- *True 3D dimensional measurement of slabs*
- *Width, edge profile, length, camber, thickness*
- *Gives information about caster performance*
- *Improve edge scrap yield at hot strip mill*
- *Non contact – low maintenance*
- *World wide references*



## Design for harsh conditions

LIMAB has many years experience in manufacturing and supplying precision laser measuring systems for use in harsh environments found within steel plants. This knowledge is engineered into the SlabProfiler 3D™ to ensure high accuracy with very low maintenance. The system will be supplied with

a high performance air cooling system to ensure complete reliability of operation in the hot and dirty conditions that are normal for any continuous casting line. The system will meet customer mechanical and electrical requirements for a perfect integration into any steel mill.



## Design for accuracy

High precision 2D sensors are at the heart of the SlabProfiler 3D™, but to ensure an accurate system, the design details of all the supporting components and equipment need to be carefully considered. This is where LIMAB's experience counts by paying close attention to the overall design.

The SlabProfiler 3D™ uses our proven ProfiCura 2D sensors that measure both the width, edge profile and edge thickness.

# SlabProfiler 3D™

## Efficient In-Line control of slab dimensions.

Precision in measurements are critical for controlling production costs of continuous processes. To address this important consideration LIMAB has developed an advanced non-contact laser system to measure the slab shape.

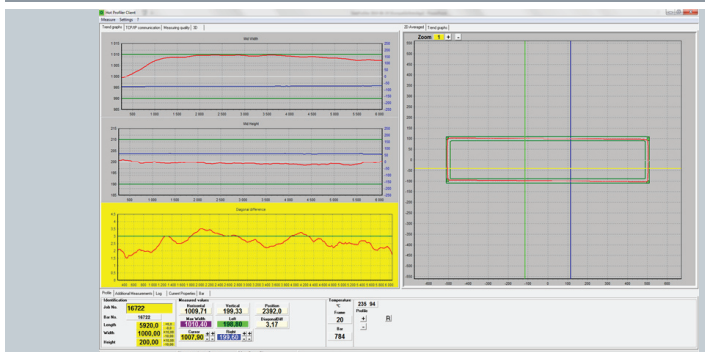
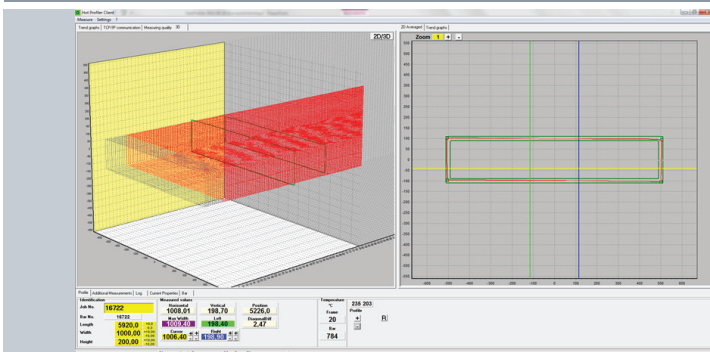
Laser distance and profile sensors measure width, edge profile, edge thickness, camber and a Doppler sensor measure the length. This information is used to calculate the slab weight.

The SlabProfiler 3D™ is a key measurement system with integrated software for real time control of slab data including data log which permits a historic data view of produced slabs.



## Key Benefits of SlabProfiler 3D™

- Reduction of waste due to non-conforming production.
- Quick recognition of out of shape and dimension of slab.
- Trend graphs showing production history.
- Immediate data of actual slab dimension to the rolling mill
- Avoid damage to HSM edge rollers
- Feedback to control adjustable mould
- Quickly identify concavity, edges and other side profile abnormalities.
- Easy integration with process control systems for communication with level 2.



## Measuring method

The SlabProfiler 3D™ is an in-line non contact measuring system providing high accuracy on either hot or cold materials. The system implements two ProfiCura 2D profile sensors, projecting the laser line at the slab edge in vertical axis, capturing a complete edge profile.

Additional sensors can be incorporated into the system if camber or length is required.

## Software key features

- Left and right edge profile graphs with shape tolerance bands
- Trend graphs of key dimensions over time
- Numeric left & right bulging display
- Numeric display of other key measurements
- Tolerance and alarm limits with on screen warnings
- Data logging for quality control
- System configuration and set-up
- Calibration
- Communication with level 2 system
- Remote service and supervision

# Technical specifications

## SlabProfiler 3D™

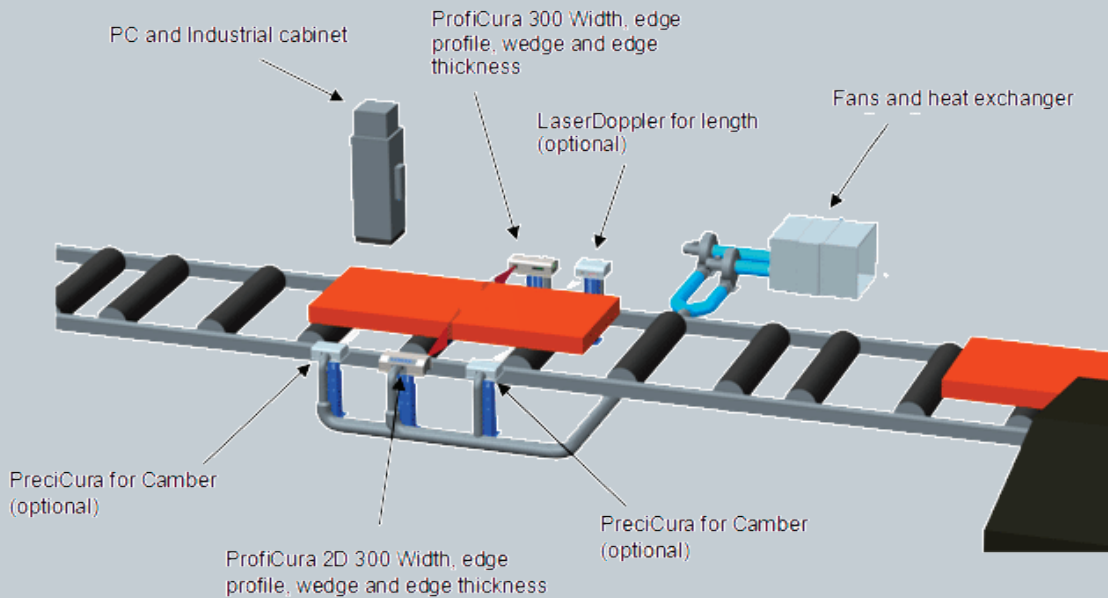
### Measurement object

Hot/Cold slabs, heavy plates

Length	2000 to 18000mm (typical)
Width	600 to 2200mm (typical)
Thickness	40 to 320mm (typical)
Temperature	0 to 1200°C
Profile rate	4ms

### Laser sensors

Width, edge profile and thickness	ProfiCura 180 or 300 (2D sensor)
Length	Doppler sensor
Camber	PreciCura MR or LR
Protection class	IP65



We reserve the right to introduce modifications without prior notice



LIMAB was founded 35 years ago and has a long tradition of producing laser sensors and complete non contact measuring systems to meet the needs of industry. The headquarters and manufacturing plant is located in Gothenburg, Sweden. LIMAB has regional offices in the USA, UK, Germany and Finland with distributors in other areas. LIMAB has over 30 years of experience in steel installations.



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