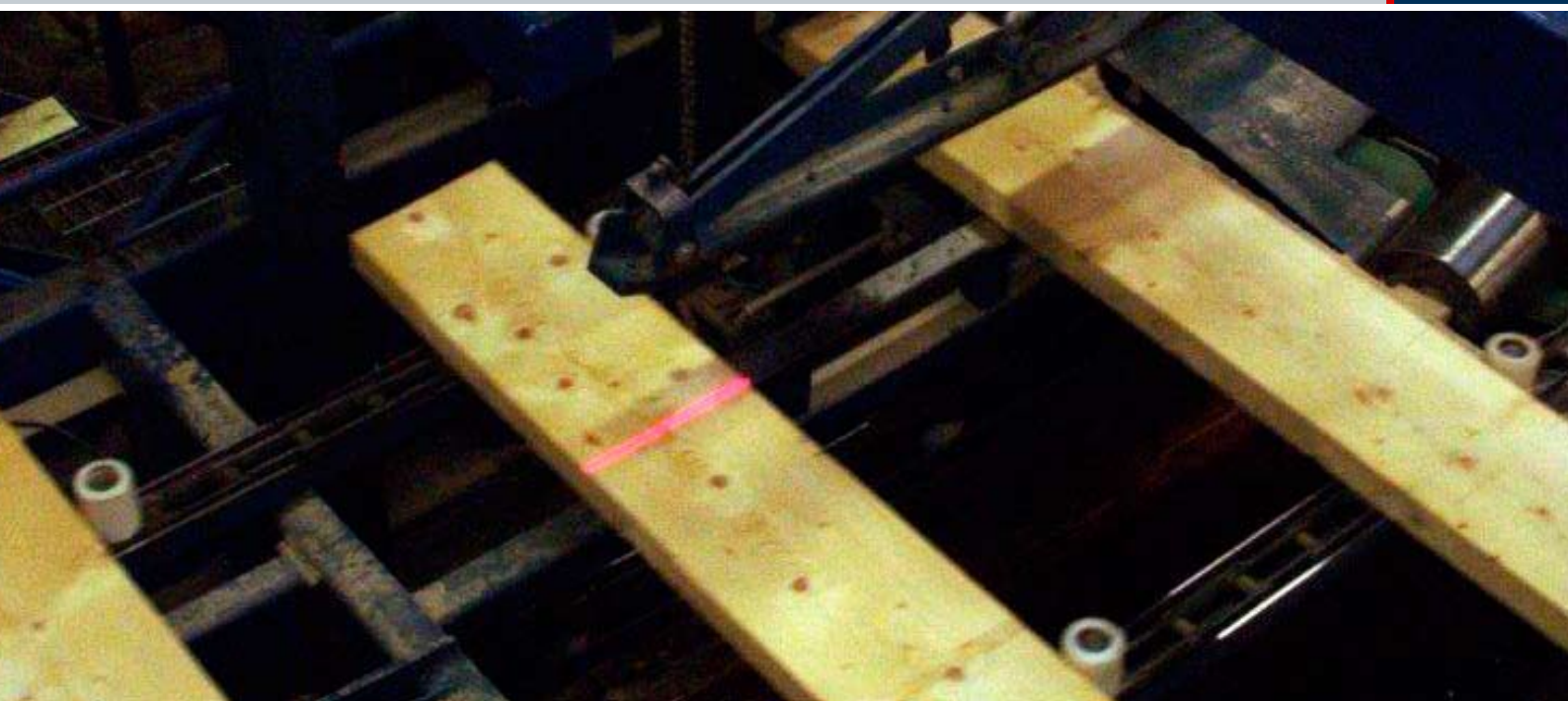


# ProfiCura Cup 2D



## System for measuring Cup and Wane.

LIMAB ProfiCura Cup 2D is an automatic stand alone measurement system for board cross profiles. If the cup/ cove or wane is greater than the user settable limit, a signal is generated that can be used to control a board turning machine.

The system is easily mounted above or below the conveyor on existing lines with limited installation costs. The system is designed to measure boards with a width up to 220 mm. (laser line length 300 mm)

## Measurement method

The measurement principle is non-contact 2D laser triangulation. LIMAB's newly developed 2-D ProfiCura sensor is the base in the system. The ProfiCura uses the latest digital and optical laser technology with an advanced built-in microprocessor (DSP Digital Signal Processor) and CMOS-array. This provides the high measurement accuracy that is required in today's modern wood industry. A one scan measurement of the board will generate a secure cove measurement and more stable turner signal compared to older systems.



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The main advantage by using a 2D measurement is that the board profile is measured in one scan. Board movements caused by the conveyor such as vibrations, bouncing and tilting will not have any influence of the accuracy of the measurement.

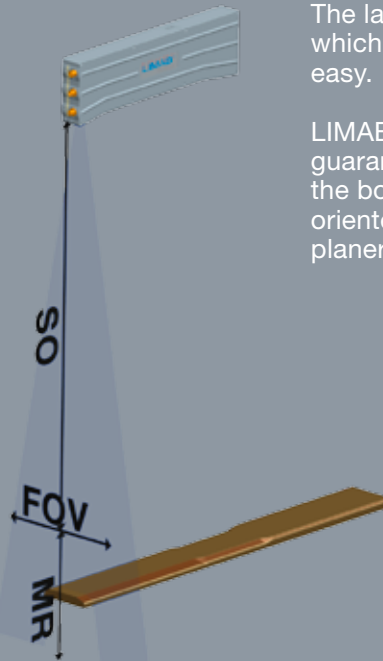
Further advantages are low maintenance cost depending on non-contact measurement and sensors that is not affected by surrounding light or wet boards.

Measurement accuracy is, unlike cameras; independent of variations in ambient light conditions, wood surface reflection, not clean cut or dark edges as we measure the top of the board not the edge.

ProfiCura sensor is equipped with a powerful laser diode with a laser line of 300 mm.

The laser light is visibly red, which makes installation very easy.

LIMAB system measurement guarantee will assure that the boards always will be oriented correctly through the planer.



### Technical Data:

Measurement Range	300 mm (11.8")
Stand off	950 mm (37.4")
Field of View	300 mm (11.8")
Resolution	1/10 mm
Measuring speed	120 Profiles/s 478 points/profile
Light source Laser	Class 3B (IEC825)
Power Supply	18 .. 36 VDC, isolated
Supply Current	<550 mA
Operating temperature	0 .. +40oC
Storage temperature	-20 oC .. +70oC
Warm up time	30 minutes
Laser power	< 50 mW
HOST	RS232
Service	RS232
Protection class	IP65
Size	524 x 149 x 57 mm (20.65 x 5.9 x 2.25 inch)
Weight	5.0 kg (11 lbs)



LIMAB were founded almost 30 years ago and have a long tradition of producing laser sensors and non contact measuring systems to meet the needs of the sawmill industry. The headquarters and manufacturing plant is located in Gothenburg, Sweden. LIMAB have regional offices in the USA, Finland, Germany and the UK and is represented in other parts of the world directly from Sweden or via representatives, agents and partners. Today we have customers benefitting from using our measuring systems in sawmills in the Nordic countries, Europe and North America.



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