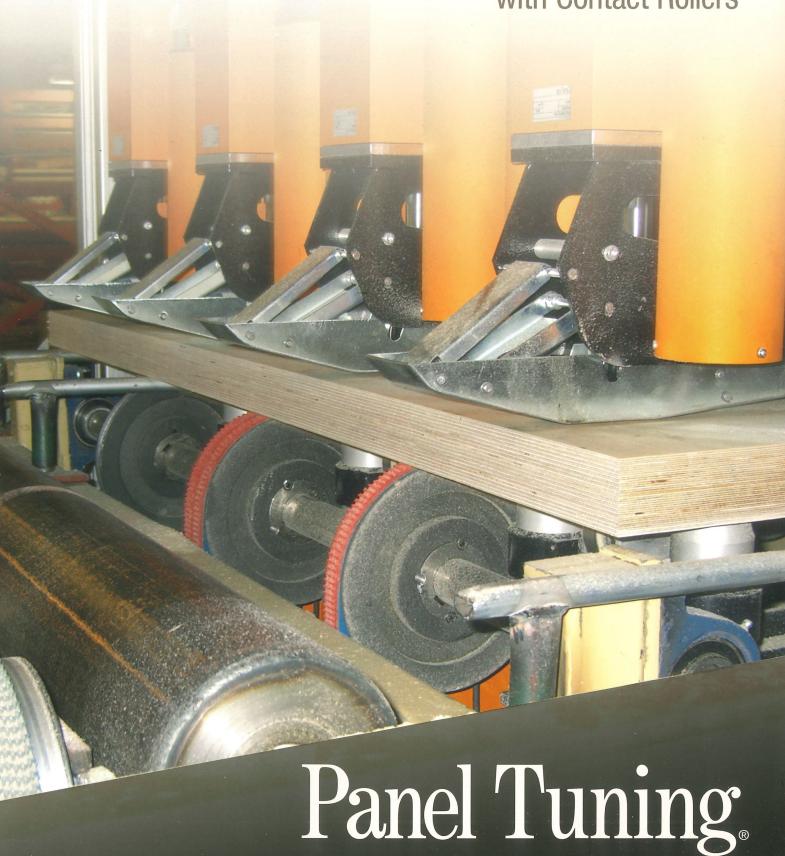
# **UPU 2500 / DMR 2500**

Inline Delamination Detection with the Ultrasonic Measuring System

Inline Thickness Gauge with Contact Rollers



## Quality Control with the Panel-Tuning Ultrasonic Measuring System

Exploit all reserves of your production, homogenise your process, increase the availability of your equipment. Undetected blisters lead to unsatisfied customers.

The Panel-Tuning Ultrasonic Measuring System UPU/DMR 2500 is the optimum measuring system to guarantee the quality standards required today. The UPU/DMR 2500 was developed especially for the measurement of thick panels. It is optimally designed to detect blows in particleboard, MDF or OSB boards up to a thickness of 100 mm. The quality of LVL panels can be measured up to a thickness of 200 mm. Hidden defects within the panel are reliably detected, marked and a signal to sort them out is given. The visualisation system clearly represents the size and position of the defects.

As an option, it is possible to equip the system with a DMR 2500 module, which allows to measure the panel thickness.

## Construction of the System

The inspection channels are mounted on a frame, which is made out of aluminium profiles. The cable and compressed air ducts are integrated in the profile and thus protected against surroundings. The transmitters, which are installed below the material to be measured and are optimised especially for thick panels, create the necessary ultrasonic energy. The emitted ultrasonic pulse is directed to the receivers through the panel.

## Software

The visualisation software of all Panel-Tuning measuring systems is based on Windows. The software of the UPU 2500 consists of the following program modules:

#### Recipe Management

This is a product data base in which different panel types and production parameters, which are relevant for the measuring system, can be stored.

#### Visualisation

The core of the software package is the visualisation software. It records, stores and graphically represents all measured data. The simple menu structure, which is identical for all Panel-Tuning measuring systems, makes an intuitive operation possible. Clear information and graphics enable the operator to quickly and effectively adjust the running production process. The graphical representation of the measured panels is graded in colours and allows for easy reading of the panel quality.

#### SQL Data Base

This data base stores the measured values and provides a function to export them to other file formats for further processing and evaluation. A uniform data structure provides easily accessible data for process control systems.

#### Network Connections

For the data transmission to higher-ranking process control systems, different network connections, such as OPC or ODBC, are available.



Fransmitter and receiver unit

## Online After-Sales Service

GreCon measuring systems are equipped with a modem or VPN, which provides a direct connection to GreCon service when needed. Support, changes in parameters, software updates and trouble shooting are all possible online.

## **Technical Specifications**

	Mains voltage:	230 V / 115 V
	Frequency:	50 Hz / 60 Hz
	Compressed air supply:	6 bar / 90 psi
	Panel thickness:	
	particleboard, MDF and OSB	up to 100 mm
		.3.9 in
	LVL	up to 200 mm
		7.8 in
	Conveying velocities:	max. 100 m/min
		320 f/min
	Minimum defect size:35 mm x 3	35 mm / 1.4 in x 1.4 in
	Diameter of measuring spot:	50 mm / 2 in
	Channel distance:	210 mm
1	Measuring accuracy for thickness	±0.01 mm



# Why Panel-Tuning



- Quick and timely recognition of quality deviations
- Detects, marks and visualises defects
- Fast visualisation of the consequences of changes in the production (intentional or unintentional)
- Especially designed for "thick panels"
- Can be combined with a thickness gauge
- Data base for measuring data, trending, calibration data, system settings and history
- Exactly and flexibly adjustable to check your panels (type/thickness)
- High availability, e. g. by means of calibration system
- Low maintenance required
- Intuitive operation

# Your Benefit



- Less complaints and rejects
- Shows irregularities in the production process and the panel homogeneity
- Visualisation of the process trend to intervene quickly
- Optimisation of pressing times
- Revaluation of existing production lines
- Revelation of reserve capacities and hidden costs
- Fast amortisation

# Panel Tuning



Panel Tuning GmbH Lindenweg 4 31028 Gronau Germany

TEL.: +49 (0) 170-6373190 FAX: +49 (0) 5182-903034 E-MAIL: mail@paneltuning.de WEB: www.paneltuning.de