

DMR 4000

Inline Thickness Gauge for Quality Control
with Measuring Rollers



GreCon®

Quality Control with the GreCon Thickness Gauge

Exploit all reserves of your production, homogenise your process, increase the availability of your equipment.

Fluctuations in panel thickness and deviations from nominal values reduce quality. Your customer will identify these as defects in your product.

The GreCon Thickness Gauge DMR 4000 provides accurate information to ensure a high quality standard by a quick adjustment of the production process.

All measured data can be transferred to an automatic process control or press control system. Thus, time periods required for product changes or production start-ups can be reduced and rejected material minimised with the DMR 4000.



Construction of the System

Up to 10 measuring tracks can be mounted on a frame, which is made out of patented aluminium profiles. The cable and compressed air ducts are integrated in the profile and thus protected against the surroundings.

The measuring heads are installed in pairs, opposite each other, above and below the panel to ensure accurate measurements, even during bending or vertical movement of the panel.

High-precision rollers contact the material and convert thickness variations into vertical motion within the transducer. The measurement is achieved by means of an optical element inside the transducer heads.

To protect the measuring heads against mechanical damage, through blisters, for example, they are equipped with relatively big rollers. The top heads have special inclined inlet rails to avoid damage.

Software

The visualisation software of all GreCon measuring systems is based on Windows. The software of the DMR 4000 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 GreCon measuring systems, makes an intuitive operation possible. Clear information and graphics enable the operator to quickly and effectively adjust the running production process.

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.

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
- Power consumption: 750 VA
- Compressed air supply: 6 bar / 90 psi
- Compressed air consumption:..... approx. 3.5 l / 0.12 cf
per measurement
(with 5 measuring heads)
- Max. number of heads
per electronics evaluation: 20 (10*1)
- Measuring accuracy:..... $\pm 1/100$ mm / ± 0.0004 in,
 $\pm 2/100$ mm*1 / 0.0008 in*1)

*1 for 2-side measurement
(pairs of measuring heads)

References

- Particleboard, Fibreboard, OSB board
- Plywood
- Gypsum board / mineral fibre / wood cement
- HDF board / hardboard
- Solid wood / veneer
- Plexiglass / rubber / linoleum
- Wet fibreboard

Why GreCon



- Quick and timely recognition of quality deviations
- Clear display of the consequences of changes in the production (intentional or unintentional)
- Display of optimisation potentials
- Reliable measured values
- Flexible use with various product alternatives
- Low maintenance required

Your Benefit



- No unacceptable material required to be added for sanding = reduction of production costs (0.1 mm ~ 0.8 % material)
- Combination with board scales possible to determine the raw density
- Production control within restricted tolerance limits
- Quick product change
- Fast amortisation





OUR HEADQUARTERS AT ALFELD - BUILT BY WALTER GROPIUS IN 1911

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