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GreCon

MEASURE
BEFORE
IT COSTS

GreCon

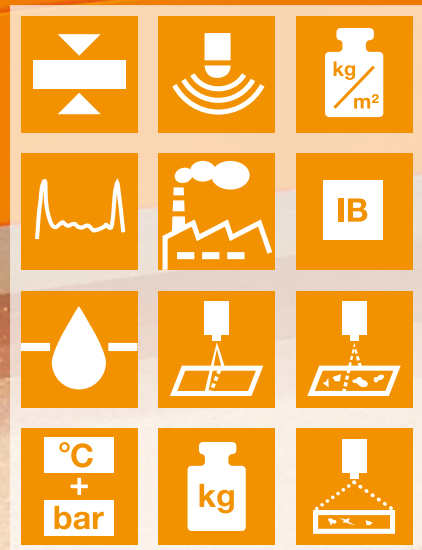
Fire
Protection

GreCon

Measuring
Technology

GreCon

Service

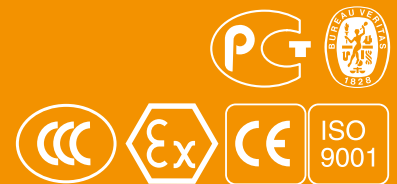


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Measuring Systems

GreCon

QUALITY
INNOVATION
TRADITION





Innovation is our Tradition.

With this maxim, we refer to our innovative company founder and my great-great-grandfather who founded the FAGUS shoe last factory in 1911. Even then he had the courage to engage the visionary, but unnoticed Walter Gropius, who became an internationally renowned architect, to build his factory, which today is regarded as the origin of the modern age building. UNESCO designated it as a World Cultural Heritage Site in 2011. With an extensive restoration, it is in very good condition, still in operation and owned by the family.

In 1970, our company experienced further innovation. My uncles Gerd and Ernst took over FAGUS, the shoe last production that continues operations today, and founded GreCon. Today, we are suppliers of measuring systems especially for the wood based panel industry and fire protection systems worldwide.

In the course of automation that arrived in industrial particleboard production at the beginning of the seventies, my uncles recognised the need for including inline measuring technology. The first systems were a thickness gauge and a radiometric scale, followed by a good dozen of inline and laboratory measuring systems. Today, they are not only used in wood based panel productions, but in all processes in which panel-shaped or endless products are produced. Besides measuring systems, preventive fire protection systems are developed, especially spark detection and extinguishment systems.

Measure before it costs.














Today we serve customers in many industries with 10 product families. The goal is to enable our customers to produce products of optimum quality, minimum consumption of resources and thus give them a competitive advantage by using our Quality Assurance Measuring Systems.

Kai Greten
Managing Director

GreCon

MEASURING SYSTEMS

GreCon
HPS 5000

	Chip Separation	CHIP-INSPECTOR
	Thickness	DMR 6000 DML 6000
	Delamination Detection	UPU 6000 UPU 2500
	Weight Per Unit Area Raw Density	DIEFFENSOR BWQ 5000 BWS 5000
	Raw Density Profile	STENOGRAPH DAX 6000
	Formaldehyde Emission	GA 6000
	Forming Optimisation	FORMATOR
	Moisture	IR 5000 MM 6000
	Surface Quality	SPM 6000 SPL 6000 SPR 6000
	Fibre Measurement	FIBERVIEW
	Gas Pressure + Temperature	CONTILOG EASYLOG
	Weight	HPS 5000 GS 6000 CS 5000
	Foreign Object Detection	DIEFFENSOR

Your Benefit



- **Check your** production
- **Ensure** the quality of your production
- **Improve** your production processes
- **Optimise** your consumption of resources and raw materials

Why GreCon



- **Market and technological leader** holding many important patents
- Decades of **expert experience** in the wood based panel and other industries
- Thousands of systems installed **worldwide**
- Global **customer service team** with more than 80 service experts



Chip Separation

Contaminated wood chips can cause numerous problems in downstream production processes. Nails can damage the steel belt, and rubber particles impair coating.

Benefit

The GreCon CHIPINSPECTOR separates foreign objects so that high panel quality and significant savings of material and production costs are achieved. Foreign objects are even identified in material layers of up to 50 mm. Materials of the same weight per unit area, such as wood and rubber, can also be reliably distinguished. The risk of contamination of the panel by rubber particles on the panel surface is significantly reduced.

CHIPINSPECTOR





Thickness

Thickness is an extremely important parameter for the production of panel-shaped materials.

If the thickness is too high, valuable material will be wasted. If it is too low, there will be complaints, or downstream finishing processes cannot be conducted.

Benefit

Fluctuations in thickness that are due to the production process are detected in time by the inline thickness gauges. Thus, waste of material or loss of quality can be avoided. Innovative frame concepts, combined with different measuring methods, provide a tailor-made solution for your process and thus precise and reliable measuring values.

DMR 6000 · DML 6000



Delamination Detection

The intensity of the ultrasound signal that penetrates a wood based panel provides valuable information on the panel parameters.

Low ultrasound values point to faulty production quality (blisters). Values that are too good indicate valuable material or capacities are wasted.

Benefit

Material can be saved and capacities optimised by using intelligent evaluation of the ultrasound signal. With ct-technology, the system can be calibrated or serviced at any time (even during production).

UPU 2500 · UPU 6000





Weight Per Unit Area/ Raw Density

The weight per unit area gives information on the amount of the material used.

If the weight per unit area is too high, valuable material will be wasted. If it is too low, severe quality defects can occur (internal bond and screw holding capacity).

Benefit

The material quantity can be optimised and fluctuations reduced by a precise determination of the weight per unit area. For that, a complete measurement is required. For the measurement of finished panels, the raw density or the weight of the panels can be calculated when the panel dimensions are known.

CS 5000 · DIEFFENSOR
BWQ 5000 · HPS 5000



Raw Density Profile

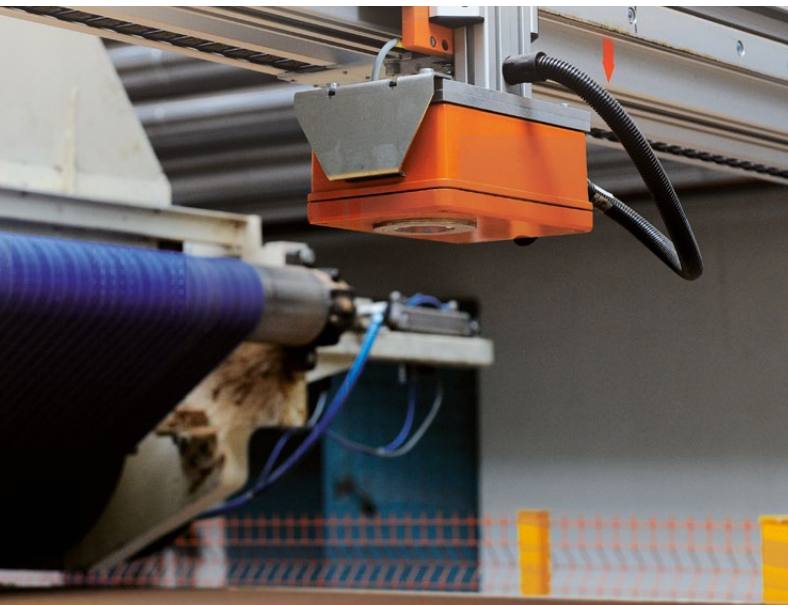
The raw density profile is an extremely important parameter in the production of fibreboard.

If the profile does not correspond to the optimum shape, this will have serious effects on the panel qualities (e.g. internal bond).

Benefit

By continuously monitoring the raw density profile, the production parameters can be adjusted to the requirements at any time. Measurement can be accomplished inline (STENOGRAPH) or in the laboratory (DAX).

DAX 6000 · STENOGRAPH





Formaldehyde Emission

The formaldehyde emission of wood based panels is subject to regulated limits.

High emissions are unacceptable and can cause serious quality defects. With the new stricter regulations, existing measuring methods are often unable to provide reliable information.

Benefit

The reliable and exact measurement of the formaldehyde emissions ensures maintenance of safe limiting values.

GA 6000



Forming Optimisation

An even material distribution of the mat is an important pre-condition for a good panel quality. High fluctuations lead to waste of material, loss of quality and reduce the service life of downstream working tools.

Benefit

Through a uniform material distribution of the mat, spreading fluctuations are reduced. Material savings of up to 5 % can be realised while the product quality is maintained. Reduced fluctuations in panel thickness and less material added for sanding. The availability of production facilities is increased because of less strain.

FORMATOR





Moisture

Drying material is expensive, but essential.

If the moisture of the raw material is too high, there will be problems in downstream processes. If it is too low, valuable resources will be wasted.

Benefit

A precise, continuous measurement of the moisture saves resources and optimises production processes.

IR 5000 · MM 6000



Surface Quality

A high surface quality of panel-shaped materials is pre-condition for a high-quality product. This also applies to materials that are coated.

Surface defects have to be detected as early and accurately as possible to avoid expensive faulty production and customer complaints. Manual inspection is expensive and inaccurate.

Benefit

An early detection of surface defects avoids consequential losses and assures quality.

SPM 6000
SPL 6000 · SPR 6000





Fibre Measurement

In fibreboard production, most of the energy is used for the production of fibres. The quality of the refiner discs is crucial.

The amount of energy required for the defibration process is high, and the evaluation of the quality of the refiner discs is difficult.

Benefit

The analysis of the proportion of big shives on the surface of the fibre mat allows conclusions of the required amount of energy. Even the timing of changing the refiner discs can be determined better. In this way quality problems can be avoided.

FIBERVIEW



Gas Pressure and Temperature

The correct adjustment of pressure and temperature within continuous presses is very important.

The information at which position of continuous presses, both along and across the production direction, which pressure or temperature exists is of utmost importance for the process, but only assumed.

Benefit

The pressure and temperature values can be measured by inserting a measuring board in the chip mat and pass it through the pressing process. As a result, an optimum adjustment can be found quickly.

CONTILOG · EASYLOG





Weight

The weight is an important parameter for the production of panel-shaped materials.

Without the panel weight, the amount of material used cannot be monitored. The raw density is also one of the most important parameters of a panel production.

Benefit

The amount of raw material used can be monitored by measuring the panel weight. This can be achieved most accurately using X-ray systems, which are also able to measure the weight distribution and also to regulate the weight along and across the production direction by using adjusting elements.

HPS 5000
GS 6000 · CS 5000



Foreign Object Detection

Foreign objects and particles of high density, such as metal pieces, hot spots or fibre lumps, can cause severe damage to production equipment.

With high-resolution evaluation, the DIEFFENSOR is able to detect such foreign objects. Even areas that are too light, such as air voids or missing material, can be detected.

Benefit

Systems for the detection of foreign objects and material distribution can protect your production and steel belts plus substantially improve quality.

DIEFFENSOR



GreCon

Global
Service Team
with more than
80 Experts

Personal customer service, combined with competence and experience, is our strength

Customer service is one of our strengths. Beginning with the installation and start-up of your system, its daily use, maintenance work and troubleshooting, your personal GreCon technician accompanies your spark extinguishing system and/or your inline measuring systems through its whole operational sequence. This is done in close co-operation with your people.

Our Network



Innumerable production plants in different industries worldwide are equipped with thousands of GreCon measuring systems.

To meet this extensive use of our systems and the customers employing them, we are represented worldwide by our own companies and reliable partners.

