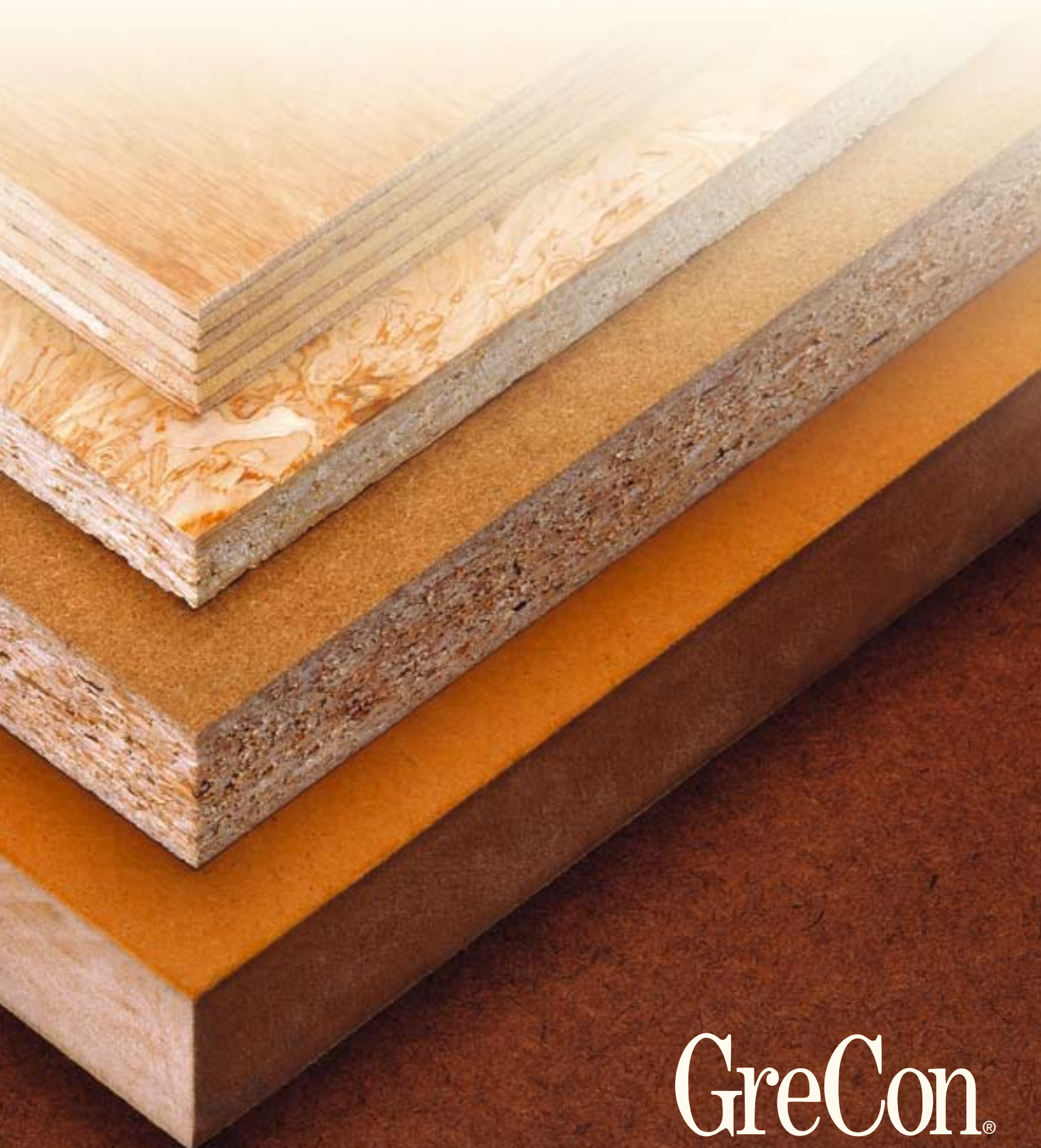


The Whole Range

Measuring Systems
Spark Detection and Extinguishment Systems



GreCon®

GreCon Online Measuring Systems for the Panel Industry

■ BS 7

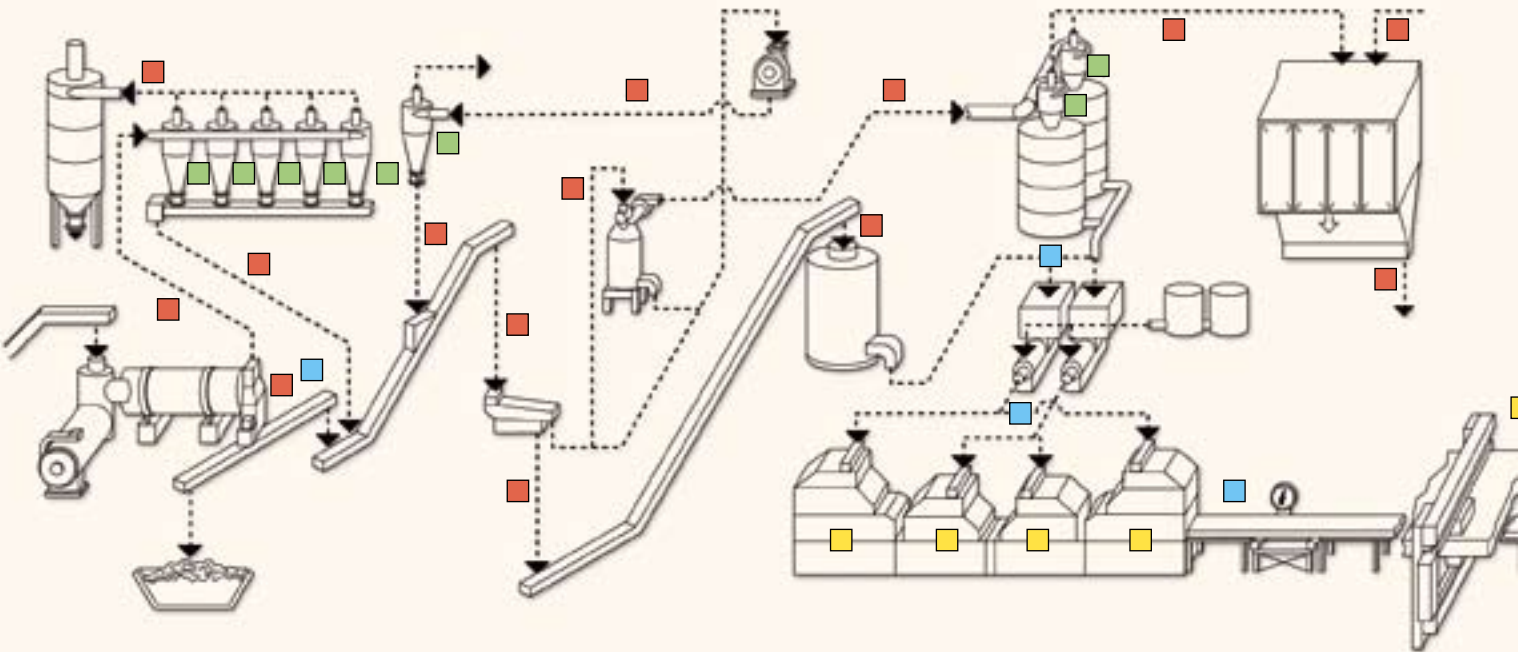
The GreCon spark extinguishing system is installed in mechanical and pneumatic conveying systems of dryers, mills, saws and sanders to protect filters and silos against fire. Spark sensors detect the infrared radiation of sparks and glowing particles. Instantly, a dense water mist spray is triggered, which extinguishes these danger potentials. All events are recorded to the millisecond, stored and visualised in the national language. By analyzing this data, the main danger zones are easily identified.

■ ABC 7

Wherever cyclones are used as material collectors, the rotary valve might get blocked. Material and dust will then escape through the clean air outlet. Production interruptions, pollution of the environment and expensive cleaning measures are the result. The GreCon cyclone plug-up detector ABC 7 monitors the material flow. An accumulation of material is automatically detected, and conveyor fans are shut down.

■ IR 3000 WBPi / MWF 3000

The online moisture analysers IR 3000 WBPi (infrared) and MWF 3000 (microwave) are used for the continuous monitoring of the material moisture in the area of dryers as well as upstream and downstream of blenders and above forming belts. Thus, over-drying of the material is recognised and can be eliminated. The permanent monitoring of the material moisture after the blender and in the forming station ensures optimum quality.



Spark Extinguishing System
BS 7



Cyclone Plug-Up Detector
ABC 7



Moisture Analysers
IR 3000 WBPi / MWF 3000

■ BWS 3000 / BWQ 3000

The quality of wood based panels is crucially influenced by the forming of the chip or fibre mat. Fluctuations in the material distribution lead to increased production costs while quality is reduced. The online weight per unit area gauge BWS 3000, installed in the forming station or at the forming belt, measures the material quantity along the production direction and regulates the belt speed or height-adjustable rakes.

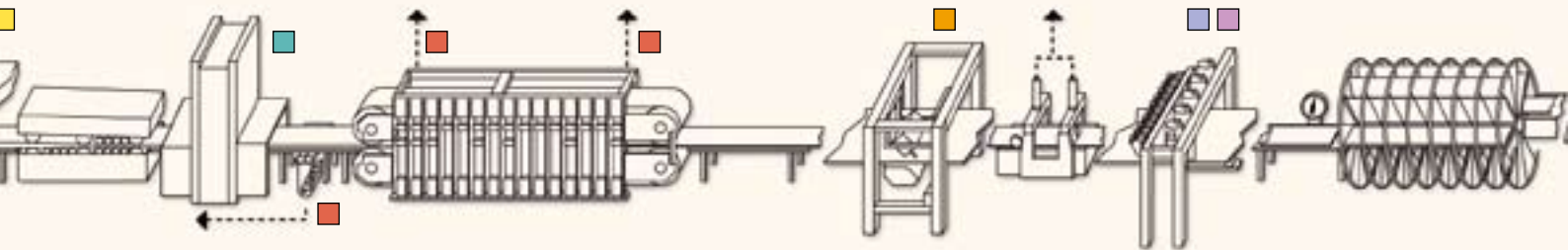
The material distribution across the production direction is measured with the online weight per unit area gauge BWQ 3000. An uneven spreading of the material can be recognised and eliminated. Through the optimised use of material, raw materials, additives and energy are saved, and quality is improved.

■ DIEFFENSOR

The online mat scanner DIEFFENSOR with foreign body detection determines the material distribution of the fibre, chip or OSB mat over the entire mat width. An uneven spreading of the material can be recognised and eliminated. Through the optimised use of material, raw materials, additives and energy are saved, and quality is improved. At the same time, the steel belts of the press can be effectively protected against damage. All foreign bodies or areas of high density, such as glue and fibre lumps or artificial, metal and aluminium parts, are detected and clearly indicated to the operator. Through timely adjustments, the life of the steel belts can be considerably increased.

■ STENOGRAPH

The GreCon online raw density profile measuring system StenOgraph determines the raw density profile directly after continuous presses. Thus, the operator is able to rectify the raw density profile and the related product features of MDF and particleboard during the pressing process. The result is an increased panel quality while material and energy and thus costs are reduced.



Weight Per Unit Area Gauges
BWS 3000 / BWQ 3000



Online Mat Scanner with Steel Belt Protection
DIEFFENSOR



Online Raw Density Profile Measuring System
STENOGRAPH

■ UPU 3000

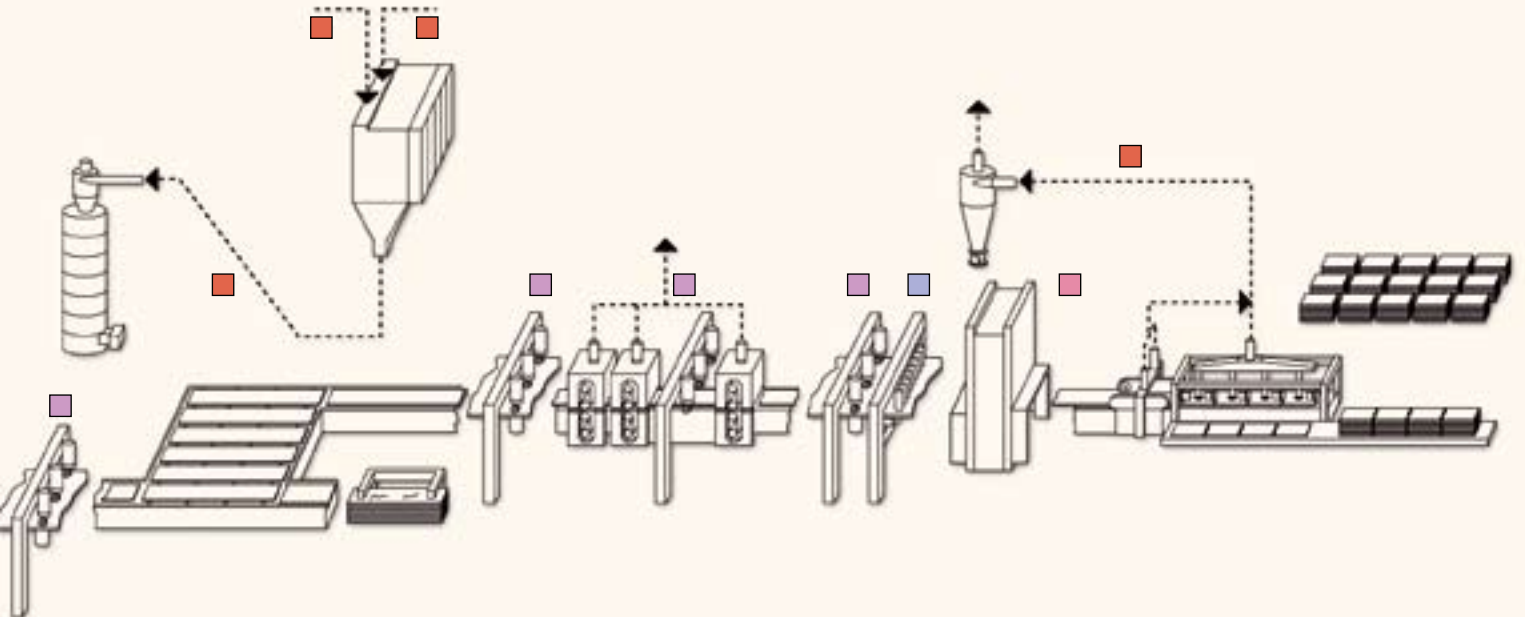
The GreCon ultrasonic camera UPU 3000 is the optimum measuring system to produce high-quality wood based panels at optimised expense by evaluating the bond quality. The internal board quality can be controlled thanks to the integrated blow detection system. If defects occur, the defective panels are deviated out of the production process. By means of the measured data, production processes can be easily tracked and recorded over a longer time period. Unused reserves are discovered, and unsatisfied customers avoided.

■ DMR 3000

The online measurement with the GreCon thickness gauge DMR 3000 provides the operator with the necessary information to ensure a high quality standard by a quick adjustment of the production process. When installed after the press or in the sanding line, thickness fluctuations and deviations from the nominal value are detected. Waste of material, losses in quality for the processing of the panels, and unsatisfied customers are avoided.

■ SUPERSCAN

SUPERSCAN is used for the automatic surface inspection of decorative wood based panels, such as laminate floorings, furniture panels, lacquered or printed panels. The system differentiates between minor gradations of shades in the pattern and defects that do not belong to the pattern. A big advantage of the system lies in the consistent sorting. The system's statistical data allows conclusions of the upstream processes to be formulated for production optimisation. The system is also suitable to inspect uncoated particleboards or MDF panels.



Ultrasonic Camera
UPU 3000



Thickness Gauge
DMR 3000



Surface Inspection System
SUPERSCAN

■ ct-Frame

To achieve a continuous system availability, the bond quality measuring system UPU 3000 and the thickness gauge DMR 3000 are equipped with a ct-frame. This construction of the measuring system makes an installation either after the diagonal saw or in an continuous production directly after the press possible.

The system can be calibrated at any time by moving the ct-frames sideways out of the production line. Maintenance, diagnostics and repairs can be carried out during the running production. Moreover, the mobile construction of the system allows an escape run in case of big blisters and thus prevents the measuring system from being damaged.

□ LABROB / BONDCHECK

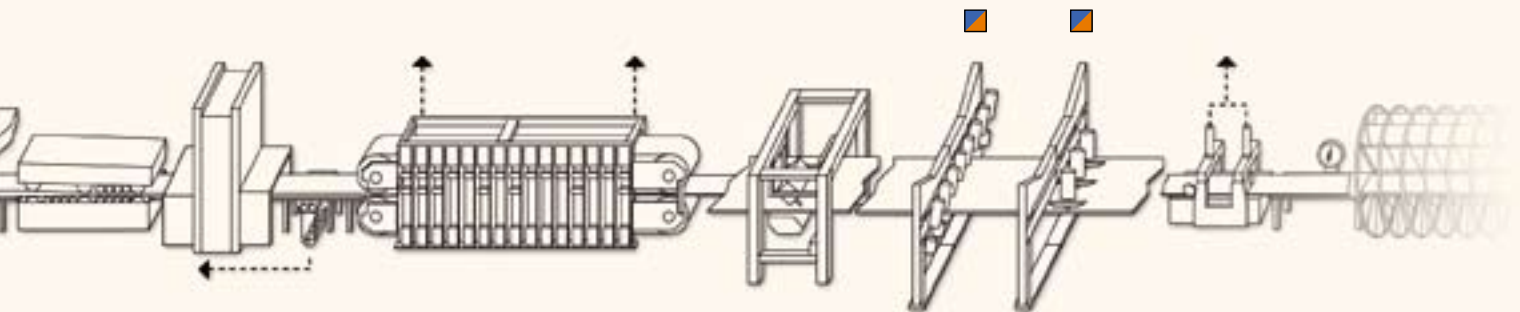
With the panel testing system LABROB, the mechanical quality features of wood based panels can be easily and precisely determined. Measurement can be carried out according to European Standards (EN) or, for the measurement of internal bond strength, according to faster alternative testing methods.

The BONDCHECK is designed especially for the quick check and control of the running production process. With the use of special testing methods, it is possible to make practical tests without the lengthy preparation of test samples. The system's modular design allows it to be adapted to individual requirements.

□ DA-X

The GreCon laboratory density analyser DA-X offers a convenient way to measure density profiles. Measuring speeds of up to 5 mm/s / 0.2 in/s allow extremely fast and high-precision measurements.

All sample data is automatically transferred to the visualisation PC via a scale and a measuring caliper which are directly connected to the system. The system can be rounded off by a laboratory microwave moisture analyser which is available as an option. Thus, the measured moisture of the panel samples is accounted for in the laboratory results.



Bond Quality Measuring System UPU 3000 with ct-Frame (one side in calibration position)

GreCon



Fagus Factory, constructed by Walter Gropius in 1911

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