

FORMATOR

The Way to a Perfectly
Formed Wood Based Panel

GreCon®

Breakthrough in Forming

The GreCon FORMATOR automatically homogenizes the material distribution of the formed wood based mat so that remarkable improvements in panel quality and significant savings of material, process and logistic costs are achieved.

A high forming accuracy is achieved by a combination of segmented scalper and X-ray scanner DIEFFENSOR. Both systems are integrated in a control loop so that the mat can be, for the first time, homogenized automatically. The DIEFFENSOR determines the weight per unit area of the whole mat with high resolution and regulates the segments of the scalper to the appropriate position. Thus, spreading fluctuations are considerably reduced, and the panels become more homogeneous.

Due to the precise weight per unit area measurement by the DIEFFENSOR, not only the material added for sanding, but also the nominal value can be reduced. Material savings of up to 5 % can be realized while the product quality is maintained. The clear reduction of spreading fluctuations leads to less strain of downstream production facilities. The service life of working tools, such as sanding belts, saw blades or milling heads, will increase. Panel surfaces become more homogeneous and thus better for coating. The consumption of lacquer is reduced.

Improved product quality increases customer satisfaction. The combination of homogeneous material distribution and reduction of the nominal value allows higher production speeds and output.



Design and Construction

- X-Ray Scanner
- Reliable measuring system
- Solid, X-ray protected measuring frame
- Modern control console
- High-performance PC
- Independent cooling circuits
- Air-knife cleaning system
- High precision due to multistage calibration and precise comparison with laboratory samples
- Intuitive software
- Customer-specific network connection
- Simple remote support SATELLITE

Segmented Scalper

- Individually controllable scalping segments
- Modern control console
- Gangway for easy maintenance
- Software module for automatic control of the scalping segments
- Customer-specific network connection

Software Functions

■ Software

The visualization software of all GreCon measuring systems is based on Windows.

■ Visualization

The core of the software is the visualization. It allows the configuration of the measurements and, because of its clear structure, offers a quick view of all information in numerical form as well as diagrams (curve, bar graph, 3-D representation). Deviations from the regular production process are clearly indicated and allow quick and automatic intervention. Detailed reports can be produced for additional analysis.

■ Database

The database 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.

Your Benefit



- Reduction of material costs
 - Saving of wood, glue and energy
 - Reduction of the material added just for sanding off
 - Reduction of run-in times upon product changes
- Improve Quality
 - More homogeneous products
 - Less rejects for the end customer
 - Better processing by downstream processes (sawing, sanding, milling, ...)
 - Better coatability (e.g. lacquering)
 - Resistant edges through specific edge forming
- Reduction of process costs
 - Higher production speed
 - Higher capacity utilization
 - Higher availability of production facilities
 - Steel belt protection
 - Longer service life of sanding belts
- Reduction of logistic costs
 - Lighter panels
 - Easier panel handling

Technical Specifications

- Installation positionin forming line
- Mat speed max. 2,000 mm/s
- Segment width 100 mm
- Relative setting range per segment 100 mm
- Necessary performance of extraction system.....min. 600 m³/segment/h

Applications

- MDF / HDF
- OSB
- Particleboard
- Insulating materials
- Gypsum fiberboard

■ Reporting

Using special software, individual reports can be generated from the database. Available reporting types are time-related reports, such as shift or monthly reports, and order-related reports that can be selected according to requirements.

■ Recipe Management

In the product database any number of different panel types and production parameters can be stored.

■ Steel Belt Protection

Software that was specially written for the protection of steel belts allows monitoring of the fiber mat for undesired metallic or non-metallic foreign objects. Visual assistant functions support the operator in defining optimum threshold values for foreign object detection. When foreign objects are detected, the fast signal transfer to the machine control allows the use of steel belt protection measures (e.g. opening the discharge). An analyzing function even gives information on source and time.

■ Network Connection

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

Why GreCon



- Customer-specific system design
- High innovative capacity: more than 10 % of the employees work in the R & D division
- Worldwide customer service network: more than 80 service technicians on duty worldwide
- Efficient sales network: represented in more than 35 countries
- High expertise: more than 40 years of experience in the measuring technology sector



OUR HEADQUARTERS AT ALFELD - BUILT BY WALTER GROPIUS IN 1911

GreCon

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