

Blow Detection System for thick and light panels

ULTRA-SCAN

Blow Detection on very thick and low density boards

For a blow detection ultrasound penetrates the boards continuously. If the signal has a big drop on the receiver side a blow will be displayed. The thicker the board and the lower the density the earlier the system limitation is reached.

Thanks to a so-called "Power-Sonic-Resonance" method this limit of the ULTRA-SCAN measuring system is expanded considerably.

The ULTRA-SCAN systems can be equipped with thickness function easily.



No problem to inspect very thick or low density boards. ULTRA-SCAN can do it

A "Power-Sonic-Resonance" method is used. By the use of contact rolls sonic transmitters and sonic receivers always float in a constant distance to the board surface. So the transmitted signal is in resonance with the sonic which is reflected from the board surface. This results in an extensive increase of the sound penetration. So, very thick and low density boards can be inspected. The system's contact rolls and frame also can be used for thickness measurement at reasonable additional cost.

Because of an automatic gain control function no calibration during production is required. ULTRA-SCAN nearly is maintenance free.

Features

- Inspection of very thick boards
- Inspection of low density boards

Locations

- After hot press
- After cross-cut saw
- After sander

Technical Data

Technology: Sonic Resonance

No. of channels: up to 32

Minimal channel width: 100mm [4"]

Minimum detectable
 blow size per channel: Ø 50mm [2"]

Maximum thickness:
 (depending on density)

PB, MDF, OSB: up to approx.
 100mm [4"]

LVL, plywood: up to approx.
 200mm [8"]

Minimum density: 400 kg/m³
 (depending on thickness) [25 lbs/ft³]

Remote Control by "EWS Online Support"

Options

- Extendable to thickness measurement at low cost
- Connection to PLC by OPC-interface
- Ink marking

Visualization

- Location of blow
- Statistic, trending
- History

Evaluation by EWS "GAUGE-CONTROLLER"

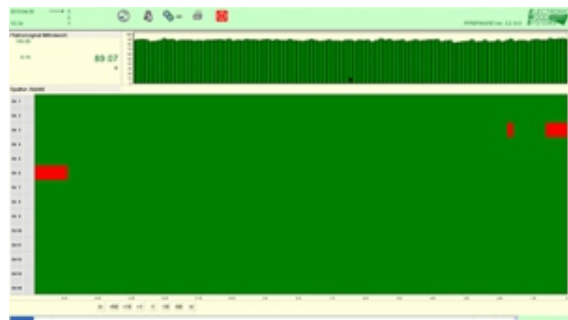
- Real time operation system
- Network connection to visualization-PC



Inspection channels on thick particleboard



Inspection channels on LVL



Screenshot

