BLISTER CLASSIFIER

BL100 – BC200

BLISTER AND DELAMINATION DETECTION SYSTEM

BL100

BC200

The IMAL BLISTER systems BL100 and BC200 have been designed for the on-line detection of flaws or imperfections which may occur in wood-based panels (particleboard, OSB, MDF, Plywood and LVL) such as unglued areas, blistered or blown areas, bubbles, cracks, etc. Each system consists of a sturdy tubular steel beam; the fully detachable structure installs around the board roller conveyor at press or sander outlet and comes complete with the electrical and pneumatic plant. An electrical box, housing the microprocessor, is mounted on the side of the assembly, whereas the PC, monitor and printer are normally located in the control room. The particular functioning principle of the system (ultrasonic impulses) avoids any direct contact with the board as well as eliminating all the usual problems related to material wear. The BL100 version is generally used on lines where maximum board thickness does not exceed 50 mm and densities are over 500 kg/m3. The BC200 version on the other hand is preferable for thicker boards (up to 120 mm) or for low density boards. Furthermore, the system is able to provide an indication of board quality on a 256 colour scale.

MAIN FEATURES

• Sturdy mechanical assembly of the structure and of the sensors in particular • A correct measurement is made without contact with the board • Diagnostics and control of the system's operating status • Fast measuring speed

BEST IN CLASS FOR:

WOOD BASED PANELS:
PB/SPB
OSB/LSB/FOSB
MDF/HDF
PLYWOOD
LVL

• An efficient pneumatic system ensures that the transmitters are kept clean, reducing maintenance • Incorporated database to store the measurement reports, for statistical analysis and graph print-outs • Numerous graphs available such as: blister position on board, production trend blisters, opening trend, board quality trends • Network linking possible with TCP/IP protocol, for Siemens S7 and Allen-Bradley ControlLogix

ADVANTAGES

• Repeatability, reliability, comprehensive and accurate measurement • Improved production quality • On-line visualization of the production process • Quick and easy to install • Little maintenance required • It can be mounted on the same beam used to support the IMAL thickness gauge.
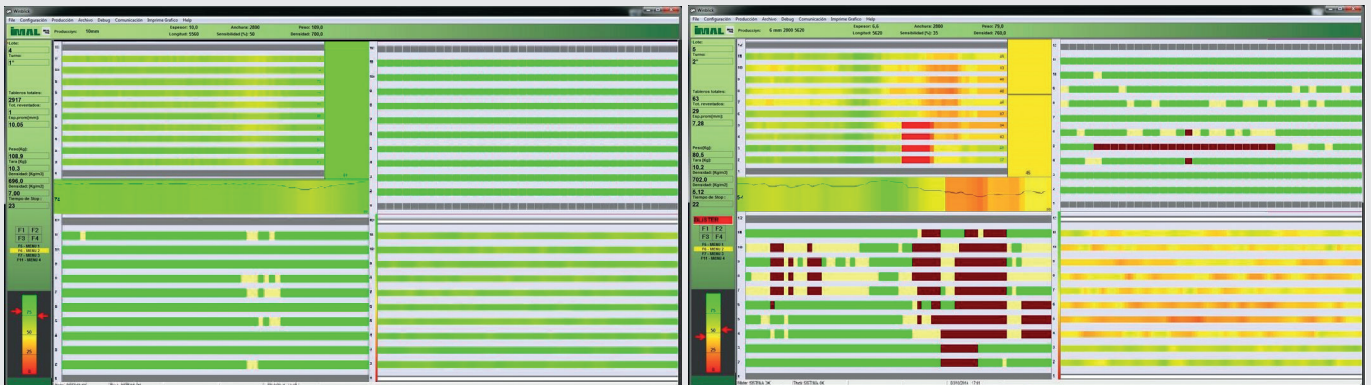
TECHNICAL DATA

MAX BOARD THICKNESS	50 mm (120 mm optional)
MAX LINE SPEED	210 m/min (can be accelerated during the measurement)
CHANNEL WIDTH	35 mm
MIN CHANNEL SPACING	(Centerline to centerline) 100 mm
NUMBER OF SENSORS	2 ÷ 32
MAX BOARD TEMPERATURE	130 °C
MAX OPERATING TEMPERATURE	50 °C
CLEANING SYSTEM	Automatic after each board, with compressed air

OUTPUT ALARMS FOR

BLISTER LENGTH	From 10 mm up to the full length of the board (programmable)
BLISTER WIDTH	Min in relation to the distance between sensors
SINGLE BLISTER	Total surface (programmable)
PERCENTAGE	Of defective area on the full board (programmable)

These alarms are either available immediately or at the end of the board, and may be paralleled for global alarms, automatic reject
or used on each channel for markers, automatic controls etc.