LBC100

WITH 100% CONTROL OF THE MEASURED PANEL

BEST IN CLASS FOR:

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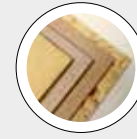PB/SPB
OSB/LSB/FOSB
MDF/HDF
PLYWOOD

The LBC100 has been designed to detect unglued, delaminated, blown or low density areas, bubbles, cracks and other flaws inside any type of board (PB, MDF, OSB and Plywood).

Unlike earlier systems that had a limited number of measuring channels and i.e. 12,14 or 16 channels etc, and hence covering a minimum percentage of the board, the LBC100 can mount as many as 54 channels with a 75 mm resolution. It is possible to grade the quality of the production in progress and to adjust the product parameter to avoid rejects and maximize customer satisfaction.

The system is composed of a sturdy beam, installed around the conveyor, complete with the electrical and pneumatic plant. It may be installed in combination with the TM200 thickness gauging system on the same beam. The full bond/blister classifier LBC measuring sensors are mounted on the top and bottom beams on the board outfeed side. Since the sensors do not come into direct contact with the board, typical problems related to material wear are eliminated. In addition, when the system is installed at press outfeed, a pressurization unit is normally supplied which is mounted on the top of the beam to prevent the sensors from being damaged by the vapours released by the upper surface of the board.

The automatic calibration and dirt accumulation control ensure an efficient and highly reliable measuring control system. It is possible to slide the bottom part of the system out to perform maintenance or repair without the need to stop production.

The operator interface for setting up the plant parameters and those for the single productions is simple and straightforward to use and the formulas may be stored and retrieved at a later date.

The display can be customised by choosing from the numerous high resolution 3D colour graphs available.

Numerical indications are also given. The parameters are stored in an SQL database and can be used to display and/or print reports on the desired productions, based on user determined choice criteria (date of production, shift, production name). In addition to being user friendly and extremely intuitive to consent a prompt and immediate interpretation of the data collected, the software also provides detailed diagnostic screen pages to enable maintenance operators or Imal engineers carrying out remote assistance, to perform a full diagnosis of the equipment.

A powerful microcontroller is mounted inside the receiver to transmit the data for the signal measured, to the CPU via Data Bus. The system may be network connected with TCP/IP protocols, for Siemens S7 and Allen-Bradley ControlLogix.

The elevated scanning accuracy over the whole board ensures that all kinds of defects are analysed and not just blisters, blows, delaminated areas.
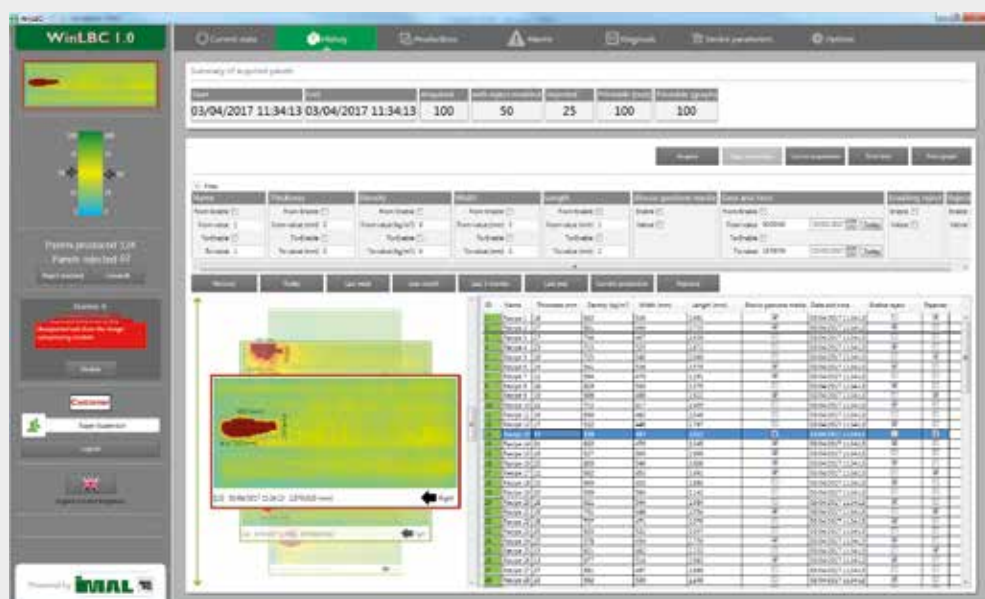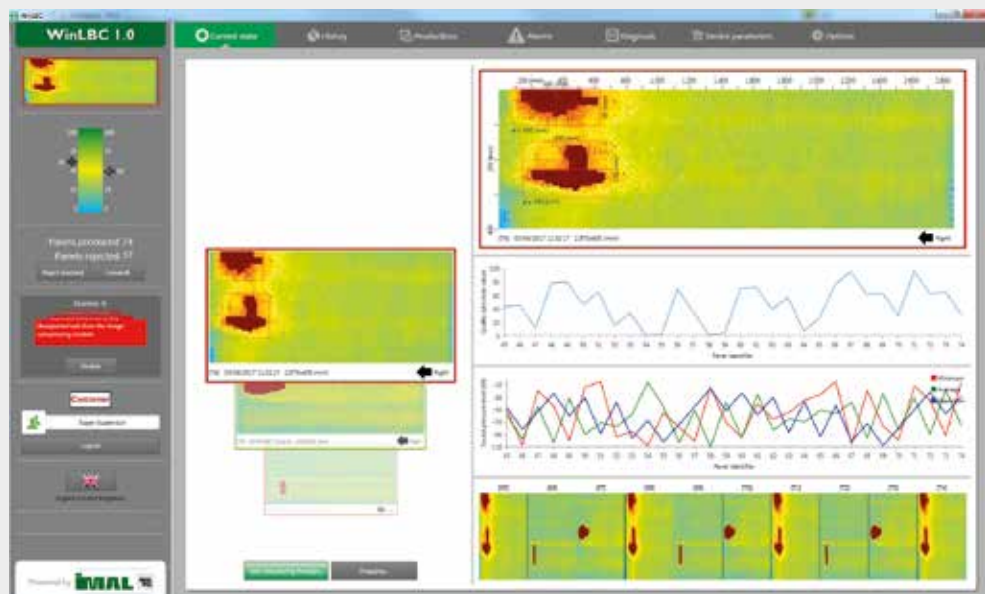
MAIN FEATURES

• Sturdy mechanical assembly of the structure and sensors • Easy to use • Clear and comprehensive software • Operator is warned of an approaching blistered board, with the consequent optimization of process parameters, reduction of board defects and rejects • Easy installation in on line processes and/or after saws • Lower part can slide out for maintenance operations.

TECHNICAL DATA	
NUMBER OF CHANNELS	18 min – 54 max
DISTANCE BETWEEN EACH CHANNEL	75 mm (fixed)
MAX THICKNESS	50 mm
MAX BOARD SPEED	210 m/min
MAX BOARD TEMPERATURE	180 °C
READ OUT AVAILABLE	1350 to 4050 mm