

MMW 100 IMAL PAL

# MMW100 MILLIMETRE WAVE GAUGE FOR TRANSVERSAL SURFACE DENSITY AND MOISTURE MEASUREMENT

The system performs an accurate on-line surface density analysis (weight per surface unit) and moisture analysis along the cross section of the mat being examined.

The analysis is conducted without any contact with the material by exploiting the millimeter wave control technology and the use of non-destructive testing techniques.

## MAIN FEATURES

• Elevated sensitivity and measuring repeatability • No contact with the mat • Device controlled by remote PC • Average profile of the last "x" scans • Graph printing management • Alarm management • Deviation ranges (++)/-- and +/- shown on graph for instantaneous values (and on the averages graph) as the mat is being scanned • Able to operate with any kind of belt (even those with irregular density) thanks to the calibration system • Suitable for any kind of wood-based panel.

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## ADVANTAGES

- The device is not equipped with radioactive isotopes or x-ray tubes
- Real time monitoring of production quality
- Low maintenance costs. Sensor designed on millimetre wave technology with penetration properties equivalent to X-rays but without the side effects or any other X-ray related drawbacks (e.g. no need for cooling systems, no administrative costs related to the safety requirements for X-ray sources)
- The sensor is a standard electronic circuit and so it does not have a limited lifetime requiring frequent replacements like that of an X-ray tube.

## SURFACE DENSITY AND MOISTURE PROFILE GRAPHS

The bar graphs show the surface density and moisture profile along the transversal section of the line; each bar corresponds to the average value of the measurements taken at a minimum distance of 80 mm. These graphs are continually updated as the board moves forward. It is also possible to see the average graphs which give the average of the last "x" scans, where "x" is a programmable parameter.

## TECHNICAL DATA

**MAT WIDTH:** As required (4 m maximum)

**MAT HEIGHT:** 800 mm

**PRODUCTION SPEED:** 35 - 1800 mm/s

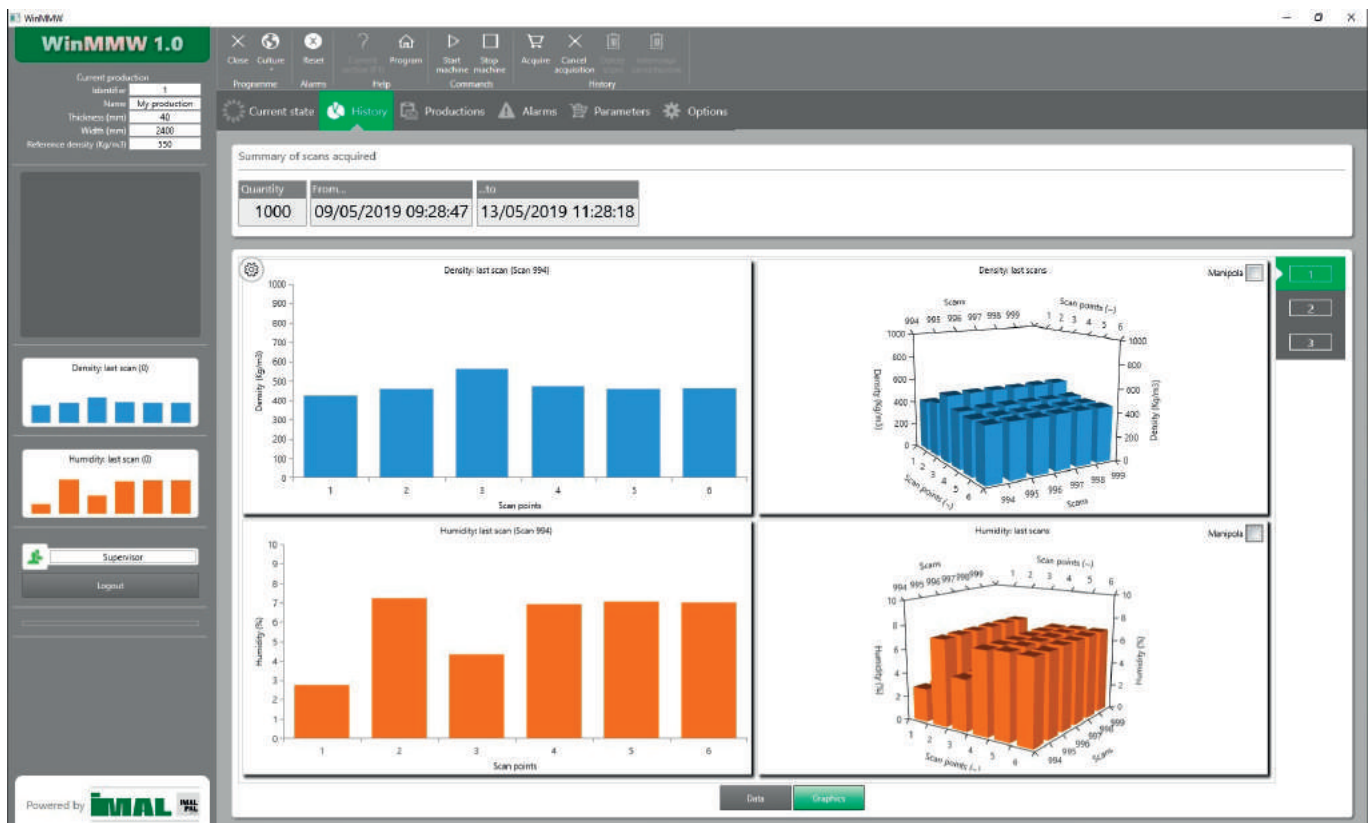
**OPERATING TEMPERATURE RANGE:** +5 ÷ 50 °C

**MAX SCANNING SPEED:** 2 m/s

**DENSITY ACCURACY:** ± 2%

**MOISTURE RANGE:** 0.5% ÷ 15%

**MOISTURE ACCURACY:** ± 2%



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