LABORATORY MOISTURE METER

UM3000

TO ASSESS MOISTURE CONTENT, BOARD DENSITY AND PERCENTAGE OF SCREENING RESIDUE

BEST IN CLASS FOR:

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

The UM3000 has been designed to measure the amount of moisture contained in the material. The material is dried by the heat coming from an infrared lamp. The method used is unaffected by any side effects which may be caused by colour, density, chemical properties or absorption which, with other methods, could produce unreliable results.
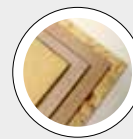
It is equipped with a colour touchscreen for entering the data for the sample to be tested simply and rapidly and where the results are displayed graphically and numerically in a user-friendly manner and stored in the internal database. The unit comes with a printer for printing the report. The results may also be transmitted via Ethernet to the facility's project data management or shared over the IMAL Smartlab platform. A web server is also included to monitor the state of the device with remote connection not only via PC but also via smartphone or tablet.

MAIN FEATURES

• Internal temperature control • Integrated thermal printer to print data and graphs directly • Rapidly calibrated (directly from keyboard) • User friendly interface • Calibration certification using primary reference samples • May be used with all kinds of powdery and/or granular material.

ADVANTAGES

• Elevated measuring precision • Tests carried out rapidly • Measuring repeatability • No maintenance required.

AUTOMATIC P CONTROL

This function enables you to view and print the moisture percentage in relation to the dry weight (ATRO) as well as to the initial weight (Total), showing the month, day and time of the test (hour and minutes). The sample is weighed before and after the drying process. The measuring procedure ends when the variation in weight over a time unit (programmable in seconds) falls below or is equal to the P which has been set (programmable in 1/100 g).

• Ø Dry material: $((Wi-Wf)/Wf)*100$ (moisture to dry weight) • Ø Wet material: $((Wi-Wf)/Wi)*100$ (moisture to total weight) where Wi=initial weight; Wf=end weight.

MANUAL TIMER CONTROL

The operator sets the time for the measuring cycle in minutes, and at the end of the cycle, the final weight and moisture content are displayed and stored and/or printed.

WEIGHT DISTRIBUTION – WEIGHING SCALE

This function enables you to print the weight distribution graph. The samples are obtained by cutting a strip of board into equal parts and weighing each part. Once the sample has been measured, a graph is printed showing the weight distribution and the deviation if any, from the average value.

SCREENING RESIDUE PERCENTAGES SCALE

With this function it is possible to calculate and print the relative percentages of the material which has settled in the various sieves at the end of the screening cycle.
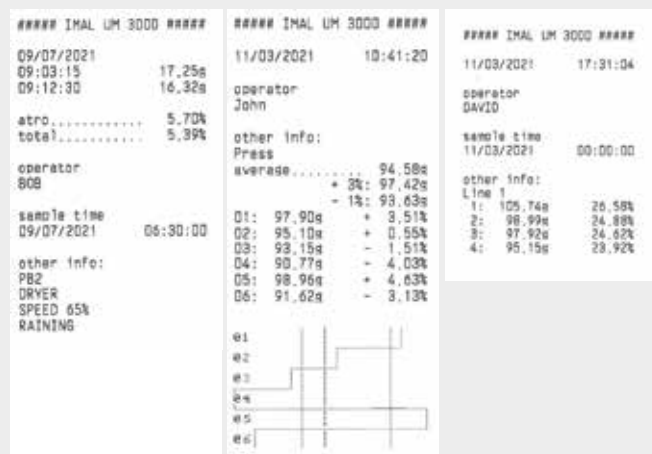
SOFTWARE INTERFACE

TECHNICAL DATA	
MAX CAPACITY	1000 g
READING DIVISION	0.01 g
MOISTURE RESOLUTION	0.01%
ENVIRONMENTAL TEMPERATURE	+5 ÷ 40 °C