• PB • OSB • MDF

IMAL PAL GROUP

LABORATORY MOISTURE METER

UM2000

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

The UM2000 has been designed to measure the amount of moisture contained in the material and to weigh each of the board samples.
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 two large lighted displays and a printer to print the results obtained.

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.

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ITEM 1

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.

ITEM 2

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.

ITEM 3

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.

ITEM 4

With this function it is possible to measure and print the moisture content of board samples in accordance with UNI EN 322 standard requirements.

ITEM 1

```
##### IMAL UM2000 ######
DeltaP Mode dP=2 Atro
S weight:    8.64g
F weight:    8.21g
CORE
Moisture:    5.25 %

05/07/2001   11:34:29


##### IMAL UM2000 ######
Timer Mode   T= 5 Atro
S weight:    8.52 g
F weight:    8.00 g
SURFACE
Moisture:    6.50 %

05/07/2001   11:16:21
```

ITEM 3

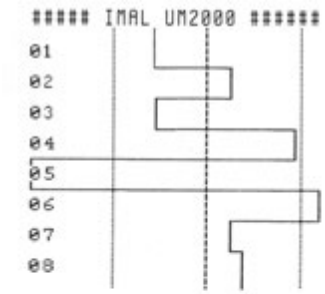
```
##### IMAL UM2000 ######
Average weight: 98.98g

Total weight: 494.91g

Sample 1:  97.96g 19.79%
Sample 2: 102.09g 20.63%
Sample 3:  98.10g 19.82%
Sample 4: 105.62g 21.34%
Sample 5:  91.14g 18.42%

05/07/2001   11:02:11
```

ITEM 2



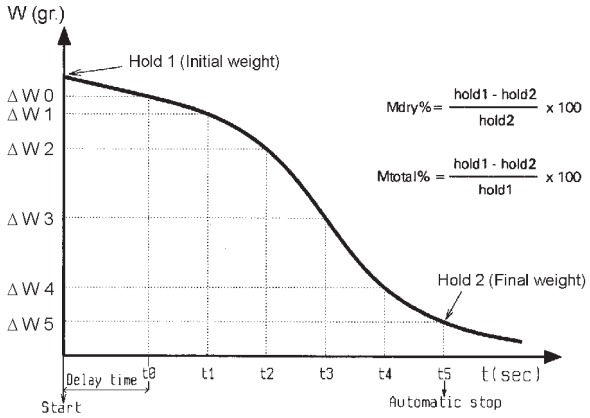

```
Tolerance:  +/-5 %
Average weight: 100.81g

Total weight: 806.51g

Sample 1:  97.96g 12.15%
Sample 2: 102.09g 12.66%
Sample 3:  98.10g 12.16%
Sample 4: 105.62g 13.10%
Sample 5:  91.14g 11.30%
Sample 6: 106.82g 13.24%
Sample 7: 102.09g 12.66%
Sample 8: 102.69g 12.73%

05/07/2001   11:06:01
```

WORKING PRINCIPLE



TECHNICAL DATA	
FULL SCALE	1000 g
SCALE ACCURACY	0.01 g
OPERATING TEMPERATURE RANGE	+5 ÷ 40 °C