

**USERS MANUAL  
WOOD MOISTURE METER  
WRD-50 "TERMITE"**

TECHNICAL DATA

Range	6%-50% moisture cont.
Wood temp. range	0°-50°C
Resolution	1%
Electrodes	10 mm
Display type	LCD 2 digits
Power	9V; (6F22)
Battery Life	about 2000 measurements
Size	185 x 52 x 45

Attention: The selected temperature is indicated by the slanting end of the knob.

PREPARING THE INSTRUMENT

In order to prepare the device for measurements you should select the appropriate wood temperature with the control knob. While still „in the air“ the device can indicate anything from 0 to 5 % (below the bottom limit of the range). This does not influence the final results at all.

DESCRIPTION AND APPLICATIONS

Wood Moisture Meter WRD-50 is a sophisticated electronic device for measuring wood moisture within the range of 6% to 100% of moisture contents. It is widely used in wood industry, sawmills and parquet floor factories. The Moisture Meter is especially design to withstand heavy duty conditions (it is dustproof and shockproof).

MEASUREMENT

To conduct a measurement you should hold the back end of the moisture meter and with a strong, slow but smooth motion push the needles into the wood. A line drawn between the needles should be perpendicular to the fibres in the wood (the measurement of the resistance across the fibres). You should observe not to swing the device as this may bend the needles. After inserting the electrodes into the wood you can read the result. If you do not require a high accuracy result you do not need to use the "Table of Corrections" and you can assume the result to be final.

Remarks:

1. The bottom limit of the range of the Wood Moisture Meter WRD-50 is 6%. If the result is below 6% it is not the value of moisture contents, but only an indication that the moisture contents is below 6%.

It does not matter if the result is 1% or 5%. In both cases you can only state that the moisture contents is below 6%.

2. You can achieve the best accuracy when you insert the electrodes to the depth of 1/3 of the thickness of the timber.

TABLE OF CORRECTIONS

The Table of Corrections is attached to the back of the Moisture Meter. The table contains corrections for wood types. The Moisture Meter is calibrated for soft, deciduous wood and for this types of wood you do not need any corrections (the correction is "0"). For all other wood types you should apply the corrections to your final results.

Examples:

- If the indicated result is for example 24% and the wood type is pine then the correct result is  $24 + 1.5 = 25.5\%$

- If the indicated result is for example 16% and the wood type is oak then the correct result is  $16 - 1.0 = 15\%$

During the measurements you should observe the following recommendations:

- make the measurement in the middle of the plank at least 0.5 m from the each end (or in the middle for short planks).
- the places for the measurements should be selected randomly,
- do not make the measurements where there are defects in the wood,
- make from 2 to 4 measurements on each side of the plank,
- in each spot you should make not less than 3 separate measurements 10 – 15 mm apart,
- the final result is the arithmetic average of the results

POWER LEVEL CONTROL

The instrument is equipped with a power level control unit. When the power drops below acceptable level two dots appear on the display (for example: •2•1). This indicates that the battery has expired and should be replaced with a new one.

Warning:

If the dots appear only temporarily just after switching on the power or while rubbing the display (even with the power of) the situation is normal and does not require any actions.

CHANGING THE BATTERIES AND STORAGE

The device should be stored in dry conditions. The battery should be replaced as it expires however at least every 6 months. To replace

the battery unscrew 4 screws at the back of the instrument and carefully remove the back panel. Pay special attention not to cut any wires with the panels while screwing them back together.

CHANGING THE ELECTRODES

The used electrodes (bend or broken) should be replaced with new ones. To replace the electrodes use a S12 wrench to unscrew the screw caps holding the needles; insert new needles and screw the caps back carefully.

The needles are simple  $\phi 1.5$  mm x 20 mm. nails for concrete.

The set contains:

- wrench S12 - 1 pc
- needles  $\phi 1.5$  mm x 20 mm - 20 pcs

SERVICE

The Wood Moisture Meter WRD-50 has a 12 months guarantee.

All repairs during the guarantee period will be done within 7 days from the date of delivery.

All other repairs will be done within 10 days from the date of delivery.

The instrument is shockproof and can be mailed by post.

PRODUCER



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GUARANTEE

The manufacturer guarantees the correct functioning of the Wood Moisture Meter WRD-50 under normal use for a period of 12 months:

Serial number: .....

Production date: .....

Date of purchase: .....

WOOD TYPES

sosna	pine
swierk	spruce
jodla	fir
brzoza	birch
klon	maple
jawor	great maple
jesion	ash
buk	beech
dab	oak
orzec	walnut
topola	poplar