EXOTEK

HUMITEST
MC-50C

Electronic Moisture Meter
for Carton /Cardboard

USER'S MANUAL

ENG

INTRODUCTION

With the moisture measuring instrument ***Humitest MC-50C***, *EXOTEK AB* has introduced an hand-held moisture measuring unit, incorporating electronic circuitry perfected over years of development and practical application.

This meter measures the moisture content (% water) in Carton/Cardboard.

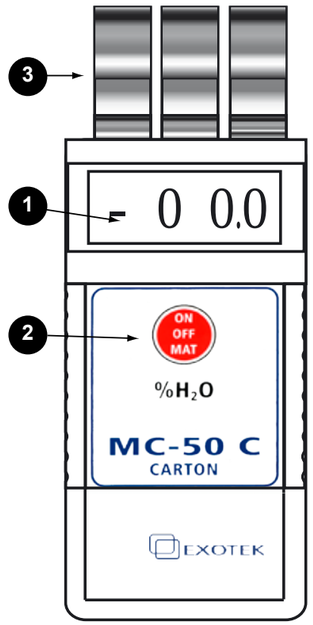
The non-abrasive measurement procedure gives a quick determination of the moisture in cardboard. The setting of the material type combined with the automatic zero-correction, allow exact measurements.

TECHNICAL SPECIFICATIONS

Measuring method:	High frequency dielectric constant
Measuring range Cardboard:	0 - 100 % moisture content (H_2O)
Working conditions, temp / RH:	-10° to +60° C 0 to 90% RH (non-condensing)
Resolution:	0,1%
Field penetration depth:	Approx. 30 mm
Max storage temperature:	-20 to +60° C
Power supply:	9 V alkali battery
Display:	LCD digital
Dimensions:	150 x 60 x 30 mm
Weight approx.:	160 g. incl. battery
Housing material:	ABS
Sensor material:	Chrome plated steel
Carrying case:	Soft
Warranty:	1 year
Auto power off:	After 2 minutes
Low battery warning	”←“ appears on the LCD

Meter Description

1. LCD Display
2. On/Off/Material selection button
3. Measuring Springs



The battery hatch is located on the rear of the instrument

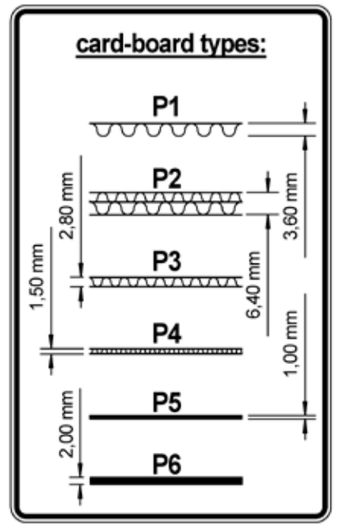
OPERATIONS

Press the red ON/OFF/MAT button to turn the meter on. Hold down the ON/OFF/MAT button for more than 3 seconds to turn the meter off. The meter will automatically power off after 2 minutes.

SELECTION OF CARTON / CARDBOARD GROUPS

Carton or corrugated cardboard materials are arranged in groups based on density and design, Before measurement select the group that best describes the material to be tested.
After the unit has been switched on, the previous selected group for carton is indicated on the Display (P1- P6). Use the ON/OFF/MAT button to step through and select the appropriate group.

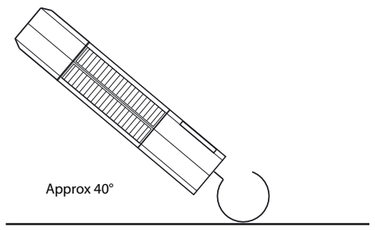
PIN-FREE MOISTURE METERS
MANUAL MC-50C



Number of sheets:
2 pcs
3 pcs
3 pcs
6 pcs
7 pcs
6 pcs

MEASURING PROCEDURE

1. Select the appropriate cardboard-group using the red push-button.
2. Hold the unit up in the air and away from any objects. The unit is ”ready for use“ after about 2 sec. On the display the figures ”-00.0 “ will appear.
3. Place the meter on a flat surface tilted at a 40° angle ensuring that the 3 electrode have good contact with the surface. Measurements may be taken on different spots of the material, or the measuring springs can be „pulled“ across the material.



MEASUREMENT CONSIDERATIONS

- A false positive value (High moisture content) can be the result if there are any metal objects within the scanning range (30-50 mm).
- Conductive paper (with electrical characteristics) will also show false positive values i.e. high moisture content.
- To obtain exact measuring results, we recommend measurements in a pile, but take care in getting a thickness of 20 mm minimum, as well as having no air spaces between the single sheets.
- It is imperative with material thickness less than 50 mm not to use a metal base. The best results are taken, if the material to be measured is hold into the air. You also can use polystyrene with a minimum thickness of 50 mm.

MEASUREMENT METHOD

The MC-50C is a capacitance measuring moisture meter. It works on the principle of measuring the dielectric constant. A high frequency electrical field penetrates the material to be measured and produces a signal which is related to the moisture content. The result is displayed after evaluation by the microprocessor and compensated by the zero point measurement and the material group selection.

BATTERY REPLACEMENT

The MC-50C is equipped with an international standardized 9-Volt alkali block-battery. In case of low voltage, an arrow ”←“ appears at the left upper side of the display. To ensure further, correct measuring results. The battery has to be exchanged.

CLEANING

Use a dry cloth to clean the plastic case.