



PCE Americas Inc.  
711 Commerce Way  
Suite 8  
Jupiter  
FL-33458  
USA  
From outside US: +1  
Tel: (561) 320-9162  
Fax: (561) 320-9176  
info@pce-americas.com

PCE Instruments UK Ltd.  
Units 12/13  
Southpoint Business Park  
Ensign way  
Hampshire / Southampton  
United Kingdom, SO31 4RF  
From outside UK: +44  
Tel: (0) 2380 98703 0  
Fax: (0) 2380 98703 9  
info@industrial-needs.com

[www.pce-instruments.com/english](http://www.pce-instruments.com/english)  
[www.pce-instruments.com](http://www.pce-instruments.com)

## MOISTURE METER FOR PELLETS PCE-PEL 20

### USERS MANUAL





## **WOOD MOISTURE METER FOR PELLETS PCE-PEL 20**

### **USERS MANUAL**

#### **Application**

Moisture Meter PCE-PEL 20 is designed for approximate measurements of moisture contents in pellets made of sawdust, scobs, wood shavings, hay and straw, dried fruit waste, fragmented waste paper, sunflower hull, buckwheat hull, bran, chaff, sunflower and corn stem, ground grain, rape and soy oilseed cake. It can be used for preliminary measurements of moisture contents of pellets delivered to power stations. As most other moisture meters the PCE-PEL 20 measures the resistance of the material. The measurement is done by inserting the electrode into a heap of pellets.

#### **Technical data**

Range	10% ÷ 20%
Temperature compensation	0 ÷ 50°C
Display	LCD 3 digits
Electrodes	∅ 10 x 1000 mm
Electrodes material	acid-proof steel
Power	12V (battery 23A)
Auto power off	yes, after 10 minutes
Battery life	approx. 10 000 measurements
Size	60 x 50 x 1000 (1500) mm

### Moisture contents measurements

Conduct the measurement as follows:

- press and hold the „ON/OFF“ switch to turn the device on,
- use the „MATERIAL“ button to select the appropriate type of pellets,
- use the „TEMPERATURE“ button to set the approximate temperature of pellets (accuracy of  $\pm 5^{\circ}\text{C}$  is enough),
- insert the electrode into a heap of pellets and wait until the result stabilizes,
- read the result.

Results over or below the measuring range are indicated as follows:

- below 10% - LO,
- over 20% - HI.

### Exploitation remarks:

1. **Do not sway the electrode while inserting it into a heap of pellets as it may break off the measuring tip.**
2. The device indicates moisture contents at the location of the tip of the measuring electrode.
3. Conduct several measurements and calculate an average result.
4. The result is influenced (beside moisture contents) by other factors:
  - pellet size,
  - distribution of moisture contents across the grain section,
  - differences in chemical composition between pellets of the same type (e.g. barley straw and rye straw).
5. Avoid placing a „cold“ electrode into „warm“ pellets in order to prevent condensation.

### Battery replacement

The instrument is equipped with a power level control unit. When the power drops below acceptable level a sign "LO BAT" appears on the left side of the LCD. This indicates that the battery has expired and should be replaced with a new one.

To replace the battery!

- unscrew the plastic cork in the handle of the device (an internal spring will push the battery out),
- gently slide the battery compartment out of the handle (but no further),
- remove the old battery,
- put the new battery into the compartment (pay attention to correct polarization – minus towards the spring),
- push the battery compartment back in and screw the plastic cork back on.

Store the device in a dry place.

**Limitations**

This warranty becomes null and void if you fail to pack your PCE-PEL 20 in a manner consistent with the original product packaging and damage occurs during product shipment.

This warranty does not cover: circumstance beyond our company's control; service required as the result of unauthorized modifications or service; misuse, abuse; failure to follow our company operating or maintenance instructions.

Repair or replacement without charge is our company's only obligation under this warranty. Our company will not be responsible for any special, consequential or incidental damages resulting from the purchase, use, or improper functioning of this equipment regardless of the cause. Such damages for which our company's will not be responsible include, but are not limited to, loss of revenue or profit, downtime costs, loss of use of the equipment, cost of any substitute equipment, facilities of services, or claims of your customers for such damages.

Serial number .....

Production date .....

