

# Grain moisture meter FS2000



**Messtechnik  
Schaller GmbH**



- ◇ You dry too long and therefore sell too cheap?
- ◇ Do you have problems with mould resulting from damage caused by moisture?
- ◇ You buy water for the price of fuel?
- ◇ You pay too much money for drying?
- ◇ Does mouldy animal feed cause you losses?

- ☑ Reduce failure of drying!
- ☑ Protects against the formation of mould and resulting damage.
- ☑ Use a non-destructive measuring method of whole grains!



To high or to low moisture increases your costs!

- × Whole grain meter for evaluating storage suitability
- × Save time with a measuring process that takes a few seconds only
- × Mobile pocket size device
- × Applications requiring high precision for which no measuring with scales is possible

Device	Calibration accuracy	Measuring range	Species	Sample	Interface
FS2000	1,5 %	12 – 18 % *	6	5 cm **	
FS1	1,0 %	5 – 30 %	12	100 ml	
FS2	0,6 %	5 – 40 %	14	300 g	
FS4	0,4 %	0 – 50 %	36	300 g	✓

\* moisture depending on the calibration curve, \*\* 5 cm height of maize



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## General information about material moisture:



In the field of moisture measuring there are two kinds of moisture:  
Relative equilibrium moisture content and absolute moisture of material.



The relative equilibrium moisture content of a material indicates the relative moisture of ambient air counterbalancing the material. In this case the material does not absorb or release any moisture.



The absolute moisture of material indicates the percentage of water content of a material referred to the total weight (paper, grain,...) and with some materials (e.g. wood) referred to the dry mass.



Almost all materials in our surroundings are hygroscopic. This means that they soak up moisture from the surroundings or set moisture free.

## Everything depends on the content of moisture!



In case grain becomes mouldy or farmers dry wheat too long, they have to sell it at a lower price. The less moisture grain contains the lighter it becomes.



If, for example, two pieces of the same kind of material (e.g. wood) containing different levels of moisture are glued together, the pieces can break apart due to loss of moisture and shrinkage of one piece resulting from that loss. Who does not know those beautiful but shaky wooden floors as a result of loss of moisture?



Another example: Two pieces of leather, one containing a lot of moisture and the other with a moisture value adapted to the air, are sewed together. The effect is the same as the one above. The moist piece of leather releases moisture into the air while shrinking at the same time. As result you get is a wavy seam.



If grain or chips of wood are stored in a place that is too moist, they become mouldy, thus resulting in a considerable degradation of quality. There can also be problems in further processing or even a standstill of machines.



You buy water at a high product price, for example in coffee, paper etc. Or take biomass fuels for example where additionally the utilization ratio quite soon decreases by half with increasing water content.



Iron in reinforced concrete bridges rusts and Rembrandt's paintings in museums fade or get cracks.

**In order to avoid these costly mistakes, moisture of materials in manufacturing and treatment processes must be checked in order to give you the chance to take suitable measures in time.**

**Should you have any problems like the ones mentioned above or any other questions concerning moisture, please contact us: +43(0)3112 / 6120 -0 – [office@schaller-gmbh.at](mailto:office@schaller-gmbh.at)**

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## Application description for FS2000 Grain moisture meters:

Grain moisture meter for maize, rye, triticale, wheat, barley  
and test- calibration curve for several materials



### Technical data:

Measuring range	12 to 18% moisture depending on the calibration curve
Temperature compensation	automatically
Measurement of whole grains	✓
Measuring depth	30mm
Operation temperature range	5°C to +35°C
Power supply	9 Volt battery
Display	LC-Display 3-digit
Resolution of measured data	0.1% moisture
Dimensions / weight	60x 120 x 26 mm / appr. 140 g
<b>FS2000 Grain moisture meter</b>	<b>10468</b>
Optional accessories	Wooden case incl. test plate