

General:

A task that all persons handling grain repeatedly have to do is to check the moisture content of the goods being handled. The IIMC moisture meter from TORNUM simplifies this process and can be connected via a hose wherever there is a flow of grain, such as after an elevator, before or after the dryer.

Watch a film of TORNUM's IIMC in operation at <http://www.tornum.se/?p=10833>



The TORNUM IIMC is patent-pending.

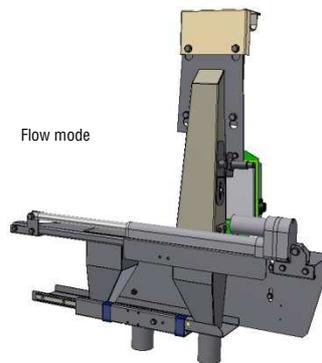
Functional description:

The moisture meter collects grain from a grain flow in the plant. The goods to be checked are collected in a container fitted with a level indicator. When the level indicator shows that the container is full, a sample of the moisture level is taken electronically. When the moisture level has been recorded, the container is emptied and the checked goods drop down and back into the plant at a suitable point. After emptying, the measuring container is refilled and a new measurement is taken. This is repeated continuously depending on the requirements of the user.

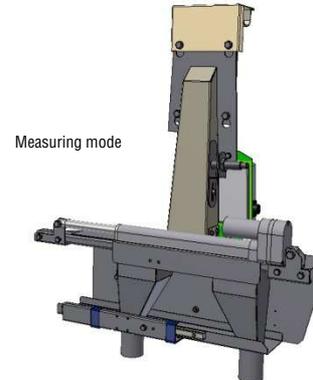
The measuring part of the moisture meter is connected electrically to a control unit that the user can place at a suitable point in the plant. The unit allows the user to enter the type of grain to be measured and to read each measurement, as well as the average value measurements. The user can also start and stop the measurements and start the calibration measuring via the unit. The meter will prompt the user to carry out a calibration at certain intervals. When the user acknowledges the calibration, the grain volume is emptied into a special calibration vessel. The user is now given the option to measure the moisture content of this volume himself and perform the calibration. The process is simple; the user just has to enter the moisture content he has measured and the meter will adjust itself to the new level.

Examples of further areas of application:

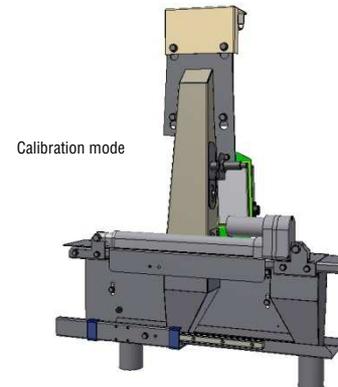
Batch drying with load cells: in the case of batch drying using weight control, it is important to know the constituent moisture of the goods in the dryer before drying. If the user knows the moisture content of the goods before drying, using this method is a very precise way of drying the grain to the right moisture content. The IIMC from TORNUM can then determine the average moisture content. The user activates the average value function when starting to fill the dryer. The meter then takes regular samples of the grain as the dryer fills. During the filling period, a number of measurements are taken and the average value of these measurements is then displayed when the dryer is full and the measuring process has ended. This average value can then be entered into the weight control, which will give a very accurate final result. All the measurements taken during the period are recorded and can naturally also be read off during the filling process.



Flow mode



Measuring mode



Calibration mode



Other details:

In its basic specification, the moisture meter is able to measure:

- Wheat 13-24%
- Oats 13-24%
- Rye 13-24%
- Barley 13-24%
- Rape 8-16%
- Maize 12-25%

The meter is designed to provide high-precision measurements at temperatures of between 5°C and 30°C.

The associated electrical cabinet should be installed in a suitable place close to the meter.

Max. 25 m distance for motor cable, size 1.5 mm²

Max. 25 m distance for control cable, size 0.75 mm²

The moisture meter must be connected by a qualified electrician.

Feed 1 phase 230V 10A.



Part code:	970262	Moisture meter for hose connection Ø50 mm complete with sampler for elevator.
Accessories:	512135	Hose Ø50 mm.
	770161	Connector pipe for hose Ø50 mm.
	514025	Hose clamp Ø50 mm.
	770162	Hose bracket
	512034	Cable tie
	770170	Rain protection

Connection to the main control system: Contact TORNUM AB.