

Process Units MW 4260 / MW 4270

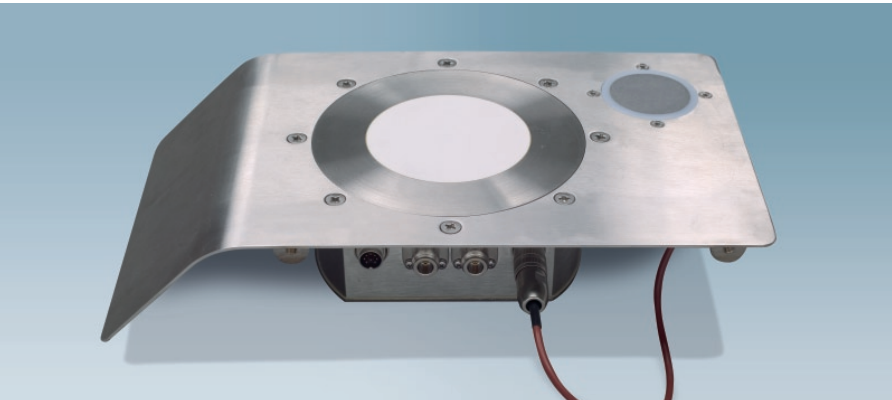
Accurate Online Measuring of Material Moisture



Moisture is a key characteristic in determining product quality during the processing of food and feedstuffs, chemical, pharmaceutical and mineral substances etc. Online moisture measuring – continuous measuring of products passing a sensor on a production line – is often the best way to maintain instant quality control.

High measuring throughput

Whereas conventional lab-based moisture measuring methods such as drying balances, drying kilns or semi-micro titration will return accurate results if handled correctly, they will also take at least a couple of minutes or, with some products, several hours before they do. These measuring methods are not suitable when a continuous stream of accurate results is required for process or quality control. The microwave resonance method developed by TEWS Elektronik delivers results within a fraction of a second, with the total measuring speed peaking at more than 100 readings per second. This is enough to analyze even quickly flowing products.



Insensitive to interference

There are various methods of online moisture measuring to choose from. Unlike other systems, TEWS Elektronik sensor readings will not be corrupted by varying product properties (e.g. density, color, graining, surface drying) or by ambient conditions at the measuring point (dust, different piling heights). Our systems are designed to be insensitive to such interference.

Practical equipment



Like the units for laboratory use, the process measuring units are also made with tough industry environments in mind. For example, MW 42XX-series units optionally come in a compact housing equipped with a 24V power supply for cabinet or tie-bar installation. Variants with special explosion protection are available. All units feature a complete set of standard interfaces for sensor value output, the transfer of control signals or for communication with top-level control units. MW 42XX-series process measuring systems accept all sensors from our "Blueline®" model range.

Touch screen and PC operation

The online measuring unit MW 4270 has a color touch screen monitor which displays results at the measuring point itself and allows the operator to change any configuration settings immediately at the unit. MW 4260 has a LC display for showing the sensor readings. If settings need to be modified on-site, this can be done using the built-in controls. The capabilities of the unit can be enhanced by connecting the MW 4260 to a PC and running the software TEWS Moisture View, which is included in the package.

STANDARD INTERFACES OF MW 4200 PROCESS MEASURING UNITS:

- Serial RS 422 (PC,PLC etc.)
- Serial RS 232 (modem, service)
- Ethernet
- 1 analog input (0/4–20mA)
- 3 analog outputs (0/4–20mA)
- 8 no potential digital inputs
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- Automatic sensor detection