

### Measuring the Moisture in Foods and Feedstuffs

## Fast and accurate Measuring to save you Time and Money

The amount of water contained in foods and primary products is vital to quality, processing and durability. The legal requirements concerning food products also need to be taken into account. Ensuring the correct product moisture at all stages of the manufacturing process requires continuously measuring the actual product or samples of it. Conventional moisture measuring involves a drying kiln or a drying balance - which often demand some preparation of samples and



will always impose some delay before a result is obtained: a couple of minutes if all goes well or frequently several hours.

#### Immediate results

Moisture meters supplied by TEWS Elektronik provide you with immediate results. Extremely fast results and simple operation of the measuring instrument save you considerable time. All TEWS' laboratory systems and process systems are simple to operate and almost entirely maintenance-free.

#### No preparation of samples

Results obtained with the microwave resonance method of moisture measuring are not influenced by the density, height of pile or color of the product analyzed. Therefore, natural variations in the grain size, color, mineral content, etc. especially of grains, oilseeds and products made from primary produce, will not affect results. Another problem with conventional laboratory measuring is that samples need to be precisely weighed. Process systems benefit from the

sensor value being unaffected by the amount of product on the sensor or by varying grain sizes. A broad range of laboratory sensors also enables moisture measuring of many different products, even with large-size particles, in their original shape and form without grinding or any other preparation.

**Total moisture** Microwave measuring will detect the moisture at both the surface and core of the product. This gives them an advantage when measuring those difficult products which, for example, may be dried at the surface only. Both drying processes and optical measuring methods will find it difficult to measure those products.



#### PRACTICAL EXAMPLES:

Product		Moisture Range
Wheat flour		5 – 13%
Sugar		0.1 – 0.4%
Banana chips	dried fruit	1.6 – 3%
Soybeans	whole and ground	8 – 13%
Rapeseed		5 – 13%
Pasta	beaker sensor	5 – 16%
Chives	dried herb	1 – 7.5%
Almonds	whole and chopped	5 – 10%
Marzipan	beaker sensor	7 – 16%
Hops	umbels	7 – 16%
Alfalfa	animal feed	6 – 14%
Pet food	pellets	6 – 16%