METER

The Precision Of An Oven With The Efficiency Of A Moisture Balance

- Conform with AOAC, ASTM, ISO
- Get trustworthy results, regardless of the user or location
- Improve precision of in-line instruments with more frequent calibration routines
- Free scientists and techs to do more profitable work
- Get insights from detailed drydown curves
- Stop looking for a better moisture method

The ROS 1 Moisture Analyzer determines moisture content from nine samples in less time than the oven with reference-method precision.

Oven-identical heating
Halogen bulbs often burn off volatiles and promote melting, scorching, and case hardening. The ROS 1 heats more consistently, maintaining the exact temperatures of a drying oven paired with automated, accurate weighing and remarkable speed.

Faster finish
ROS 1 doesn't heat samples to a higher temperature. It's faster because continuous monitoring plus a revolutionary drying algorithm allow ROS 1 to determine the drying endpoint precisely when set to dry to a constant weight. Note that different samples will require different drying times, as they do with any method. You can dry to a specific time and temperature or to constant weight.

Precise results
ROS 1 is in the same class of precision as oven and Karl Fischer moisture methods, while moisture balances have a relative standard deviation two to three times greater.

Reference MC goes digital
Let's face it, your NIR starts losing precision the day after you calibrate it. Technology has improved secondary moisture methods, but their precision depends on calibration to the same old standards, Karl Fischer and oven loss-on-drying. ROS 1 makes the reference method modern: efficient enough to revolutionize your calibration schedule—and the precision of your in-line measurements.

All the data
Get all the points in your dry-down curve without ever picking up a pencil. Unlike microwaves and moisture balances, ROS 1 lets you see exactly what it's doing. And records it all so you can reference it later.
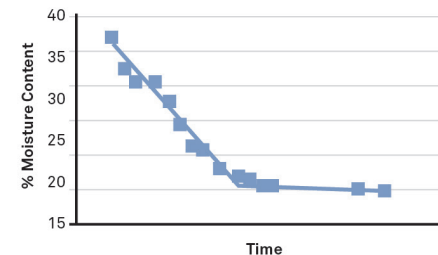
ROS 1's constant-weight mode lets you nail your endpoint.

When you dry to constant weight, ROS 1 uses a revolutionary algorithm to smooth out the curve, allowing you to determine dwdt with precision.

Instead of leaving samples in the oven for hours to be sure they're dry, you can determine the precise drying endpoint for each sample.

Get faster results in a reference method that removes all the water at a safe temperature.

Moisture Range

Range .... 0.1% to 100%
Accuracy 0.15%
Repeatability (4 g Sample)............... 0.05%
Repeatability (10 g Sample) 0.01%
Method .... Loss-on-drying
using any standard method

Balance

Readability .... 0.0001 g
Minimum .... 0 g
Maximum .... 50 g
Calibration .... Menu driven
Samples
Number 9
Size Range .... 1–15 g

Physical Specifications

Drying Unit

Heat Source .... Resistive coils provide conductive heat
Temperature Range .... 50–150 ºC
Temperature
Adjustment Increments .... 1 ºC

Case Dimensions

Length... 38.1cm (15.0 in)
Width .... 30.5 cm (12.0 in)
Height .... 20.3 cm (8.0 in)
Case Material................................... Powder-coated steel
Sample Cup Capacity .... 5.70 cm (2.25 in) diameter,
1.30 cm (0.51 in) height
Weight .... 12.5 kg (27.5 lb)

Operating Temperature

Minimum .... 4 ºC
Typical... NA
Maximum .... 50 ºC
Operating Environment .... 0% to 90% non condensing
Data Communications .... Serial over USB
Power .... 110 to 220 VAC
.... 50/60 Hz

COMPLIANCE
Manufactured under ISO 9001:2015
EM ISO/IEC 17050:2010 (CE Mark)

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