Halogen Moisture Analyzers

HB43-S, HG63 and HR83

Fast

Precise

Reliable

Top Performance
with Halogen Technology

METTLER TOLEDO

High-Speed Precision
For a wide application range

Whenever the correct moisture content has a decisive influence on the quality of end products: A METTLER TOLEDO moisture analyzer will give you the results you need with unsurpassed accuracy, speed and reliability. METTLER TOLEDO moisture analyzers are robust, easy to use and are built for long and reliable operation. They offer both precision and speed. You save time and costs – in the laboratory and on the factory floor.

Top Performance on Three Levels:

HB43-S
The workhorse
Ideal for measurements in production environments

HG63
The precision instrument
Perfect for routine tests in the laboratory

HR83
The high-end solution
For highest demands and regulated areas

Broad Range of Applications | Food and beverages

Plastics

Pharmaceuticals

Chemicals

Cosmetics

Textiles

Cellulose and paper

Tobacco

Waste water

The Workhorse on the Factory Floor
Fast, robust, reliable

Make routine inspection easy with the HB43-S Moisture Analyzer. It combines proven METTLER TOLEDO weighing technology with ultrafast halogen heating. The compact design saves space, while the robust components guarantee a long service life, even in harsh environments.

Easy Operation
Simply choose your drying method by pressing method key A or B, open the cover and the HB43-S guides you through the measurement. The brilliant display and clear user-guidance ensure trouble-free operations in the factory and in the laboratory.

Fast Measurements
If you need your results even faster, a single push of a button is enough to select the fast drying program.

Tried-and-Tested
The proven measurement technology delivers reliable results in all environments. The robust design, flat surfaces and easily accessible components make cleaning and maintenance a breeze.

Ready-to-use method library
The integrated method library offers ready-to-use methods for more than 100 substances. Method development becomes simple and fast. All methods are fully tested and compliant to official regulations.

Easy cleaning

Integrated method library

HB43-S in the Food Industry: The best recipe for error-free results

Wherever quality and shelf life depend on the moisture content, it is vital to get fast and accurate moisture analyses. The HB43-S moisture analyzer offers everything you need: simple operation, clear user guidance, proven test methods and compact dimensions.

**HB43-S
Your Workhorse for
Routine Tests**

Direct access to 2 methods
Rapid drying program
Rugged, compact and easy to clean

The Precision Instrument for the QC Lab
Accurate, efficient, versatile

Efficient quality control has to rely on exact measurements – choose the HG63 for its highly precise analytical weighing technology and excellent repeatability. All test parameters and measurements are documented on the integrated printer, for GLP/GMP-compatible protocols.

Highly reproducible
Halogen technology stands for fast and uniform drying and precise temperature control. The high resolution of the analytical balance integrated in the HG63 ensures good repeatability and highly accurate results

Efficient Routine Work
The brilliant display, clear operating procedures and graphic user guidance ensure error-free and consistent measurements. The automatic drawer and the patented sample holder make your routine work even more efficient.

Fast Method Development
The integrated test function helps you determine the optimum test parameters for each substance. This saves time and reduces labor costs. Up to 10 methods can be saved for direct access.

Three Steps to Perfect Results
Moisture measurements require just three operator steps: Tare the sample pan, insert the sample and press start. The measurement runs automatically and delivers reliable results within minutes.

Safe sample handling
Automatic drawer
Easy operations

Brilliant display and GLP/GMP compliant protocols

HG63 – Keeps Your Business Running

Higher productivity thanks to optimized process control and full documentation: The HG63 offers optimum measurement performance for fast and precise moisture determination.

HG63
The Precision Instrument in the QC Laboratory

Analytical weighing technology
Direct access to 10 methods
Simple operating procedures
Automatic sample chamber

The Solution for High-End Requirements
Highest resolution and greatest security

The HR83 is the right instrument for use in regulated sectors, such as the pharmaceutical industry, and for all applications requiring maximum measurement accuracy, for example in plastics processing. The HR83 offers powerful analytical and QM tools to meet the strictest demands in research, production and quality control.
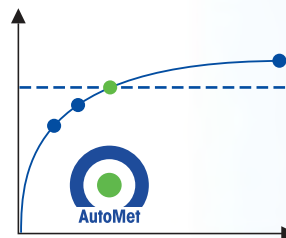

AutoMet

Outstanding Measurement Performance
The HR83 allows reliable analyses of substances with very low moisture content. The state-of-the art measurement technology with a resolution of 10ppm moisture content and the excellent repeatability provide superb measurement performance.

Greatest Security
The HR83 offers all necessary tools to comply with SOP and regulations including
- Three-level password protection
- Sample and user ID
- Calibration of the heating module at operating temperature: An exclusive feature of the HR83.

AutoMet for Fastest Method Development
The unique AutoMet function automatically determines the optimum test criteria for each new substance. This reduces development time by up to 50%.

Temperature calibration at point-of-use

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--- HEIZMODUL-TEST-1 ---
10.02.2008          19:03

METTLER-TOLEDO
Halogen MoistureAnalyzer
Type:            HR83
SNR:        1113143097
SW:             1.92

Justierset ID:

.........................
Soll-Temperatur:  65 °C
Ist-Temperatur:   64 °C
Toleranz:     +/- 3 °C

Test-Ergebnis:
Bestanden

Test ausgeführt
Unterschrift:

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---------- ENDE ----------
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Fully documented instrument check

HR83 in Plastics Processing
Increase your profitability through precise moisture analyses. Say goodbye to process and quality problems with the HR83: The right moisture content of your raw materials ensures trouble-free compounding and injection molding processes, smooth surfaces and ideal mechanical properties of the injection-molded parts.

**HR83
for the Highest Speed and
Greatest Accuracy**

Excellent precision and highest resolution
Fast method development
Direct access to 40 methods
User ID and password protection
Calibration at point-of-use

Technical Data

Moisture Content	HB43-S	HG63	HR83
Readability	0.01%	0.01%	0.01% / 0.001%
Repeatability (sd) with 2 g sample	0.10%	0.05%	0.05%
Repeatability (sd) with 10 g sample	0.015%	0.01%	0.01%
Display modes and functions			
Moisture and dry content in %	installed	installed	installed
Weight in g	installed	installed	installed
ATRO Dry, ATRO Wet	installed	installed	installed
Statistics function	no	no	can be activated
Journal function	no	no	can be activated
Balance			
Capacity	54g	61g	81g
Min. sample weight	0.5g	0.1g	0.1g
Readability	1mg	1mg	1mg / 0.1mg
Drying unit			
Technology	Halogen	Halogen	Halogen
Temperature range	50-200°C	40-200°C	40-200°C
Adjustment increments	1°C	1°C	1°C
Temperature programs	standard, rapid, LP16	standard, rapid	standard, rapid, step, gentle
Switch-off			
Manual	installed	installed	installed
Time controlled (minutes)	1-480	0.5-480	0.5-480
Automatic (in 5 steps) and Free criteria	installed	installed	installed
User support			
Testfunction	no	installed	installed
Automatic method development	no	no	AutoMet
Method memory	2	10	40
Method library	installed	no	no
Method designation	alpha-numeric	numeric	alpha-numeric
Comment lines (alpha numeric) per sample	no	1	4
Free factor	-10 /+10	FFMC/FFW	FFMC/FFW
Method linking	no	no	installed
Standby temperature	no	no	installed
Printer	external	can be built in	can be built in
Interface	RS232	LocalCan/opt. RS232	LocalCan/opt. RS232
Quality management			
Balance adjustment	20 g	50 g	50 g
Balance test	no	50 g	0.1 g - 80 g
Heating module adjustment	100/160°C	100/160°C	100/160°C
Heating module test	no	2-point Test	2-Point Test or point-of-use
Weighing-in aid	passive	active / passive	active / passive
Password	no	no	3-Level
Change protection	installed	installed	installed
GLP/GMP-compliant printouts	installed	installed	installed

Accessories HB43-S / HG63 / HR83	MT part no.	Remarks
Sample handling (∅ 90 mm)		
Aluminum sample pan, HA-D90	00013865	Set of 80
Prof. aluminum sample pan (extra strong)	11113863	Set of 80
Reusable sample pan (steel, height 6 mm) HA-DR1	00214462	Set of 3
Reusable sample pan (steel, height 15 mm)	00013954	1 piece
Textile weighing pan, HA-CAGE (gold cage for voluminous samples)	00214695	1 piece
Sample-pan handler, HA-PH	00214526	Set of 3
Glass-fiber disks, HA-F1	00214464	Set of 100
Printers		
Printer RS-P42 (only for HB43-S)	00229265	
Printer RS-P26 (only for HB43-S)	12120788	
Printer paper	00072456	Set of 5 rolls
Printer paper (self-adhesive)	11600388	Set of 3 rolls
Printer ribbon, black	00065975	Set of 2
Quality management		
Certified Temperature adjustment set, HA-TCC	00214528	40°C to 200°C
Certified adjustment weight 20 g (Class F1)	11119529	
Certified adjustment weight 50 g (Class F1)	11119530	
Tweezer	11116540	
Accessories		
Chemical-resistant protective cover HG63/HR83	00214533	Set of 2
Chemical-resistant protective cover HB43-S	11113363	Set of 2
Barcode reader	21901297	MT Heron-G D130
RS232 F Cable (CAB-327)	21901305	
Null Modem Adapter 9P M/M	21900924	

Accessories

Sample pans
Thanks to its perfect surface finish the aluminium sample pans ensure optimal testing conditions.

Glass fibre filters
The adsorbent glass fibre filters simplify testing of liquid and pasty substances and prevent film building.

Textile weighing pan
The gold-plated cage is the ideal solution for measuring voluminous samples such as textiles.

Reusable sample pan
This robust stainless steel sample pan can be easily cleaned and re-used for each new measurement.

Save time and costs

METTLER TOLEDO offers not only the right Moisture Analyzer for your application, in addition we offer several tools which enable you to work even more effectively with these instruments.

IPac Moisture
The fastest way to quality and compliance: IPac Moisture ensures that the Moisture Analyzer is correctly configured under working conditions. The users are trained, the installation and qualification of the instrument is fully documented. An important requirement for successful audits.

LabX direct moisture
Automatic transfer of measurement data into Excel® – including drying method parameters, instrument and sample information. Visualization of drying curves for perfect overview.

www.mt.com

For more information