

Moisture Analyzers



Halogen Moisture Analyzers HX204 / HS153

Peace of Mind Assured

Boost Productivity



Moisture Matters
Best Results Delivered

METTLER TOLEDO

Excellence Moisture Analyzers

Peace of Mind and Productivity

When moisture matters, METTLER TOLEDO Excellence Moisture Analyzers deliver outstanding value. The innovative hanging weighing pan provides best measurement performance with highly reliable results in the shortest time possible. The One Click™ Moisture graphical user interface enables smooth and fast operation, featuring real-time drying curves and control charts. Rugged design and the new easy-cleaning concept ensure a long service life and disruption-free operation, both in the lab and on the factory floor.



Accurate and fast results

The new Excellence Moisture Analyzers feature advanced halogen technology, the key to fast heating and precise temperature control. Combined with a high performance MonoBloc weighing cell, hanging weighing pan and up to 0.1 mg resolution, the new Moisture Analyzers deliver results with unsurpassed accuracy, speed and reliability.



One Click™ Moisture

The graphical user interface makes you feel at home right away. Shortcuts enable the user to start his methods with one click.

Real-time drying curve

Smart graphics visualize the measurement on the display. Control charts trend the moisture content over time.



Clean in 30 seconds

The flat surface is completely smooth and sealed. Cleaning a moisture analyzer has never been as easy and fast. Spills are contained in the draft shield and can be easily removed before the next measurement.

Halogen heating

Motorized lid (HX204 only)

Temperature sensor

Flat surfaces

MonoBloc
weighing cell
200g, 0.1mg (HX204 only)

Hanging weighing pan

FACT inside (HX204 only)

Electronic LevelControl (HX204 only)



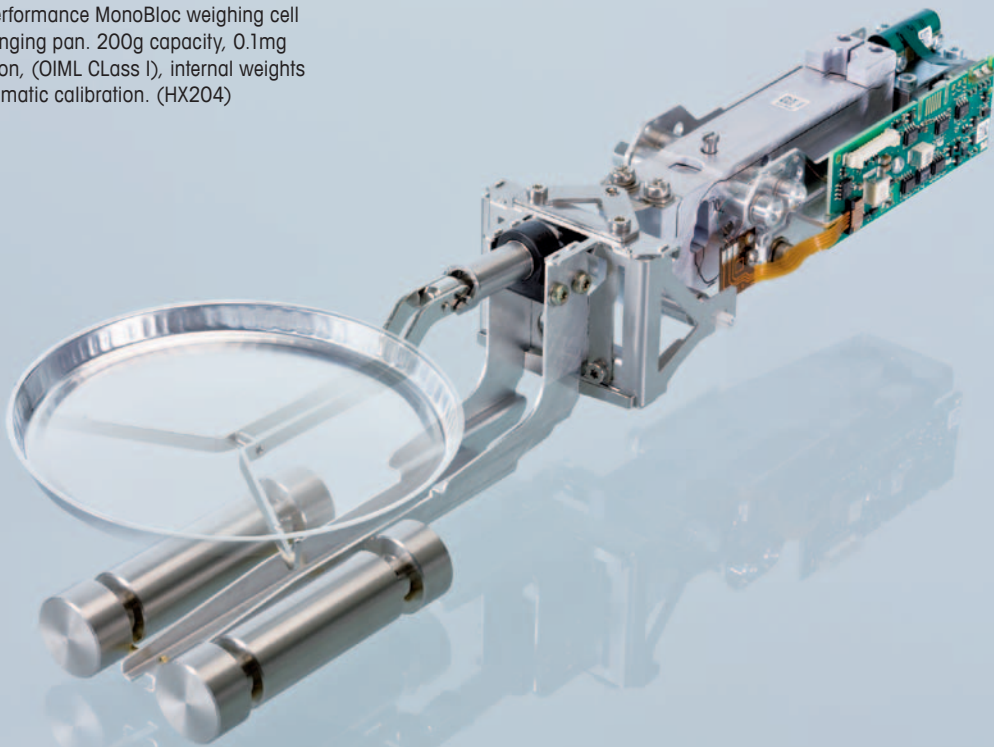
One Click™ Moisture
graphical user interface

Real-time
drying curve

USB
flash drive

Tip
See the moisture analyzer in action at
► www.mt.com/moisture

High performance MonoBloc weighing cell with hanging pan. 200g capacity, 0.1mg resolution, (OIML CLass I), internal weights for automatic calibration. (HX204)



Hanging weighing pan

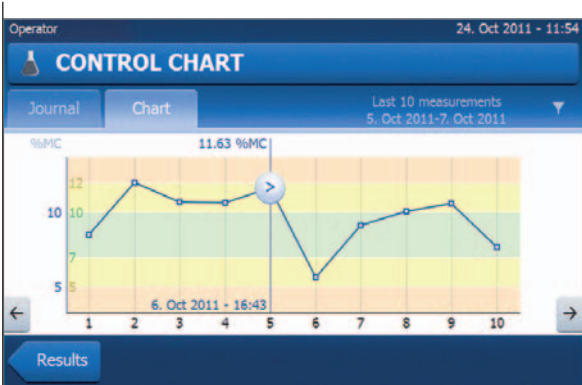
The innovative hanging weighing pan concept moves the weighing cell away from spilled samples and from the heat of the sample chamber, which improves measurement results by eliminating adverse thermal effects on the weighing cell. It also makes the instrument rugged and easy to clean as the surface underneath the weighing pan is completely flat and sealed. Spilled samples can no longer obstruct the weighing cell.

One Click™ Moisture



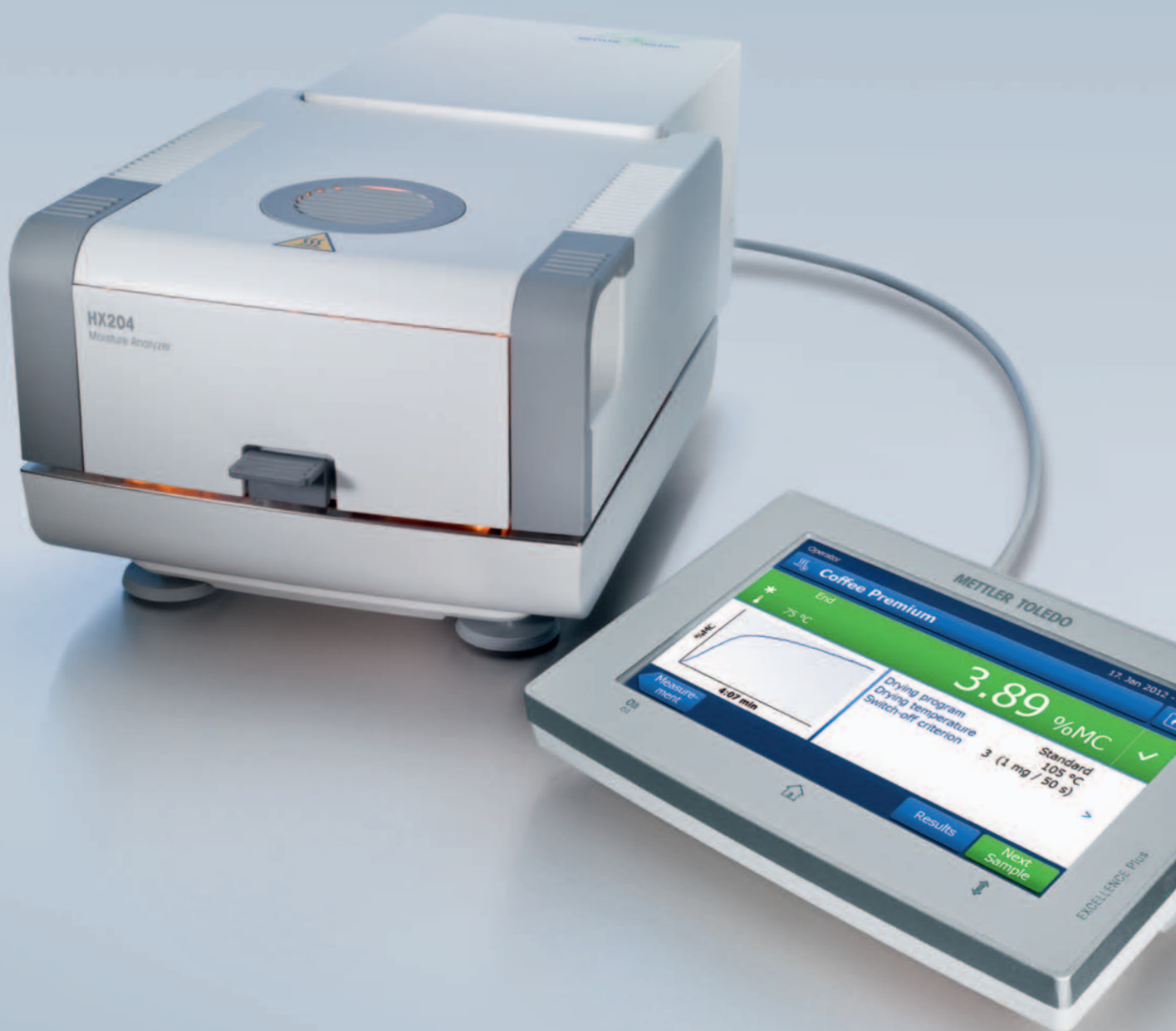
Tailored to your needs

The One Click Moisture graphical user interface can be adapted to your needs with customized home screens. Personalized shortcuts allow starting measurements with a single click.



Control charts

Powerful control charts and real-time drying curves provide full transparency. Individual control and warning limits can be defined for each product for quick pass/fail decisions in the lab and on the factory floor.



HX204 & HS153
Innovation for better moisture analysis

Operational Excellence In Lab and Factory

When moisture content determines productivity, the HX204 and HS153 Halogen Moisture Analyzers are your instruments of choice. High speed testing and powerful real-time graphics, combined with ruggedness and ease-of-use, answer the needs of companies striving to optimize operations in laboratories and factories.



Free access – Rugged by design

Free, unobstructed access to the weighing chamber from all sides simplifies handling of samples. The weighing chamber is completely sealed without any openings. The weighing cell cannot be damaged by spilled samples.



Start measuring immediately

The intuitive user interface and integrated workflows reduce training effort and enable users to start working right away.



Compact footprint saves bench space

Minimal space is required when using the optional stand. The instrument is no wider than a sheet of A4 paper.



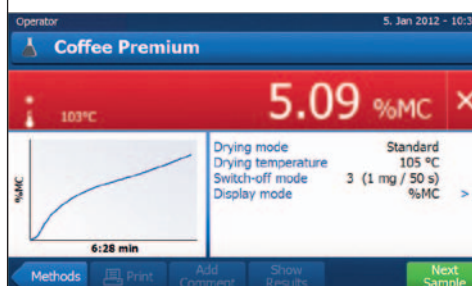
One-Click operation

Personalizable home screen and shortcuts ensure simple and error-free operations. Only the information needed to perform daily work is displayed. Shortcuts start drying methods with one click.

Measure Smart with One Click™ Moisture

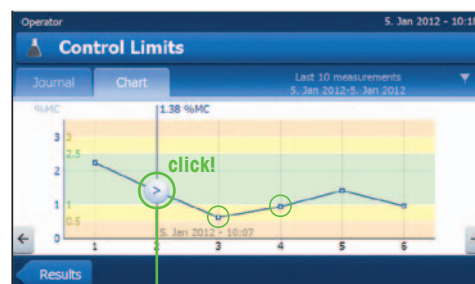
Easy Result Tracking With Real-time Charts

Production of food, chemicals and many other goods requires regular sample testing to maintain full process control. Control limits with pass/fail thresholds can be defined for each product. Integrated control charts trend the moisture content over time. Each measurement is saved as graphical drying curve and can be recalled with one click.



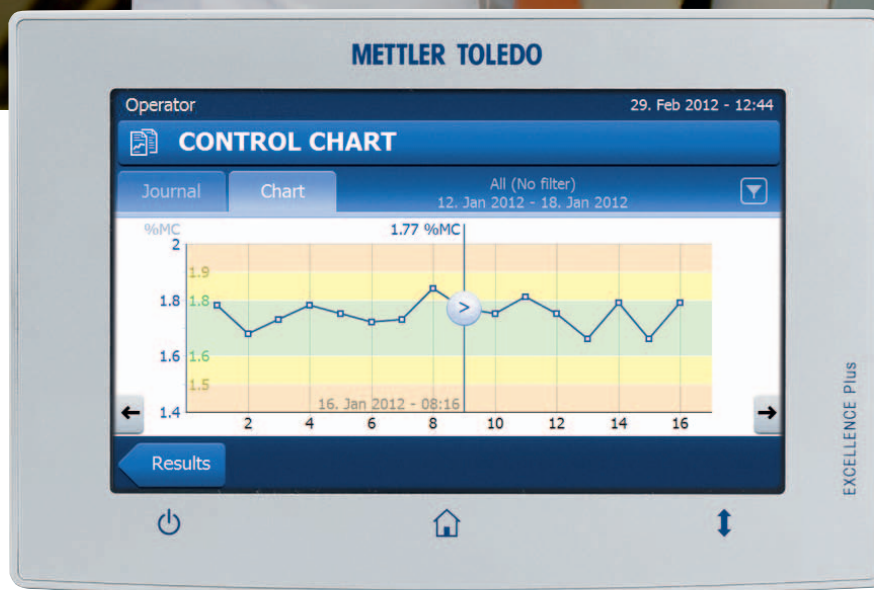
Pass/Fail decisions

Individual control limits for each product simplify pass/fail decisions. The result is clearly indicated by a display colored green or red.



Automatic moisture trending

A control chart trends the moisture content for each product tested. Every individual measurement can be recalled with a click for later review, if required.



State-of-the-art data handling

USB flash drives make configuring instruments, sharing drying methods and exporting results very fast and simple. Data files, e.g. drying methods, can be forwarded by e-mail to a different location and uploaded there with ease.

Boost productivity

Peace of Mind Assured

Solutions for Regulated Industries

METTLER TOLEDO has designed the HX204 Excellence Moisture Analyzer to meet the strict demands of research, quality control and production. With a resolution of 0.001%MC and excellent repeatability the HX204 meets the demands of applications requiring maximum measurement accuracy. Advanced security functions ensure systematic instrument verification for correct results at all times. The HX204 is the ideal instrument for use in highly regulated industries.

**FACT Internal calibration**

FACT automatically adjusts and calibrates the balance using internal weights for accurate and consistent results. Frequent manual testing with external weights becomes unnecessary, saving time and effort.

**LevelControl – Instrument is always leveled**

The built-in electronic level control warns if the instrument is not leveled correctly. Compliance with SOP's is ensured and automatically documented.

**Temperature calibration at point of use**

The HX204 can be adjusted and tested at operating temperature, ensuring that the instrument is performing optimally under your specific working conditions.



One Click™ Moisture – Compliance included

Individual user rights make sure that quality guidelines are followed. The home screen is personalizable to suit each user's needs, providing only the information required to perform daily tasks. Password protection and access rights prevent errors and ensure SOPs are met.

Always consistent results – only from METTLER TOLEDO

Demonstrate to auditors and customers that your moisture analyzers produce correct results. METTLER TOLEDO has combined state-of-the-art instruments, the new reference substance SmartCal™ and a risk-based testing recommendation to a simple and fast solution for testing and documenting instrument performance.

Reliable moisture results? Learn more at

► www.mt.com/smartcal

Everything under control

Accessories and Technical Data

Make the best of your Moisture Analyzer: high-quality sample handling accessories and certified quality management tools ensure that the instrument delivers optimal performance - for highly accurate and reliable moisture results.



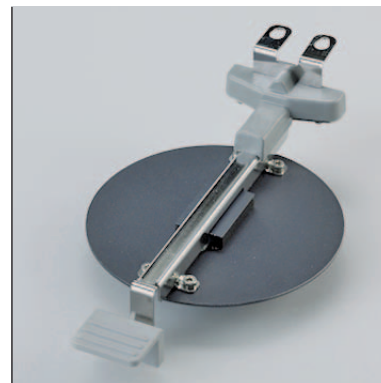
Aluminum sample pans

Thanks to the optimal surface finish of the aluminum pans, the sample material is distributed evenly over the whole pan, ensuring highly repeatable measurements.



Glass fiber filter pads

The adsorbent glass fiber filters reduce testing time for liquid and pasty substances by up to 50% and prevent the formation of a surface film.



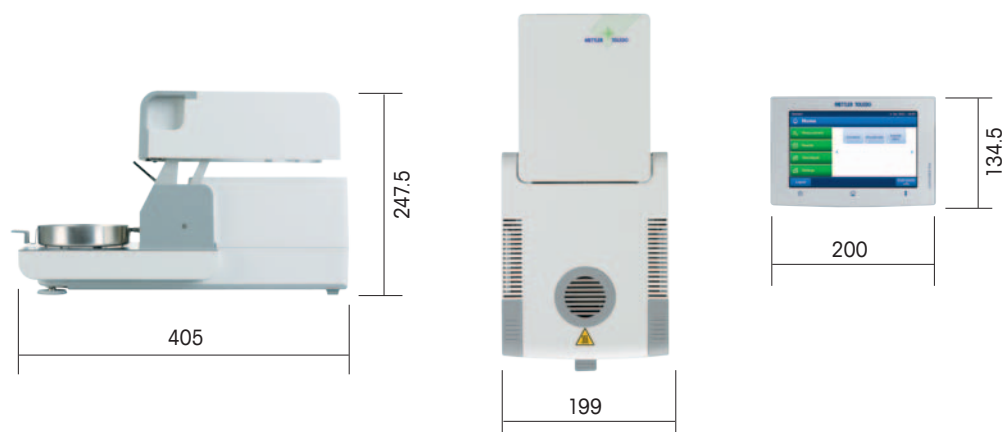
HX/HS certified temperature adjustment

Automatic calibration and adjustment routines minimize handling and prevent errors.

Sample Handling	Description	Part No.	Quantity
	Aluminum sample pan	00013865	80
	Filters	00214464	100
	Professional aluminum sample pan (extra strong)	11113863	80
	Steel sample pan (reusable), height 6 mm	00214462	3
	HX/HS sample pan handler	30020852	1
Quality Management	cSmartCal (certified, set of 24)	30005791	24
	cSmartCal (certified, set of 12)	30005793	12
	SmartCal (set of 24)	30005790	24
	SmartCal (set of 12)	30005792	12
	HX/HS certified temperature adjustment kit	30020851	1
	HX/HS adjustment weight, 100g certified	11119531	1
Printers	RS-P42 printer with RS232 interface	00229265	1
	RS-P25 compact printer with RS232 interface	11124300	1
	Printer paper	00072456	5
	Printer paper, self adhesive	11600388	3
	Printer ribbon, black	00065975	2
Accessories	HX/HS stand for terminal	30018474	1
	HX/HS dust filter	30020838	50
	HX/HS protective cover for terminal	30003957	1
	HX/HS anti-theft device	11600361	1
	HX/HS transportation case	30020836	1

Dimensions in mm

HX204 and HS153



Technical Data*

HX204 and HS153

		
Moisture Content	HX204	HS153
Readability	0.01% / 0.001%	0.01%
Repeatability (sd) with 2 g sample	0.05%	0.05%
Repeatability (sd) with 10 g sample	0.01%	0.01%
Display modes	% MC, % DC, % ATRO MC/DC, g, g/kg MC, g/kg DC	% MC, % DC, % ATRO MC/DC, g, g/kg MC, g/kg DC
Balance		
Capacity	200g	150g
Readability	1mg/0.1mg	1mg
Drying unit		
Temperature range	40-230°C	40-230°C
Lid-opening	Motorized	Manual
Routine Tests		
Balance test	Sensitivity at free weight, 100g default	Sensitivity at free weight, 100g default
Heating module test	2-point temp. calibration at adjustment values plus free definable temp.	2-point temp. calibration at 100/160°C
Internal calibration (FACT)	Yes	No
Instrument adjustment		
Balance adjustment	Sensitivity at free weight, 100g default	Sensitivity at free weight, 100g default
Heating module adjustment	2-point temp. adjustment at freely definable temperatures (Default: 100/160°C)	2-point temp. adjustment at 100/160°C
Method management		
Drying programs	Standard, gentle, fast, steps	Standard, fast, gentle
Method memory	300	99
Result handling		
Control chart	Yes	Yes
Drying curves	Yes	Yes
Quality management		
Pass/Fail statement	Yes	Yes
Level control	LevelControl, with warning function	Level indicator

* More information available in HX204 and HS153 datasheets

Test Your Moisture Analyzer in 10 Minutes with SmartCal™ Reference Substance

SmartCal™

SmartCal offers a fast and efficient way to verify the performance of your Moisture Analyzer. With a simple 10 minute test you can be sure your instruments are working within specification at all times. Testing your Moisture Analyzers with SmartCal fulfills the demands of industry regulations and company audits.



PASS



FAIL



Simple and fast test

The test is as easy to perform as a regular measurement. Simply distribute SmartCal evenly into the sample pan and start. The results are available in 10 minutes.

Verified instrument

The Moisture Analyzer is ready for use if the result lies within the SmartCal control limits.

No issues with auditors

Proper verification and seamless documentation guarantee correct performance and valid moisture results.

► www.mt.com/smartcal

www.mt.com/moisture

For more information

Mettler-Toledo AG

Laboratory and Weighing Technologies
CH-8606 Greifensee, Switzerland
Tel. +41 44 944 22 11
Fax +41 44 944 30 60

Subject to technical changes
© 04/2012 Mettler-Toledo AG
Printed in Switzerland 30019688
Global MarCom Switzerland

Moisture Analyzers



HC103 **Halogen Moisture Analyzer**

Convenient

Clever

Robust



Moisture Matters

Trusted Results at One Click™

METTLER TOLEDO

Trusted Results at One Click

Convenient, Clever and Robust

Make routine moisture determination easy with the HC103 halogen moisture analyzer which combines proven METTLER TOLEDO weighing technology with fast halogen heating. The compact design saves space, while the robust components guarantee a long instrument lifetime, whether you work in a busy laboratory or a harsh production environment.

With touchscreen operation and user guidance, the HC103 is convenient and easy to use. The robust design ensures reliable results for years to come, whatever types of samples you have. It's the perfect choice for quality control and in-process control applications.

Intuitive to operate and easy to clean, the HC103 brings a new level of comfort to your daily moisture analyzing tasks.

Convenient operation simplifies processes



- Large color touchscreen
- Direct access with One Click
- Programmable methods
- Multiple languages

Clever features ensure trusted results



- Setup wizard and tutorial
- Graphical user guidance
- Real-time drying curve
- Result reporting via PDF/CSV
- Instrument configuration via USB drive

Robust construction guarantees long lifetime



- Metal housing
- Easy to clean
- Reliable halogen technology
- Long-term availability of spare parts



Halogen heating

Accurate temperature control
between 40-230 °C



High performance weighing cell

Accurate moisture results

Bright and sharp touchscreen

Easy to read

Real-time drying curve

Progress overview

RS232 and USB interfaces

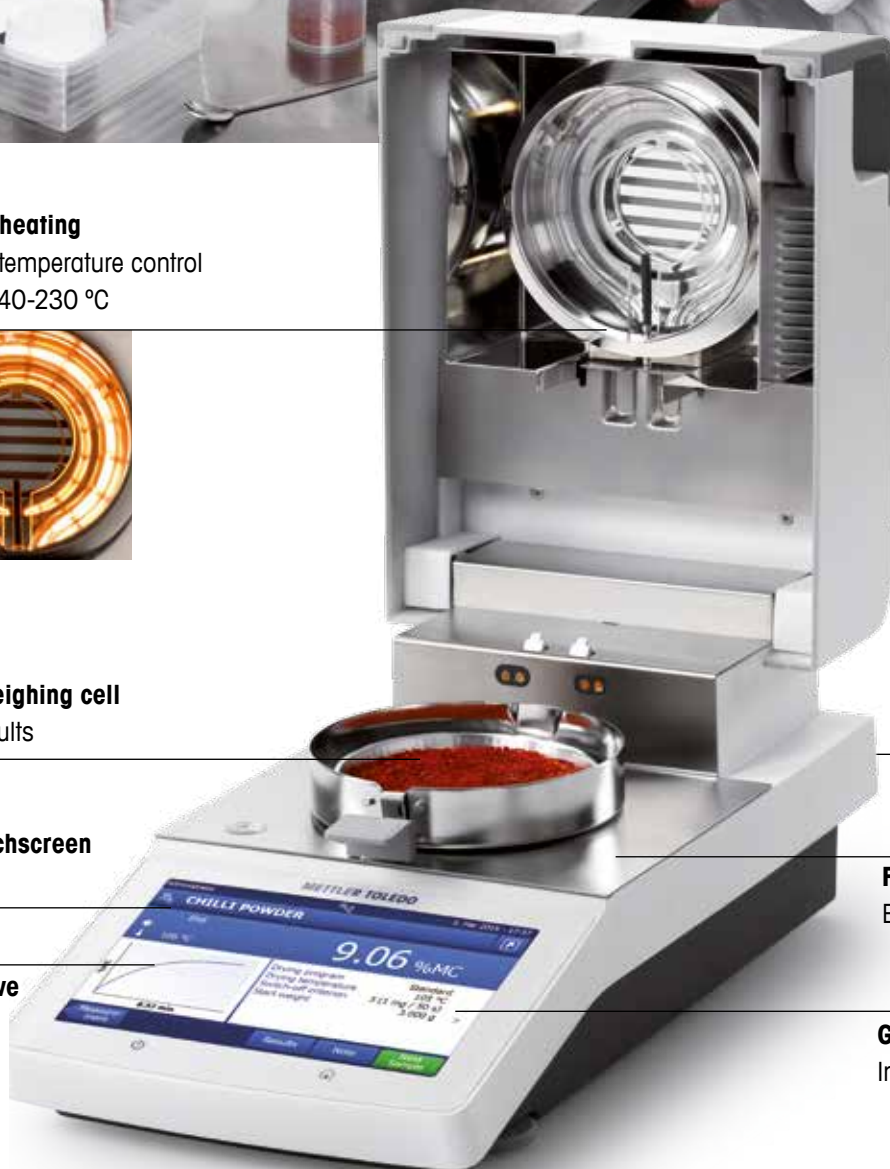
Convenient data transfer

Flat stainless steel surfaces

Easy to clean and robust

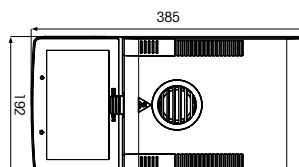
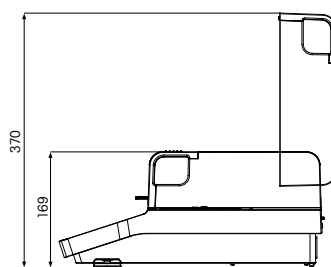
Graphical user guidance

Intuitive for anyone to operate



HC103 Technical Data

Capacity	101 g
Readability	1 mg, 0.01% MC
Repeatability	0.10% (2 g sample), 0.015% (10 g sample)
Heating	Halogen
Temperature range	40 – 230°C (1°C increments)
Drying programs	Standard, Rapid
Switch-off	Automatic (5 SOC and free), timed
Display modes	%MC, %DC, %ATRO MC, % ATRO DC, g
Method memory	20
Results storage	100
Connectivity	USB host (2), USB device, RS232
Display	7" color touchscreen
Languages	en, de, fr, es, it, pl, cz, hu, pt, ja, zh, ko



Moisture expertise

Benefit from our moisture solutions, eLearning courses, application methods, white papers and more.



Instrument performance verification

The SmartCal™ reference substance verifies the performance of your moisture analyzer in a simple 10 minutes test.



Temperature adjustment kit

Periodically test and adjust the halogen heating temperature automatically with this easy-to-use kit.

METTLER TOLEDO Service

Our worldwide service network is always on hand to support you with calibration and maintenance to keep your moisture analyzer performing at its peak.

► www.mt.com/service

www.mt.com/moisture

For more information

Mettler-Toledo AG

Laboratory Weighing
CH-8606 Greifensee, Switzerland
Tel. +41 44 944 22 11
Fax +41 44 944 30 60

Subject to technical changes
© 03/2015 Mettler-Toledo AG
Printed in Switzerland 30249611
Global MarCom Switzerland / MC

Nem Tayin Cihazları



HE73 ve HE53 Halojen Nem Tayin Cihazları

Güvenilir Sonuçlar

Kolay Kullanım

Uygun Maliyetli Kalite



Nem Tayini Önemli Bir Konudur
Hızlı ve Kolay Analiz

METTLER TOLEDO

Güvenilir, Kolay ve Ekonomik Kalite İçin Sağlam Bir Yatırım

HE73 ve HE53 halojen nem tayin cihazları, kaliteyi korumak ve en iyi raf ömrünü sağlamak üzere ürünlerinizin nem içeriğini belirlemek için güvenilir ve ekonomik çözümlerdir. Bu güçlü ve ekonomik nem tayin cihazları, METTLER TOLEDO'nun hassas cihazların üretimiyle ilgili kapsamlı deneyiminden ve uzun yıllara dayalı nem analizi uzmanlığından yararlanmaktadır.

HE73 ve HE53'ün kullanımı cihaz eğitimi almamış kullanıcılar için bile kolaydır. Ekranda görüntülenen yardım yönergeleri ve ücretsiz sahip olacağınız Nem Tayin Kılavuzu ile, kolay bir işlem sayesinde, cihazı kurmanız ve doğru nem ölçümleri yapmaya başlamanız için gereken her şeye sahip olursunuz. İsviçre'de tasarlanmıştır; sadece nem tayin sonuçlarınıza güvenmekle kalmayacak, aynı zamanda yıllar boyu mükemmel bir performanstan da emin olacaksınız.

Güvenilir Sonuçlar



HE73 ve HE53 yalnızca birkaç dakikada doğru ve tekrarlanabilir nem ölçümleri sağlar.

- Güvenilir
- Etkili
- Artan verim

Uygun Maliyetli Kalite



Halojen kurutma teknolojisi ve yüksek performanslı tartım ünitesi ile paranızın karşılığını mükemmel şekilde alın.

- Modern teknoloji
- Sağlam tasarım
- Uzun cihaz ömrü

Nem Tayininde Uzmanlık



Nem analizine hemen başlamanız için gereken her şeyi kapsayan teknik bilgi kütüphanemizden yararlanın.

- Hızlı kurulum
- Çevrimiçi eğitim
- Kullanıma hazır kurutma yöntemleri



Kolay 3 Adımlı İşlemle Hızlı Nem Sonuçları

Nem analizi hiç bu kadar kolay olmamıştı; yapmanız gereken sadece grafik ekrandaki grafik yönlendirmeleri izlemektir, sonuçlarınız birkaç dakika içinde hazır olacaktır.



1. Boş tartım kefesinin darasını alın.



2. Numuneyi ekleyin ve eşit şekilde yayın.

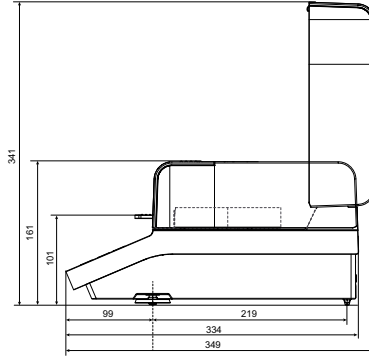
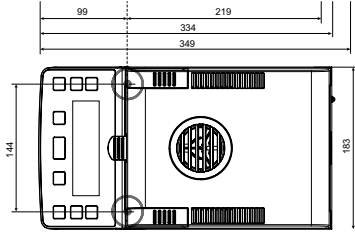


3. Başlat'a basın. Sonuçlarınızı sadece birkaç dakika içinde ekranda görün.

METTLER TOLEDO Service

Nem tayin cihazınızın en iyi performansta çalışmaya devam etmesi için dünya çapında servis ağıımız kalibrasyon ve bakımda sizi desteklemek üzere her zaman hizmetinizdedir.

Teknik Veriler



	HE73	HE53
Kapasite	71 gr	54 g
Okunabilirlik	1 mg, %0,01 MC	1 mg, %0,01 MC
Tekrarlanabilirlik	%0,15 (2 gr numune), %0,05 (10 gr numune)	%0,15 (2 g numune), %0,05 (10 g numune)
Analiz sonlandırma kriteri	Tam Otomatik, Zamanlanmış, Serbest (1 mg/10 – 140 s)	Tam Otomatik, Zamanlanmış
Kurutma Programları	Standart, Hızlı	Standart, Hızlı
Kurutma Metodları	2	1
Sıcaklık Aralığı	50 – 200°C (1°C'lik kademelerle artım)	50 – 160°C (1°C'lik kademelerle artım)
Isıtma	Halojen	Halojen
Sonuç Ekranı	%MC, %DC, %ATRO MC, % ATRO DC, gr	%MC, %DC, %ATRO MC, % ATRO DC, g
Ekran	Arkadan aydınlatmalı LCD	Arkadan aydınlatmalı LCD
Ekran İşlevleri	Kullanıcı Rehberliği, İlerleme Durumu Göstergesi	Kullanıcı Rehberliği, İlerleme Durumu Göstergesi
Ağırlık	4,1 kg	4,1 kg

Aksesuarlar



Alüminyum numune keferi

En iyi düzeyde tekrarlanabilirlik için tüm uygulamalara uygundur. Parça No. 13865



Fiberglas filtreler

%50'ye kadar tekrarlanabilirlik düzeyini arttırmak ve ölçüm süresini kısaltmak için sıvılarla ve macun kıvamındaki katılarla kullanın. Parça No. 214464



Yazıcılar

Nemle ilgili sonuçlarınızı belgelemenin en hızlı yolu. Parça No. 11124300 (RS-P25) 11124303 (RS-P26)

www.mt.com/moisture

Daha fazla bilgi için

Mettler-Toledo TR

Laboratuvar ve Tartım Teknolojileri
Altunizade Mah. Haluk
Türksoy Arka Sok.
Tel: +90 216 400 20 20
Faks: +90 216 400 20 29

Teknik değişiklikler yapılabilir
© 11/2014 Mettler-Toledo AG
İsviçre'de basılmıştır 30097219
Global MarCom İsviçre