Moisture Analyzers

MS-70/MX-50
MF-50/ML-50

ISO 9000 CERTIFIED

MS-70
MX-50
MF-50
ML-50

SRA

SHS

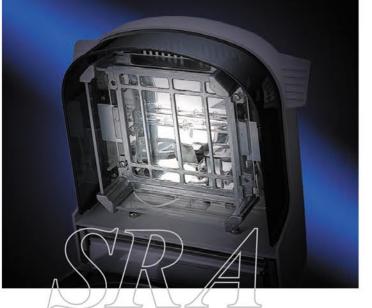### Fast and uniform heating with halogen lamp and innovative SRA technology

Straight halogen lamp and uniquely designed SRA (Secondary Radiation Assist) filter gives shorter measurement time, thanks to fast and uniform heating

High repeatability

With SHS (Super Hybrid Sensor) featured as the weight sensor, ultra accurate moisture content determination is possible based on high precision weighing of even a small sample

Low moisture content measurement

MS-70 measures the moisture content at 0.001% resolution suitable for low moisture content samples as well as Karl Fischer method, yet requires no special knowledge or training and produces no harmful waste

Standard WinCT-Moisture (for MS&MX) for real-time graph displaying

WinCT-Moisture is an original software application designed to display a graph of moisture content rate change while measuring with a connected PC

Sodium Tartrate Dihydrate comes as standard for accuracy checking

Sodium Tartrate Dihydrate is a chemical material that has stable moisture content of 15.66% $^{+0.3}_{-0.1}$, and thus is best to use for accuracy check to maintain the reference value of the analyzer

Calibration of the heater temperature (for MS&MX)

With the temperature calibrator (optional), calibration result can be output in the format that conforms to GLP, GMP, ISO

Memory function

According to sample up to 20 suitable measurement conditions can be stored and recalled, which saves time and prevents the user from making a mistake when setting (10 for MF & 5 for ML)
For measurement result, up to 100 data can be stored and output at once (50 for MF & 30 for ML)

Five measurement programs

Five choices of measurement programs, Standard, Automatic, Quick, Timer, and Manual Mode are provided
Standard Mode : Just measurement accuracy, HI, MID or LO needs to be set
Automatic Mode : Ends measurement when moisture content changes at a rate less than the set rate
Quick Mode : Begins heating samples at 200℃ for 3 minutes, then is the same as Automatic Mode
Timer Mode : Continues measurement for a set duration of time (1~60mins.: by 1min, 60~480mins.: by 5mins.)
Manual Mode : STOP button should be pressed to end measurement (Max. heating time: 480mins.)

Selectable Heating Mode

Choose the heating mode from standard, quick, step and ramp heating modes for the most suitable measurement (ML has Standard and Quick heating modes only)

Clear and easy-to-see, large VFD display

Measurement, setting value, change in moisture content, action status, data number and other important information are clearly displayed

Easy handling of the unit

Ergonomically designed pan handle eliminates mishaps such as burns when moving a hot sample pan into or out of the unit from either side. Wing handle for easy opening and closing of the heater cover

Low maintenance cost assured

The halogen lamp is user replaceable without unit downtime with protective chamber for easy cleaning (Lamp life 5000 hours)

Specifications

Specifications	MS-70	MX-50	MF-50	ML-50
Measurement Method	400W straight halogen lamp heating system with SRA filter and SHS weighing technology			
Max Sample Weight Capacity	71g	51g		
Weight Resolution	0.0001g	0.001g	0.002g	0.005g
Moisture Content Display	0.001%/0.01%/0.1%	0.01%/0.1%	0.05%/0.1%/1%	0.1%/1%
Moisture Content Accuracy (Standard Deviation) over 1g	0.05%	0.10%	0.20%	0.5%
Moisture Content Accuracy (Standard Deviation) over 5g	0.01%	0.02%	0.05%	0.1%
Heating Technology	Halogen lamp (Straight type, 400 Watt max, 5000 hours)			
Drying Temperature (1°C increment)	30-200°C	50-200°C		
Memory of Measurement Programs	20 sets		10 sets	5 sets
Measurement Programs	Standard Mode/Automatic Mode/Quick Mode/Timer Mode/Manual Mode			
Measurement Mode	Moisture content(Wet or Dry base) /Dry content/Ratio/Weight			
Heating Mode	Standard/Quick/Step/Ramp			Standard/Quick
Display Type	Large VFD			
Interface	RS-232C standard			
Data Memory Function	100		50	30
Operating Temperature	5-40°C (41-104°F) less than 85%RH			
GLP/GMP/ISO	Available			
Self Check Function	Standard			
Communication Software	WinCT-Moisture standard		WinCT standard	——
Sample Pan Size	Ø85mm			
Power	AC 100V to 120V (3A) or AC 200V to 240V (1.5A), 50/60 Hz, Approx. 400W			
Physical Dimention/Weight	215(W) x 320(D) x 173(H) / Approx. 6kg			
Standard Accessories	Sample Pans (20 for MS/MX/MF 10 for ML), Pan Handles (2 for MS/MX/MF, 1 for ML), Tweezers(for MS/MX/MF), Spoon (for MS/MX/MF), Test Sample (30g of Sodium Tartrate Dihydrate for MS/MX/MF), CD-ROM (WinCT-Moisture for MS/MX, WinCT for MF), Glass Fiber Sheet (for MS/MX/MF), RS-232C Cable (for MS/MX), Display Cover, Dust Cover(for MS/MX/MF), Instruction Manual, Quick Reference Card, Power Cable, Fuse			

Specifications are subject to change for improvement without notice.

Accessories

AD-8121B	Dot Matrix Compact Printer
AX-MX-30	Disposable Aluminum Pan (100pcs)
AX-MX-31	Sample Pan (ø85mm x 100pcs)
AX-MX-32-1	Glass Fiber sheet (ø70mm x 100 sheets)
AX-MX-32-2	Glass Fiber sheet (ø78mm x 100 sheets)
AX-MX-33	Test Sample (Sodium Tartrate Dihydrate, 30g x 12pcs)
AX-MX-34-120V	Halogen Lamp for AC100V to 120V
AX-MX-34-240V	Halogen Lamp for AC200V to 240V
AX-MX-35	Pan Handle (2pcs)
AX-MX-36	Tweezers (2pcs)
AX-MX-37	Spoon (2pcs)
AX-MX-38	Display Cover (5pcs)
AX-MX-39	Dust Cover
AX-MX-40	RS-232C Cable (2m, 25-9pins)
AX-MX-41	Calibration Mass (20g, equivalent to OIML class F1)
AX-MX-42	WinCT-Moisture (CD-ROM, Application Software for Windows)
AX-MX-43	Certified Temperature Calibrator (only for MS/MX)
AX-USB-25P	Serial / USB Converter

AD-8121B
Dot Matrix Compact Printer