

MDS-2014

DISSOLUTION SAMPLING SYSTEM

Be a leader in high-end drug testing instruments.



SCIENTZ TECHNOLOGY CO., LTD

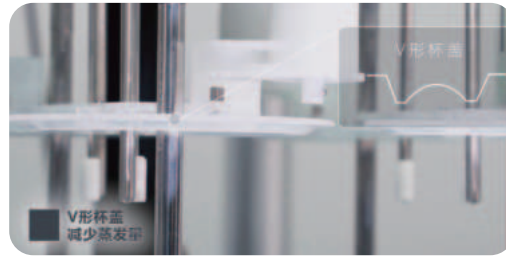
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COMPONENT COMPLIANCE AND INNOVATION



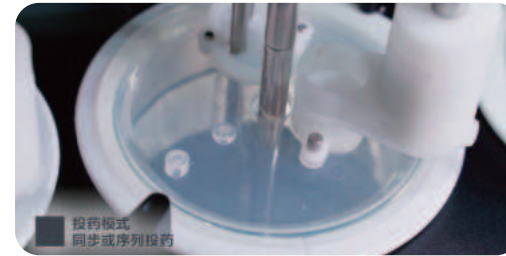
Dissolution cup

Recessed retaining collars prevent bumps, reduce evaporation and have better centering and verticality. Indicator bars on the rim and diagonal fixtures minimize differences between dissolution processes. The dissolution vessel is available in 1000mL and 250mL specifications, of which the 1000mL specification can choose a brown light-proof dissolution vessel.



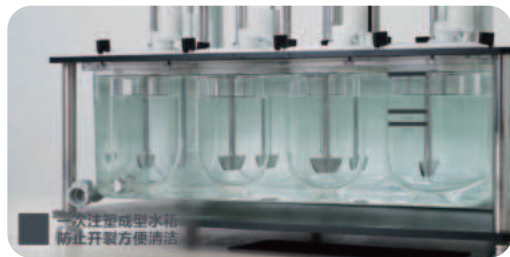
Anti-evaporation cover

Considering the influence of solvent evaporation on experimental results, MDS-2014DS adopts a V-shaped lid design that fits perfectly with the dissolved cup to minimize solvent evaporation.



Automatic dosing module

The ingenious design of the automatic dosing module avoids the sticking of the tablets, which can realize the simultaneous dosing of 14 cups, and can also take into account the sequential dosing, which can effectively improve the accuracy of dosing.



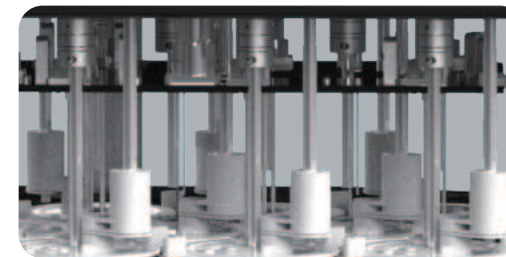
Water bath box

Water bath with Quick Connect Fittings: Quick connect fittings and a rounded water bath design that allows complete draining of circulating water saves time cleaning instruments and prevents dirt and bacteria growth in the seams of traditional water baths.



Segmented paddle shaft

The use of a segmented 316L stainless steel paddle shaft design, including paddles, baskets, bowls and low volume options, allows interchangeable baskets and paddles to be attached, and can avoid height readjustments before and after conversion, saving significant time.



Stainless steel guide rod

The multi-point stainless steel guide rod is used to ensure the stability of the handpiece, providing strong support for the stability of the positioning of the dissolution vessel and the center of the rotating shaft, and can effectively prolong the mechanical performance stabilization time.

MDS-2014DS
Drug Dissolution
Apparatus Parts

COMPONENT COMPLIANCE AND INNOVATION



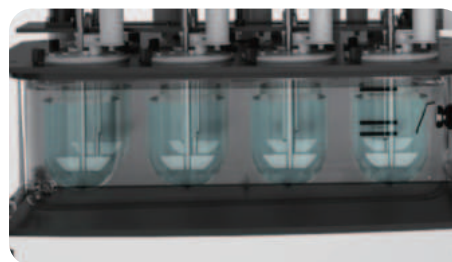
Color touch screen

With a 10-inch color touch screen, the touch panel is easily manipulated to set up, store and run up to 100 methods. Intuitive interface with screen lock security feature, Chinese and English are also available as language options.



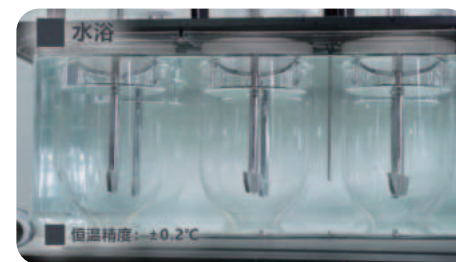
Administrative rights

The MDS-2014DS provides three levels of administrative privileges compliant with audit trail requirements, controlling access and preventing unnecessary changes to instrument settings or methods.



Heating Circulation System

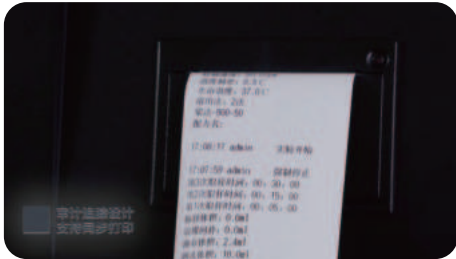
Relying on the company's accumulated experience in the field of temperature control for many years, the MDS-2014DS is equipped with an independently controlled heating cycle system, which can minimize vibration while saving the volume of the experimental bench. The unattended reservation function can realize unattended automatic constant temperature water bath, saving experimental time.



Temperature probe

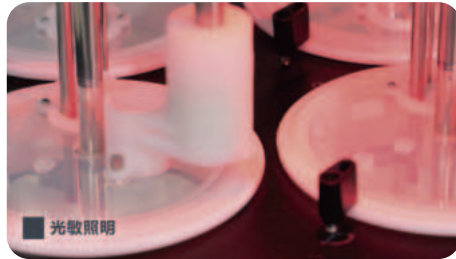
The 14-cup independent temperature probe can realize the independent monitoring and real-time display of the 14-cup solvent temperature, and the temperature probe can be raised during the dissolution test. Using PID+ fuzzy control, the temperature control accuracy reaches $\pm 0.2^{\circ}\text{C}$, and the temperature resolution reaches 0.1 $^{\circ}\text{C}$.

COMPONENT COMPLIANCE AND INNOVATION



Built-in printer

The instrument is equipped with a built-in printer, which can print log records in real time, and the experimental process data records can be audited and queried; The logs can be exported for viewing (the exported document needs to be opened using the company's special software).



Photosensitive lighting

The instrument has built-in light-sensitive illumination, and the brown dissolved cup is used to better realize the light avoidance experiments.



One-click import

100 experimental method storage space, USB can realize one-key import and export operation, avoiding the tedious steps of method transfer between different instruments.



Certification and Technical Support

Certification and technical support: We also provide standard-compliant AIQ certification services, mechanical verification services, and technical and application related support services such as instrument training exported document needs to be opened using the and installation site training.

COMPONENT COMPLIANCE AND INNOVATION



Intelligent voice broadcast function

During the operation together, the user can be reminded of the current instrument status and the required follow-up operations through voice broadcast.



Real-time display of instrument level

Monitor the levelness of the whole instrument in real time and display it in the interface.



7×2 independent operation, adjustable speed

Two groups of parallel experiments can be carried out at the same time, and the speed of the two groups can be differentiated

MDS-2014DS TECHNICAL PARAMETERS



Technical parameter

Instrument performance index	Water bath heating range: room temperature -45.0 °C	Instrument function	Compatible with basket method, paddle method, small cup method, paddle butterfly method and tumbler method
	Resolution: 0.1°C		Number of cups: 14 cups
	Temperature control accuracy: ±0.2 °C		Segmented shaft design, dissolution method switching without manual readjustment Positioning basket (paddle) height
	Stirring speed range: 10.0-300.0RPM		Automatic simultaneous dosing/sequential dosing
	Speed Resolution: 0.1RPM		Photosensitive lighting: white light/red light three-level lighting
Instrument mechanical indicators	Speed accuracy: ±0.5RPM	Instrument function	Save more than 100 experimental methods, and can import and export USB operation
	Basket (paddle) shaft swing amplitude: ≤0.5mm rotating basket		Permissions can be divided into 3 levels of control
	Swing range: ≤1.0mm		With operation record printing and log recording function, and can audit and track dissolution
	Deviation between the rotating shaft and the dissolution vessel shaft: ≤2.0mm		Operating temperature (5~40) °C
	Instrument levelness ±0.5°Basket (paddle) axis verticality: ±0.5°		Storage temperature (-20~60) °C
	Dissolution vessel verticality: 1.0°	Storage degree (5~95)% RH	
		Degree of work (20~80)% RH	

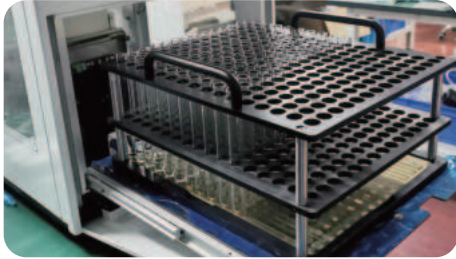
Product accessories

- Host
- Built-in printer
- 14 basket shafts
- 14 baskets
- 14 large cup components
- 8 large paddle components
- 100 10μ column filters
- 100 30μcolumn filters
- Quick Connector
- Waterproof hose 1 meter
- 14 film pads
- 1 GB power cord
- 14 · Film pad
- Dissolution Apparatus Suitcase 1
- 14 solid plastic padding balls with a diameter of 25mm

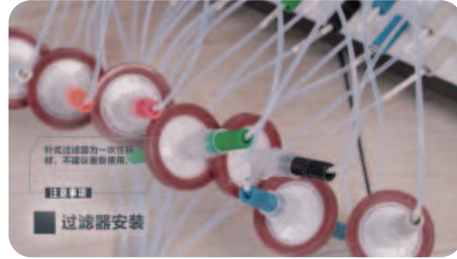
Optional accessories

- Small cup assembly
- Paddle assembly
- Small plate assembly
- Sink assembly
- Rotary drum assembly
- Light-proof mugplus accessories
- Luer connector
- 25mm diameter solid plastic pad high ball

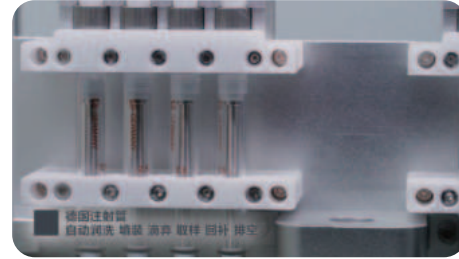
SAMPLER PARTS



- Equipped with automatic door opening device to realize one-key entry and exit of the warehouse.
- Test tube rack automatic positioning detection function.



- Automatically calculate the sampling height, and at the sampling time, you can accurately sample at the position that meets the Pharmacopoeia according to the volume of the solvent.
- Equipped with a secondary filter interface, the solvent filtration is more sufficient.



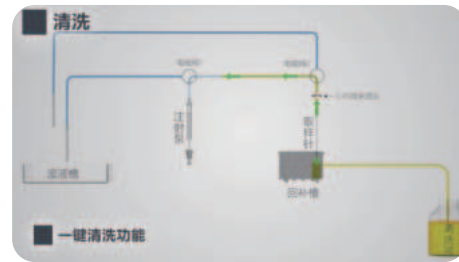
- Using syringes imported from Germany, automatic rinsing, filling, waste dripping, sampling, replenishing, emptying and other steps ensure sampling accuracy and ensure that the pipeline remains as little as possible.



- Adopt imported PTFE micro transparent pipeline, with excellent anti-corrosion and anti-absorption Attachment.



- Continuous sampling, dual sample sampling, automatic sample dilution and other functions Automatically rinse the pipeline and sampling pump before sampling to ensure the accuracy of sampling.



- One-click automatic cleaning of the liquid tank and pipeline after the experiment is completed to ensure no cross-contamination.

MDS-2014
Drug Dissolution
Sampling System
Sampler Parts



SAMPLER TECHNICAL PARAMETERS

The performance parameters	Number of sampling channels for performance parameters: 14	Minimum sampling interval: 1 minute 20 seconds (initial sampling), minimum sampling interval 2 minutes (subsequent sampling)
	Single sampling volume: 0.1-10mL (single); 0.2-20mL (double)	Sampling accuracy: ≤0.8% (10mL sampling)
	Sampling times: 1-16 times (single); 1-8 times (double)	Instrument function
	Network interface: 100M RJ45	Fully automatic rinsing, filling, dripping, sampling, replenishment, dilution, emptying, cleaning
	Control interface: RS 485	Precise sampling by syringe pump, suction and stop time can be set
	Automatic dilution accuracy: ±1% supplement	Operating temperature (5~40) °C
	Liquid temperature control accuracy: ≤ ±0.5 °C	Storage temperature (-20~60) °C
	Long working hours: unlimited	Degree of work (20~80)% RH
	Storage degree (5~95)% RH	