

DW-MDS-2008 Drug Dissolution Sampling System

MDS-2008 Drug Dissolution sampling system meets the performance indexes of Chinese Pharmacopoeia and 21 CFR Part 11. It is designed for high-end pharmaceutical companies, drug testing centers and scientific research institutes around the world, and consists of Dissolution Tester and Auto sampler. It realizes fully automatic sampling and preservation of samples in drug dissolution test, which can effectively improve the experimental efficiency.

Description

1. Dissolution cup

Embedded retention hoops prevent collisions, reduce evaporation and provide better centering and verticality. Indicator strips on the rim of the cups and diagonal mounts minimize variation between dissolution processes. Dissolution cups are available in 1000mL and 250mL sizes, with the 1000mL size available in a brown, light-proof dissolution cup.

2. Automatic dosing module

The ingenious design of the automatic dosing module avoids the sticking of tablets, and can realize 8 cups dosing at the same time, and also can take into account the sequence of dosing, which can effectively improve the accuracy of dosing.

3. Segmented paddle shafts

Using a segmented 316L stainless steel paddle shaft design that includes paddles, rotating baskets, rotating barrels and small volume options allows for the attachment of interchangeable baskets and paddles and eliminates the need for height readjustment before and after conversion, saving significant time.

4. Built-in printer

The instrument is equipped with a built-in printer, real-time printing log records, the experimental process data records can be audited query, logs can be exported to consult (need to use the company's special software to open the exported documents).

5. One click import

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

6. Anti-evaporation cover

Considering the impact of solvent evaporation on the experimental results, the MDS-2008DS is designed with a V-shaped lid that fits perfectly with the dissolution cup to minimize solvent evaporation.

7. Water bath

One-piece injection-molded water baths with quick-connect fittings: Quick-connect fittings and rounded corners that allow the circulating water to be completely emptied save time in cleaning the instrument, preventing dirt and bacteria from being trapped in the seams of conventional water baths.

8. Stainless steel guide rods

The use of multi-point stainless steel guide bar, excellent to ensure the stability of the machine head, for the dissolution of the cup and the center of the rotary axis of the positioning of the stability to provide strong support for the effective prolongation of the mechanical properties of the stabilization time.



9. Photosensitive lighting

The instrument has built-in photosensitive illumination, together with the brown dissolution cup, to better realize the experiment of avoiding light.

10. Certification and technical support

Certification and Technical support: we also provide standards-compliant AIQ certification services, me-chanical validation services, and technical and application-related support services such as instrument training and installation training.

11. Heating circulation system

Relying on the scientz's many years of experience in the field of temperature control, MDs-2008Ds is equipped with an independently controlled heating circulation system, which can minimize vibration under the condition of saving the volume of the experimental table. The unattended reserva- tion function can realize unmanned automatic thermostatic water bath, saving experiment time.

12. Administrative authority

The MDS-2008DS provides three levels of adminis- trative privileges that meet audit trail require- ments, controlling access and blocking unneces- sary changes to instrument settings or methods.

13. Temperature probe

Eight cups of independent temperature probe, can realize eight cups of solvent temperature independent monitoring, real-time display, and the temperature probe can be raised during the dissolution experiment, will not interfere with the dissolution experiment. Adopting PLD+fuzzy control, the temperature control accuracy reaches $\pm 0.2^{\circ}\text{C}$, and the temperature resolution reaches 0.1°C .

14. Color touch screen

Featuring a 10-inch color touch screen, the touch panel can be easily manipulated to set up, store and run up to 100 methods. The intuitive interface with screen-lock safety feature also offers chinese and English as language options.

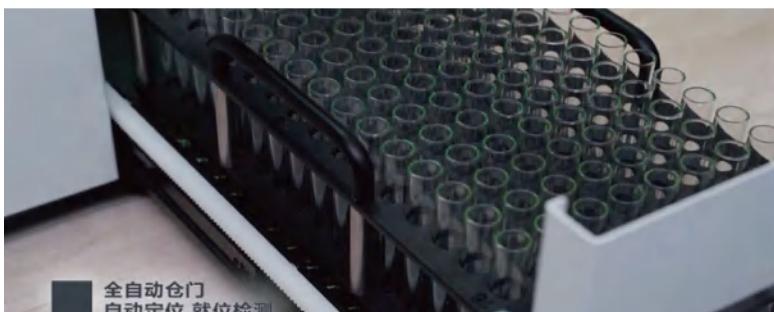
Specifications

Instrument Performance Indicators	Heating range of water bath: RT-45.0℃	Instrument Functions	Compatible with basket method, paddle method, small cupmethod, paddle dish method, rotating cylinder method.	
	Temperature resolution: 0.1℃			
	Temperature control accuracy: ±0.2℃			
	Stirring speed range: 10.0-300.0RPM		Dissolution cups: 6/8 cups.	
	Speed resolution: 0.1RPM		Segmented swivel design, no need to readjust the heightfor switching between basket, paddle and swivel methods.	
	Speed accuracy: ±0.5RPM			
Instrument Mechanical Indicators	Basket (paddle) shaft swing: ≤0.5mm			Automatic synchronized dosing/sequential dosing
	Swing of rotating basket: ≤1.0mm			
	Deviation between rotating shaft anddissolving cup shaft: <±1.5mm			Photosensitive illumination: white/red three-level illumination
	Dissolution meter level: <0.2℃			
	Verticality of basket (paddle) shaft: 90±0.5℃			More than 100 experimental methods can be stored andimported and exported byUSB.
Working humidity	(20~80)% RH			39 login accounts and passwords can be stored, andoperating privileges can be controlled at 3 levels.
Storage humidity	(5~95)% RH			
Input power supply	220VAC+10% 1300w			
Dimensions	≈670x565x640mm			
Overall weight	≈65kg			
Operation temperature	(10~30)℃			With operation record printingand logging function,and can audit trail.
Storage temperature	(-20~60)℃			

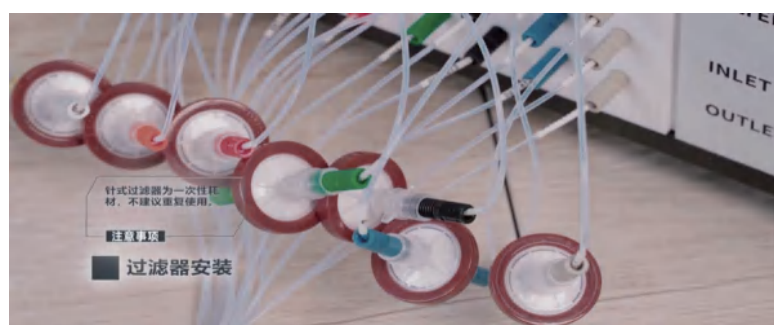
DW-MDS-2008 Auto Sampler

Drug Dissolution sampling system consists of a dissolution tester and an auto sampler.

Description

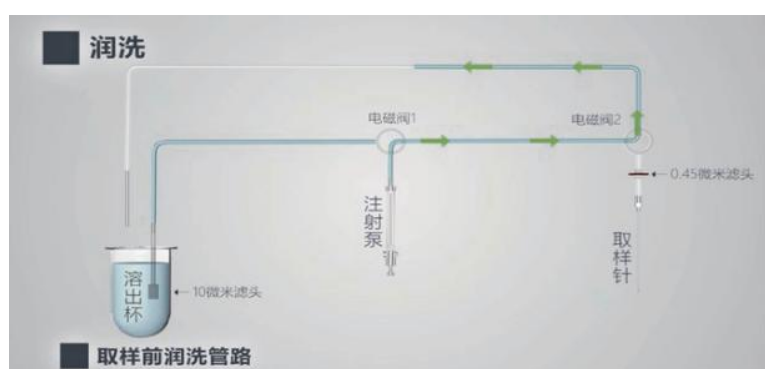


- Fully automated silo doors for one-touch in and out of the silo. Automatic positioning detection function for test tube racks.



- Automatically calculates the sampling height, at the moment of sampling can be based on the volume of solvent in accordance with the pharmacopoeia in the position of accurate sampling.

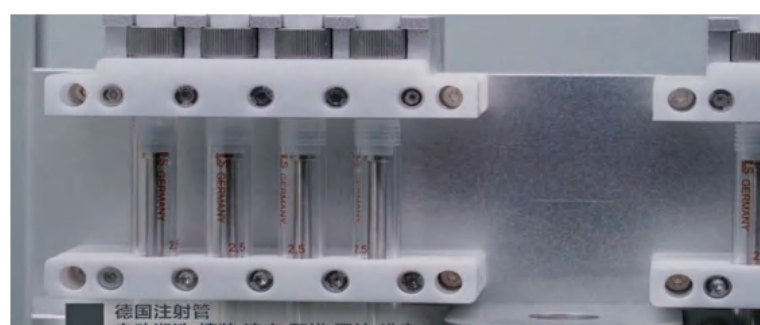
Equipped with a secondary filter interface, more adequate solvent filtration.



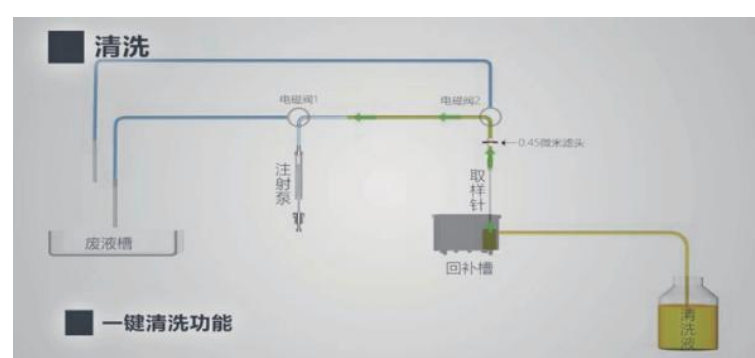
- One-click automatic cleaning of the liquid tank and pipeline after the completion of the experiment to ensure no cross-contamination.



- High quality PTFE micro-transparent piping with excellent corrosion and adsorption resistance.



- Adoption of German syringes, automatic rinsing, filling, waste liquid disposal, sampling, back filling, emptying and other steps to ensure the sampling accuracy, while ensuring that the pipe line residue as little as possible.



- Continuous sampling, dual sample sampling, automatic sample dilution and other functions. Automatically lubricates piping and sampling pumps before sampling to ensure sample accuracy.

Specifications

Performance parameter	Single sampling volume: 0.1-15mL (single);0.2-30mL (double)
	Sampling frequency: 1-16 times (single); 1-8 times (double)
	Sampling accuracy: + 0.8%(10mL)
Instrument functions	Fully automatic lubrication, filling, dripping, sampling,replenishment, dilution, emptying, and cleaning
	Accurate sampling with injection pump, adjustable suction stop time
Input power supply	220VAC+10% 200W
Dimensions	≈515x660x460mm
Whole machine weight	≈53Kg
Operation temperature	(10~30)°C
Storage temperature	(-20~60)°C
Working humidity	(20~80)% RH
Storage humidity	(5~95)% RH

DW-MDS-2008T Mechanical verification Tools

DW-MDS-2008T Mechanical verification Toolbox is a set of mechanical parameter testing device for dissolution meter in accordance with the“Guideline for Mechanical validation of Drug Dissolution Meter” developed by the state Food and Drug Administration, which is applicable to the calibration of all series of Drawell Dissolution tester and standard dissolution test of other manufacturers.

Inspection items:	levelness, verticality, coaxiality, depth, speed, oscillation, temperature and other parameters.
Resolution:	Coaxiality, depth, oscillation: 0.01mm
	Temperature: 0.1°C
	Verticality: 0.01°
	Stirring speed:0.01rpm
Provide special validation software to automatically record and judge the validation effect.	

