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DW-MDS-2014 Drug Dissolution Sampling System

DW-MDS-2014 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.

Features

1. Dissolution cup

The Dissolver is equipped with 14 cups and 14 paddles, two of which are independent is othermal refill cups. The large cup and small cup compatible design allows for quick switching and easy operation by the operator.The dissolution vessel is available in 1000mL and 250mL specifications, of which the 1000mL specification can choose a brown light-proof dissolution vessel.

2. 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.

3. Water bath

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.

4. Heating circulation system

Relying on the company's accumulated experience in the field of temperature control for many years,the DW-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.

5. 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.

6. Anti-evaporation cover

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

7. 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.

8. 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.

9. 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 +0.2℃,and the temperature resolution reaches 0.1℃

10. Administrative rights

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

11. Intelligent voice broadcast function

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

12. 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 training.

13. 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.

14. One-click import

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

15. Photosensitive lighting

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

Specifications

Instrument Performance Indicators	Water bath heating range: RT-45.0℃	Instrument Functions	Network Interface: 100M RJ45
	Resolution:0.1℃		Compatible with basket method, paddle method, small cup method, paddle butteriy method and tumbler method
	Temperature control accuracy:±0.2℃		Number of cups: 14 cups
	Stirring speed range: 10.0-300.0RPM		Segmented shaft design, no need to manually readjust the height of the positioning basket (paddle) when switching dissolution methods
	Speed resolution:0.1RPM		Automatic simultaneous dosing/sequential dosing
	Speed accuracy:±0.5RPM		Photosensitive lighting: white light/red light three-level lighting
Instrument Mechanical Indicators	Basket (paddle) shaft swing: ≤0.5mm		Save more than 100 experimental methods, and can import and export USB operation
	Rotating basket swing range:≤1.0mm		Permissions can be divided into 4 levels of control
	Deviation between rotating shaft and dissolving vessel shaft: <±1.5mm		With operation record printing and log recording function, and can audit and track dissolution
	Instrument levelness: <0.2℃		
	Basket (paddle) axis verticality: 90±0.5℃		
	Dissolution vessel verticality: 90±1℃		
Degree of work	(20~80)% RH		
Operating temperature	(10~30) ℃		
Storage temperature	(-20~60) ℃		
Storage degree	(5~95)% RH		

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DW-MDS-2014 Auto Sampler

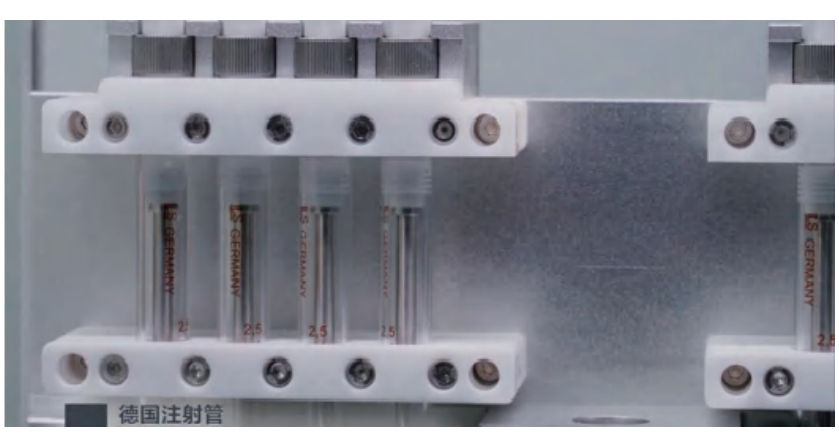
Drug Dissolution sampling system consists of a dissolution tester and an auto sampler.

Description

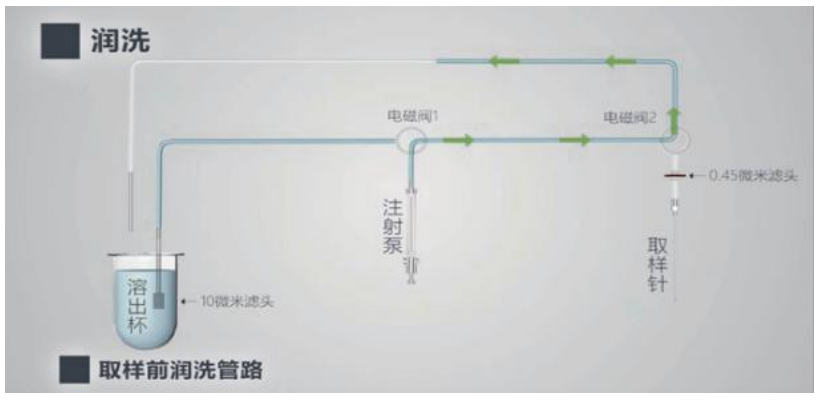
● Automatic door opening device to realize one-click entry and exit of the warehouse.
Test tube rack automatic positioning detection function.

● Adopt PTFE micro transparent pipeline, with excellent anti-corrosion and anti-absorption attachment.

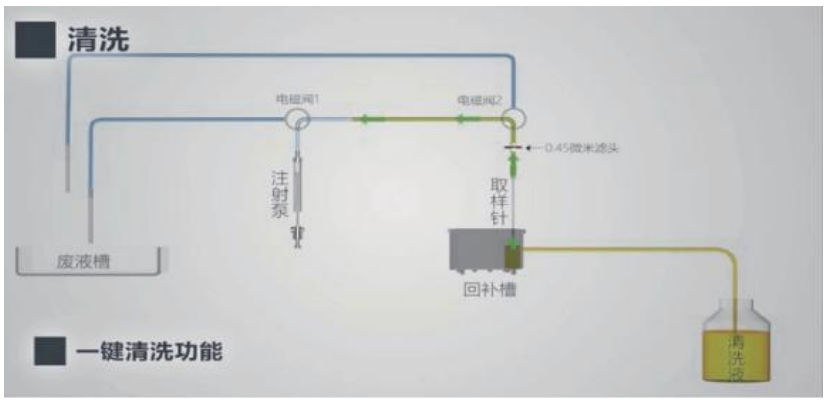
● Automatically calculate the sampling height, and at the sampling time, you can accurately sample at the position that meets the pharmacopoeia according to the volume of the solvent. Equipped with a secondary filter interface, the solvent filtration is more sufficient.



● 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.



● 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 completion of the.experiment to ensure no cross-contamination.

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Specifications

Performance parameters	Number of sampling channels : 14
	Single sampling volume: 0.1-10mL (single); 0.2-20mL (double)
	Sampling times: 1-32 times (single); 1-16 times (double)
	Control interface: RS 485
	Automatic dilution accuracy: ±1%
	Temperature control accuracy of replenishment:≤±0.5℃
	Sampling accuracy: ≤0.8% (10mL sampling)
	Minimum sampling interval: 1 minute 20 seconds (initial sampling), minimum sampling interval 2 minutes (subsequent sampling)
Instrument function	Fully automatic rinsing, filling, dripping, sampling, replenishment, dilution, emptying, cleaning
	Precise sampling by syringe pump, suction and stop time can be set
0perating temp	(10~30) ℃
Storage temp	(-20~60) ℃
Degree of work	(20~80)% RH
Storage degree	(5~95)% RH

Drug Dissolution Image Analysis system

Drug Dissolution Image Analysis system is an integrated hardware and software system independently developed by Drawell Biotechnology, which allows you to display real-time images, save information, view and analyze the drug dissolution experimental process. It well solves the problem of observing and recording the changes of the physical properties of the drug under test in the process of dissolution experiments, which provides a new observation dimension for you to carry out drug research and development, and also provides data support and video for you to analyze the quality of drug production.

Features

● **Analysis software**

You can use the drug dissolution image analysis software to realize process monitoring, data recording, data saving, data access and other functions. The analysis software is linked and synchronized with the dissolution sampling software for data interoperability without the need for complex program management and setup.

● **High-definition cameras For Experimental Environments**

Equipped with 14 experimental environment-specific high-definition cameras, up to support 1920 * 1080 full HD video recording.

● **Data storage**

The experiment starts, automatic recognition and video recording, the data is saved in the computer and can be viewed at any time.

● **Sampling Time point Recording Function**

when samples are taken, they are automatically photographed and marked with text, making it easy to find and analyze key time points at a later stage.

● **Playing speed**: support fast playback and slow playback to meet all kinds of analysis requirements.