

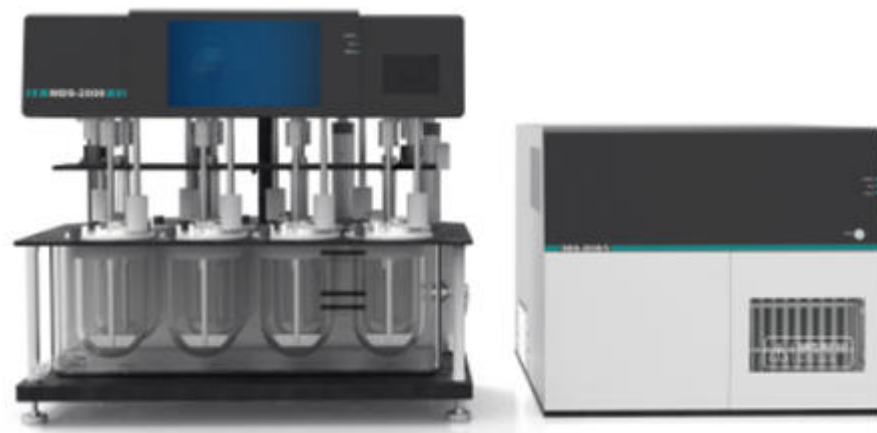
MDS-2008 Drug Dissolution Sampling System

Product manual

The MDS-2008 drug dissolution sampling system fully complies with the new version of the national pharmacopoeia. It is a brand-new instrument launched by DRAWELL Biology for domestic high-end pharmaceutical companies, drug testing centers, and scientific research units. The performance indicators of the product (speed accuracy, single sampling volume, sampling accuracy, shaft deviation, etc.) have reached or exceeded similar imported brand products.

Performance characteristics

- One-time injection molding water tank, anti-cracking, slope drainage combined with rounded corner design, easy to clean;
The independent diagonal fixing device of the dissolution cup, the silicone cup ring and the V-shaped cup cover, realize double sealing of the line and surface, greatly reducing the evaporation of solvent;
- 316L stainless steel paddle rod, using MPT stainless steel mirror polishing technology to reduce bacterial adhesion;
- Segmented propeller shaft design, no need to re-set height when changing the dissolution method, which is convenient and quick.
- Multi-point stainless steel guide rods to ensure long-term stability of the machine head vertical and mechanical performance indicators;
- The fully automatic sampling tray with automatic positioning and in-position detection reduces manpower and prevents interruption of operation due to human reasons;
- The ultra-high-precision micro-injection tube imported from Germany is used to ensure the accuracy when the extraction volume is low;
- The external dosing device is easy to clean to prevent cross contamination;
- The 10-inch large LCD touch screen makes every operation clear and simple;
- Integrated mechanical verification function package.



Sampling system

- Automatic sampling: realize ON/OFF LINE sampling, including rinsing, filling, dripping, sampling, refilling, emptying, cleaning, and dilution, all of which can be operated offline
- Sampling volume: The automatic sampling volume can be set from 0.2-15mL, and the sampling times can be set from 1-16 times; when dual-sample sampling is selected, the maximum sampling volume is doubled, and the sampling frequency is halved.
- Sampling accuracy: The high-precision syringe pump is used to achieve a sampling accuracy of 0.8% when sampling 10mL; the suction stop time of the syringe pump can be set to solve the sampling deviation caused by the different viscosity of the solvent.
- Automatic sample entry and exit: The sample tray can be automatically entered and exited when the experiment is not in progress or sampling intervals, and the sampling needle can be automatically positioned. The green light indicates when it is available, otherwise it is red. With tray in place detection, there will be an alarm reminder if the sampling stage is not in place, and no detection will be done during the sampling interval.
- Liquid level tank: It is divided into waste liquid tank, replenishment tank, dilution tank, and cleaning tank. The low-noise diaphragm pump realizes automatic pumping in and out. When necessary, it can realize isothermal rehydration, precise dilution and automatic cleaning.
- Sample container: optional 15mL test tube or 1.5mL liquid phase bottle with puncture function

Parameters

Model	MDS-2008
Water bath heating range (°C)	RT~45.0°C
Temperature resolution(°C)	0.1°C
Temperature control accuracy(°C)	≤±0.2°C
Range of stirring speed	10.0-300.ORPM
Speed resolution	0.1RPM
Speed accuracy	≤±0.5RPM
Single sampling volume	0.1-15mL (single); 0.2-30mL (double)
Sampling times	1-16 times (single); 1-8 times (double)
Sampling accuracy	≤0.8% (10mL sampling)
Basket (paddle) axis swing amplitude	≤0.5mm
Rotating basket swing range	≤1.0mm
Deviation between rotating shaft and dissolution cup shaft:	≤±1.5mm
Level of dissolution apparatus	≤±0.2°
Basket (paddle) axis verticality	≤±0.5°
Dissolution apparatus	220Vac±10% 1300W
Sampler	220Vac±10% 200W
Dissolution apparatus	670x565x640mm
Sampler	515x660x460mm
Dissolution apparatus	65Kg
Sampler	53Kg