



## Circular bath design for optimum temperature uniformity



The model DT-810 Dissolution Tester is fully automated and designed for flexibility to provide dissolution testing of up to 8 samples with either the paddle method (standard) or the rotating basket method (option). The unique circular design provides uniform water temperature while utilizing a round heating element. The Direct-Center™ automatic centering mechanism provides hands-free positioning of the dissolution vessels and drive shafts for accurate dissolution tests with high reproducibility. All components can be controlled via PC using simple keystroke operations with a user friendly graphic interface.

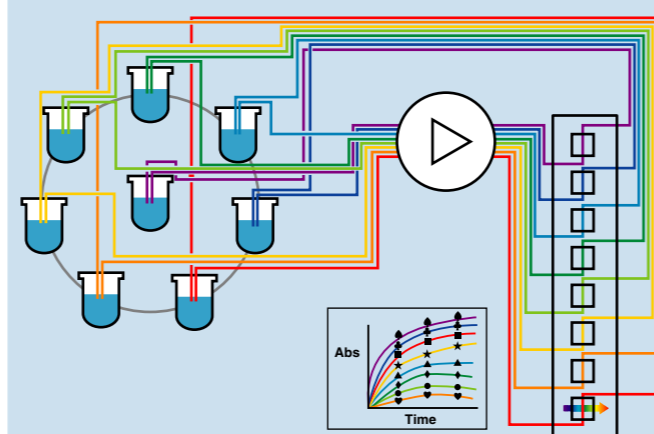
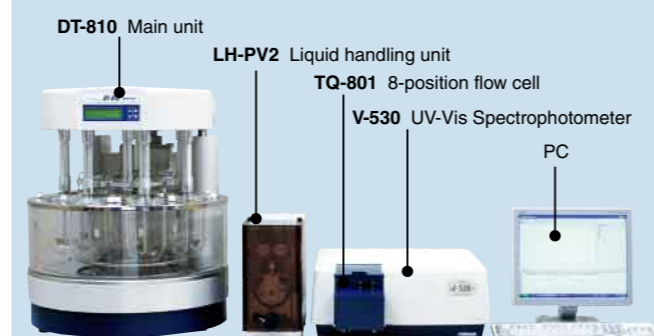
- Meets USP, EP and JP requirements
- 21 CFR Part 11 compliant
- Excellent temperature stability using the circular bath
- Uniform temperature distribution between vessels
- Easy to set up and maintain
- Direct-center™ vessel centering for automatic alignment of vessels and drive shafts
- Test vessels manufactured with precise tolerances for vessel dimensions
- PC control for monitoring
- Automated tablet dropping system for dosage loading
- Automatic sampling tube positioning for the upper and lower positions



## Flow System

### Continuous photometric analysis during dissolution

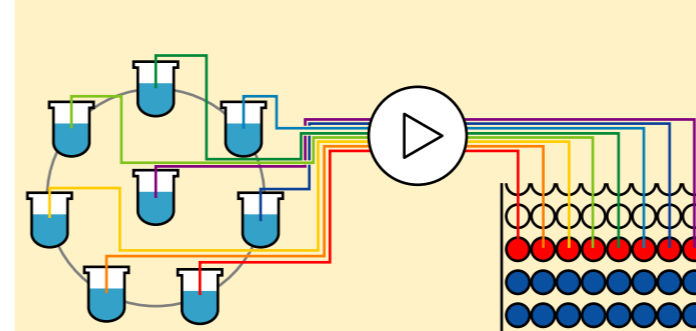
This system integrates the DT-810 with an 8 position flow-cell accessory and a UV-Vis spectrophotometer. A peristaltic pump (LH-PV2) continuously circulates sample solution between the 8 dissolution vessels and the flow cell accessory. Absorbance values are measured at user declared intervals and dissolution rates are automatically calculated. External samples can also be introduced for analysis.



## Fraction System

### Analyze a maximum of 12 sets of 8 samples

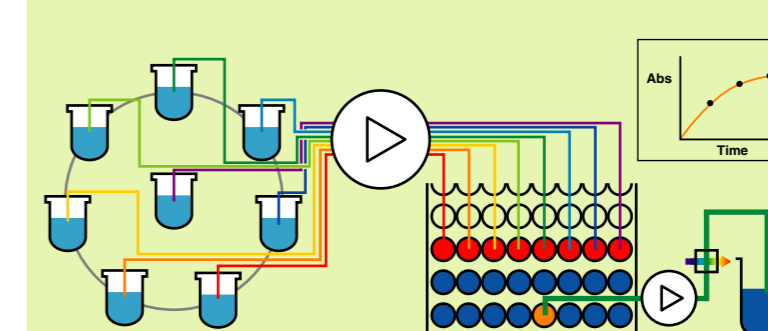
This system integrates a fraction collector and the LH-PV3 pumping unit for off-line testing. As many as 12 sets of samples with a volume of 20 mL or less can be collected from each dissolution vessel at pre-set intervals. Additional flow lines for solvent refills or line flushes using internal or external volumes are available.



## Fraction Flow System

### Flexibility for on-line and/or off-line testing

This system combines the fraction collector and a flow cell installed in a UV-Vis spectrophotometer. Samples from the dissolution vessels are collected in test tubes using the fraction collector and sample aliquots are analyzed by the UV-Vis using the autosampling capability of the fraction collector. Residual sample volumes can be analyzed later using other techniques such as HPLC.



## LH-PV series Liquid handling unit (peristaltic pumps)



The LH-PV series are 8-channel peristaltic pumps for sampling or circulation of sample solutions with adjustable flow rates.

### •LH-PV2 (Flow System only)

Designed for the Flow System configuration, the LH-PV2 circulates sample solution between the dissolution vessels and the 8-position flow cell. Extra flow lines can be used to introduce external solutions and/or for line flushing to reduce sample carryover.

### •LH-PV3 (for all systems)

The LH-PV3 can be used for both sample collection and sample circulation. Additional flow lines are available for solvent refill, introduction of standard solution and/or line flushing using an external source or a selected dissolution vessel.

## Fraction collector



### •FC-812AS

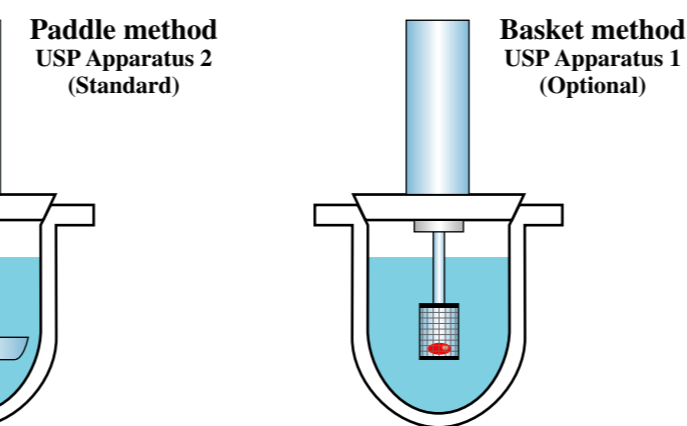
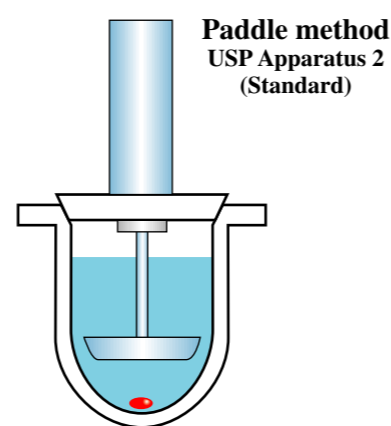
Using up to 96 test tubes, the FC-812AS Fraction Collector can simultaneously collect a maximum of 12 separate samples from each of the eight dissolution vessels. When coupled with the NPF-509 peristaltic pump, the FC-812AS can also deliver sample aliquots to a UV-Vis instrument using the integrated autosampler function.

## UV-Vis spectrophotometer



### •V-530 UV-Vis spectrophotometer

The V-530 is a flexible UV-Vis spectrophotometer suitable for dissolution sample testing. The Flow System combines the TQ-801 8-position flow cell accessory with the V-530 spectrophotometer. The Fraction Flow System utilizes the NPF-509 peristaltic pump and integrated flow cell with the V-530 for sample analysis. The V-530 is supplied with validation support software for instrument performance tests. (Note: optional standards are required for instrument validation.)



The DT-810 is designed for use with USP Apparatus 1 and 2.

