



Tablet Dissolution Testing Instruments

A dissolution test is a means of identifying and proving the availability of active pharmaceutical ingredient (API) in their delivered form. A dissolution test reflects the availability of active substance and allows the prediction of the time for complete release of the material from the dosage form. All Pharma Test tablet dissolution testing instruments are fully USP and EP compliant. They use our MonoShaft™ tool system and include a full set of vessel and USP Apparatus 2 paddles. A full range of dissolution accessories is also available.



PTWS 120D
6-Station Tablet Dissolution Bath

- > 6 stirred positions, excellent access to all vessels
- > Centrally located electronic lift drive to raise and lower the head
- > Large color touch screen user interface



PTWS 120S
6-Station Individual Speed Control Dissolution Bath

- > Individual speed control for all 6 stirred positions
- > Centrally located electronic lift drive to raise and lower the head
- > Large color touch screen user interface



PTWS 820D
8-Station Tablet Dissolution Bath

- > 8 stirred positions, excellent access to all vessels
- > Centrally located electronic lift drive to raise and lower the head
- > Large color touch screen user interface



PTWS 620D
6+2 Station Tablet Dissolution Bath

- > 8 stirred positions, 6+2 configuration
- > Rigid motorized lift drive to raise and lower the head
- > Large color touch screen user interface



PTWS 1220
6+6 Station Tablet Dissolution Bath

- > 12 stirred positions, 6+6 configuration: ideal for Biowaver tests
- > Rigid motorized lift drive to raise and lower the head
- > Large color touch screen user interface



PTWS D620
6+6 Dual Drive Dissolution Bath

- > 12 stirred positions, individual speed control for both rows
- > Rigid motorized lift drive to raise and lower the head
- > Large color touch screen user interface



PTWS 4000
4-Liter Pool Test Dissolution Bath

- > 6 stirred positions for 4 liter vessels in a unique format
- > Also supports 1 and 2 liter vessels
- > Motorized lift drive to raise and lower the head



PT-DT70
6+1 Station Tablet Dissolution Bath

- > 7 stirred positions
- > Low head design with pneumatic flip-back lift
- > Tablet drop directly through chutes in instrument head



PT-DDS4
Media Preparation System

- > Prepares up to 25 liters of pre-heated and deaerated medium
- > Media degassing is one of the most influential factors on USP suitability tests
- > Deaeration by vacuum is the most efficient medium preparation process



Automated Dissolution Testing Systems

An offline automated dissolution system includes a dissolution bath, a pump and a fraction collector. They automate sampling which is the most labor intense stage of a dissolution test, especially for sustained release products. Online systems automate sampling, measuring, and result calculation. Unlike the offline systems where samples are removed from the dissolution vessels and stored either for transfer to a measurement system or for further preparation (e.g. dilution), the samples here are circulated in a closed loop. A UV/VIS spectrophotometer with cell changer and PC control software is included as part of this system set-up.



DSR-M | Dissolution Sampling Robot

The flexible, modular design of the DSR-M allows sampling, auto media refill, dilution and transfer into HPLC vials for 6 to 12 station dissolution baths.

- > Features integrated valve-free piston pumps for high precision
- > Modular design to allow auto media refill, dilution and transfer into HPLC vials for 6 to 12 station dissolution baths
- > Up to 20 sampling cycles (10 cycles with dilution)



DFC Offline Automated Dissolution Testing Systems

The DFC offline automated dissolution testing systems include a dissolution bath, a pump and a fraction collector which will collect the sampled dissolution media.

- > Automates sampling, the most labour intensive stage of a dissolution test
- > Automated sampling reduces human (non-systematic) errors
- > Offers unattended operation after start of dissolution run



ADS Online Automated Dissolution Testing Systems

The online ADS systems are so called "closed loop" dissolution systems. Sampling, measuring, and result calculation are automated.

- > Automates sampling, measuring, and result calculation
- > No media loss due to closed loop design
- > Include UV/VIS spectrophotometer and PC software



Tablet Hardness Testing Instruments

Tablet hardness testing is used to test the breaking point and structural integrity of a tablet prior to storage, transportation, and handling before usage. All Pharma Test tablet hardness testing instruments meet the latest requirements of the USP and EP Pharmacopeia.



PTB 420 Auto
"4-in-1" Hardness Tester with Integrated Balance and Feeder

- > Measures thickness, diameter, hardness and weight via integrated analytical balance
- > Touch-less measurement of sample thickness
- > Tests up to 25 samples fully automatically by using the integrated sample feeder



PTB 111E
Hardness Tester

- > Measures tablet hardness
- > Automated re-start feature to speed up the testing sequence
- > Time and date are printed on the reports



PTB 111EP
Hardness Tester with Integrated Printer

- > Measures tablet hardness and document results via an integrated printer
- > Automated re-start feature to speed up the testing sequence
- > Time and date are printed on the reports



PTB 311E
"3-in-1" Hardness Tester

- > Measures tablet thickness, diameter and hardness
- > Automated re-start feature to speed up the testing sequence
- > Time and date are printed on the reports



PTB 420
4-in-1 Hardness Tester with Balance Connection

- > Measure thickness, diameter, hardness and weight (via connected external balance)
- > Touch-less measurement of sample thickness
- > Test up to 10 samples fully automatically by using a tablet magazine (optional)



PTB 302
Hardness Tester with Integrated Printer

- > Measures tablet hardness and document results via integrated printer
- > Automated re-start feature to speed up the testing sequence
- > Stainless steel housing and simple operation ideally suited to a production environment



PTB-M
Portable Hardness Tester

- > Compact, portable instrument to measure tablet hardness
- > Features the same high quality force sensor as other Pharma Test hardness testers
- > Operated by 9V battery or using supplied power adapter



WHT 3ME
Fully-Automated Tablet Hardness Testing System

- > Tests weight, thickness, diameter and hardness of tablets in a fully automated self-contained system
- > Multi and single batch feeders available
- > Included WHT32 software with full 21 CFR part 11 compliance



PTBA 211E
Ampoule Breakpoint Tester

- > Fully DIN/ISO 9187 compliant test of ampoule hardness
- > Exchangeable supports to allow testing of 1-30ml ampoules
- > Automated re-start feature to speed up the testing sequence



PT-MT3
Magnetic Test Tablet

- > A dynamic validation option for tablet hardness testing instruments
- > Tablet simulator to qualify break point detection, load cell linearity and force increase
- > A test finger held in place by an electro-magnet acts as a "re-breakable" and "re-settable" tablet



Tablet Disintegration Testing Instruments

Tablet disintegration testing instruments are widely used in the pharmaceutical industry to evaluate the disintegration characteristics of formulations and the quality control of different dosage forms. All Pharma Test tablet and capsule disintegration testers are fully compliant with the current USP and EP Pharmacopeia and support both A-type and B-type baskets for regular or larger samples. The PT-ODF is a special basket to test the disintegration of orally dispersible films.

Friability Testing Instruments

Friability testing is used to test the durability of tablets during packing processes and transit. This involves repeatedly dropping a sample of tablets over a fixed time, using a rotating drum with a baffle. The result is inspected for broken tablets, and the percentage of tablet mass lost through chipping. All Pharma Test friability testers are fully compliant to the current SP and EP Pharmacopeia and come with friability („Roche“) drums included in the standard scope of supply. Abrasion drums as well as an anti-static coating are available as options.



PTZ-S and DIST
Manual Disintegration Testers

- > Cost effective, manual disintegration testing instruments
- > Models with one (PTZ-S) and three (DIST 3) test stations available
- > Instrument body made from GMP compliant stainless steel



PTZ AUTO
Semi-Automated Disintegration Testers

- > Independent movement of all stations and time log function
- > Models with one, two, three and four test stations available
- > Instrument body made from GMP compliant stainless steel



PTZ AUTO EZ
Fully-Automated Disintegration Testers

- > Fully-automated individual disintegration time detection
- > Models with one, two, three and four test stations available
- > Instrument body made from GMP compliant stainless steel



PTF E/ER
Friability Testers

- > Single and double drum versions available
- > Fixed and variable rotation speed versions available
- > Operation at a 10 degree angle to test larger samples is supported



PTF ERA
Automated Friability Testers

- > Triple and six drum versions available
- > Variable rotation speed setting from 20-60 rpm
- > Automated discharge of samples after test



PTF DR
Automated Friability Testers

- > Single and triple drum versions available
- > Variable rotation speed setting from 20-70 rpm
- > Automated discharge of samples after test and connection to analytical balance



Powder Testing Instruments

Powders are used in many industries today and the bulk properties of a powder are dependent upon the preparation, treatment, and storage of a sample. Since small disturbances of bulk powders result in a changed bulk density, it is often very difficult to measure with good reproducibility. The Pharma Test powder testing product portfolio includes instruments to not only measure bulk density but also tap density and flowability. We also offer added benefits by combining flowability measurement with NIR (near-infrared) spectroscopy to give as much in-depth information about your powders as possible.

Suppository Testing Instruments

The European Pharmacopeia describes methods to test the disintegration time and softening time of suppositories. Disintegration time is measured by placing the samples into rotating baskets inside a heated water bath. The softening time is the time for which the suppository melts at a certain temperature. This is an indication for the hardness of the base. This range of instruments to test the quality of suppositories, pessaries and creams includes disintegration and penetration testers.



PT-TD300
Tap Density Tester

- > Determines bulk density of powders to improve product quality during the production process
- > Supports 3 and 14mm tapping height, as well as frequency of 250 and 300 per minute
- > Noise reduction hood available as an option



PT-SV100
Scott Volumeter

- > Easy to use instrument to determine apparent density
- > Applicable to powders including metal powders, compounds, pigments
- > Instrument comes ready to use, only an analytical balance is needed in addition to the basic unit



PTS 3E
Suppository Disintegration Tester

- > Fully EP <2.9.2> compliant testing of 3 samples at the same time
- > Test disintegration of suppositories and pessaries
- > Instrument body made from GMP compliant stainless steel



SPT-6
Suppository Softening (Penetration) Time Tester

- > Tests six samples at the same time
- > Connects to a PTZ-S, DIST 3 or PTZ AUTO (EZ) instrument
- > Fully automated detection of suppository softening time (with PTZ AUTO EZ units)



PTG-S4
Powder Characterization Instrument

- > Measures the flow behaviour of powders to reduce process costs and maintain batch-to-batch quality
- > Determine flow-time, cone angle, flowability, cone density and cone volume
- > Integrated analytical balance cell, dust protection bonnet and printer



PTG-NIR
Powder Analysis System

- > All features of the standard PTG-S4 instrument combined with J&M NIR spectroscopy
- > The integrated diode array NIR spectrometer allows measurements directly in the powder cone
- > Perform quantitative analyses to determine moisture or active content information



Leak Testing Instruments

The leak test apparatus is used in the pharmaceutical industry to check the integrity of tablet strips, blister packs and small bottles. It also finds application in the food industry where it can be effectively used to check the air-tightness of sweet packets, ready-to-eat pre-packed foods, confectionery packaging, packs of noodles, sauces to name but a few.

THE GERMAN GRÜNDLICHKEIT



PT-LT
Leak Tester

- > Tests the integrity of tablet strips, blister packs and bottles
- > Operation based on vacuum
- > Different sizes of desiccators available to accommodate broad sample size range