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Portfolio Overview Galenic Instruments

www.pharma-test.com



Galenic Instruments

For over 40 years, Pharma Test has been synonymous with the development and production of high-value test devices and systems. The term "galenic" comes from "galenic formulation". Galenic formulation deals with the principles of preparing and compounding medicines in order to optimize their absorption. The pharmaceutical formulation of a medicine has an impact on the pharmacokinetics, pharmacodynamics and safe delivery profile of a drug.

Our range of galenic instruments features all instruments used for the testing of physical parameters of solid dosage forms as well as those of powders and granules.



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.



PT-Node Instrument Network Adapter

- > Prints test reports via a web browser on any printer
- > Exports results to external systems in your company network
- > Connects up to two instruments simultaneously



PTB 330 Hardness Tester with Balance Connection

- > Measures tablet thickness, diameter/length, width and hardness
- > Connect a balance to measure weight
- Instrument software includes user and method management



PTB 500 Hardness Tester with Integrated Balance

- > Measures tablet weight, thickness, diameter/length, width and hardnes
- > Automated sample carousel



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 "4-in-1" Hardness Tester

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



WHT 4 Fully-Automated Tablet Hardness **Testing System**

- > Measures weight, thickness, diameter and hardness of tablets fully automatically
- > No change of tools necessary to handle different tablet shapes
- > Integrated system with PC and touch screen including WHT32 software with optional full 21 CFR part 11 compliance



WHT 4-SM1 Single-Batch Feeder

- > Single-Batch Feeder is optionally available > Fully automated control of different samples and batches
- > Possible to use the WHT4-SM1 seperately to connect with an existing tabletting machine



WHT 4-SM Multi-Batch Feeder

- > Multi-Batch Feeder is optionally available
- > Use to test up to 10 different products fully automatically and unattended together with the WHT 4
- Possible to use the WHT4-SM seperately to connect with an existing tabletting machine



PTBA 211E Ampoule Breakpoint Tester

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



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

- > Instrument software includes user
- management, method management,
- audit trail and electronic signatures



Hardness Tester

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



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



Tablet Disintegration Testing Instruments

Tablet disintegration testing instruments evaluate the disintegration characteristics of formulations and the quality control of different dosage forms. All Pharma Test disintegration testers are fully compliant with USP and EP Pharmacopeia. PT-ODF (pictured above) is a special basket to test orally dispersible films.



PTZ-S and DIST-3 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

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 USP 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. All PTF instruments support operation at a 10 degree angle to test larger samples by use of collapsible feet.



PTZ 100 / PTZ 300 Semi-Automated Disintegration Testers

- Compact semi-automated disintegration testers
- > Models with one (PTZ 100) and three (PTZ 300) test stations available
- > Instrument software includes user and method management



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 10E / PTF 20E Tablet Friability Testers

- > Available as single and double drum versions with fixed rotation speed at 25 rpm
- > Instrument body made from GMP compliant stainless steel
- > Easy to use and cost-effective instrument



PTF 100 / PTF 200 **Tablet Friability Testers**

- Available as one and two drum versions
- > Variable rotation speed setting from 15-100 rpm
- > Automated sample discharge, analytical balance connection and optionally available integrated printer



PTF 300 / PTF 600 **Tablet Friability Testers**

- > Available as three and six drum versions
- > Variable rotation speed setting from 10-70 rpm
- > Automated sample discharge, analytical balance connection and integrated printer (included)



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 in 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 and pessaries includes disintegration and penetration testers.



PTS 3E Suppository Disintegration Tester

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

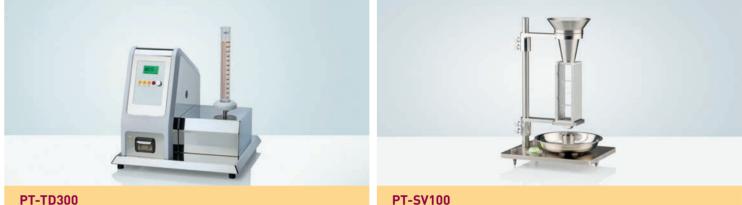


SPT-6 Suppository Softening (Penetration) Time Tester

- > Tests six samples at the same time, EP <2.9.22> Apparatus <A>" compliant
- > To be connected to a PTZ-S or PTZ AUTO (EZ) instrument
- > Fully automated detection of suppository softening time (with PTZ AUTO EZ units)

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 tapped density and flowability. Pharma Test also offers added benefits by combining flowability measurement with NIR (near-infrared) spectroscopy to give as much in-depth information about your powders as possible.



Tapped Density Tester

- > Determines bulk density of powders to improve product quality during the production process
- > Fully USP, EP, ISO and ASTM compliant with noise reduction hood available as an option
- > Supports 3 and 14 mm tapping height, as well as a frequency of 250 or 300 per minute respectively



PTG-S5 Powder Characterization Instrument

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

Scott Volumeter

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



Powder Analysis System

- All features of the standard PTG-S5 instrument combined with J&M NIR spectroscopy
- > The integrated diode array NIR spectrometer allows measurements directly in the powder cone
- Performs guantitative analyses to determine moisture or content information



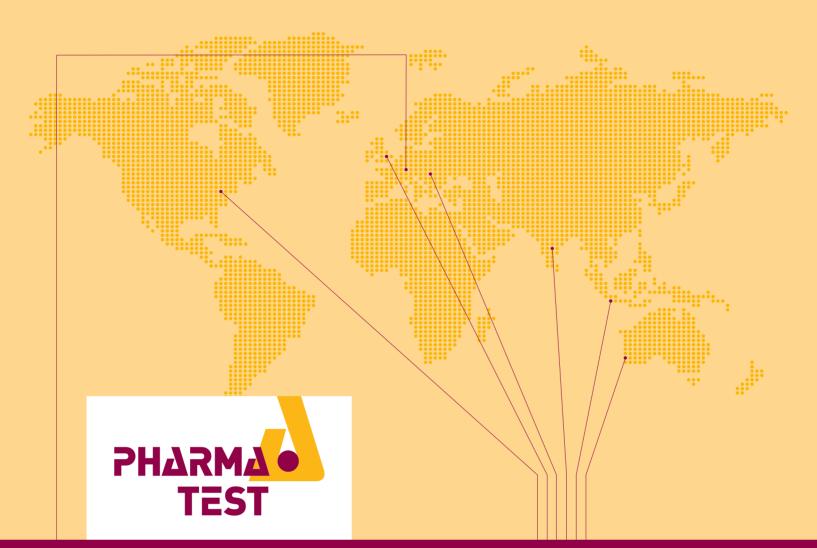
Leak Testing Instruments

The leak testing 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 just a few.



- > 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

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