Portfolio Overview
Galenic Instruments
For over 35 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.

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

WHT 3ME
Fully-Automated Tablet Hardness Testing System
> Measures weight, thickness, diameter and hardness of tablets in a fully automated self-contained system
> Multi and single batch feeders available
> WHT32 software included with full 21 CFR part 11 compliance (optional)

PTB 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

PTBA 211E
Ampoule Breakpoint Tester
> Measures tablet thickness, diameter and hardness
> Automated re-start feature to speed up the testing sequence

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

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 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

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 (pictured above) 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 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.
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.

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.

**PTG-S5**
- 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

**PTG-NIR**
- 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 quantitative analyses to determine moisture or content information

**PT-3E**
- 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**
- Tests six samples at the same time
- To be connected to a PTZ-S, DIST 3 or PTZ AUTO (EZ) instrument
- Fully automated detection of suppository softening time (with PTZ AUTO EZ units)

**PT-TD300**
- 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 16mm tapping height, as well as frequency of 250 and 300 per minute

**PT-SV100**
- 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

**PTS 3E**

**SPT-6**

**PTG-S5**

**PTG-NIR**

**PT-TD300**

**PT-SV100**

**PTS 3E**

**SPT-6**

**PTG-S5**

**PTG-NIR**

**PT-TD300**

**PT-SV100**
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.
Over 100 distributors and agents serve your interests worldwide, with fully qualified and trained staff to service and maintain your investment.