

DIST3 – Manual Tablet Disintegration Testing Instrument



The **DIST3** is a three-basket manual tablet disintegration testing instrument, manufactured according to the recent **USP <701/2040>**, **EP <2.9.1/2.9.1.2>**, JP and other pharmacopoeias.

The DIST3 is used for the manual testing of disintegration times of tablets, capsules and other solid dosage forms. The triple basket DIST3 version offers the following features:

A silent 24V DC motor drive smoothly moves the disintegration basket up and down over a distance of 55 mm (each way), 30 times per minute. Every two seconds the stroke rate is automatically re-adjusted; the stroke height is pre-set by the eccentric drive mechanism. The disintegration basket which holds the glass tubes and discs, is placed into a stainless steel holder. After start it is smoothly moved into the testing medium. Depending on the operating procedure, the test is either automatically stopped if the pre-set time has expired or if the operator aborts the test after he saw all samples to be disintegrated. The basket always stops at its highest mechanical position.

The digital LED display shows the elapsed testing time and the firmware version.

A built-in thermostatically controlled heating system warms the water within the Plexiglas (Perspex) bath up to 37°C. A powerful pump is used to circulate the water within the bath. The pre-selected temperature is automatically adjusted by a built-in control sensor. A second sensor is used as a safety device which switches off the heater should the temperature rise outside the limit. A thermo fuse and a

thermo switch, fixed to the heater, provide additional safety features to protect the system from overheating.

The bath temperature can be steplessly adjusted. Using an external control thermometer the temperature of the test medium can be checked at any time. The standard disintegration basket is supplied with 6 glass tubes and 6 plastic discs. Optionally, the 3 tube basket according to apparatus "B" of the EP <2.9.1.2> and USP <2040>, can be used without any further modifications.

Advantages

Some of the highlights the DIST3 offers are:

- LED display informing of running time and firmware version
- Totally silent operation of the stroke mechanism
- Pre-programmable maximum disintegration time with auto-stop function
- Vibration free movement, stroke height set to 55 mm at 30 strokes/min
- Disintegration baskets always stops at highest point
- Total testing time (pre-selectable) between 1 second to 9 hrs. 59 min. 59 sec.
- Small footprint L x W x H: approx. 42 x 35 x 42cm

Features

The main features of the DIST3 are:

- Fully USP <701/2040> and EP <2.9.1/2.9.2> compliant
- Temperature adjustable within about 30 to 45°C
- Digital LED display of elapsed testing time and auto stop at the end of a run
- Single (PTZ-S) and triple station instruments available
- Exchangeable baskets for apparatus "B" (30mm tube size) as described in the USP <2040> and EP <2.9.1.2>)
- GMP compliant stainless steel housing

Standard Scope of Supply

The DIST3 comes ready to use with the following standard scope of supply:

- Ready to operate including three fully equipped disintegration baskets, including disks and glass tubes
- Three 1 ltr. glass beakers
- Thermometer
- Comprehensive documentation folder including:
 - User manual
 - IQ documentation
 - OQ documentation
 - Instrument logbook

Options

In addition to the standard scope of supply Pharma Test offers a broad range of accessories and options including:

- Exchangeable baskets for apparatus "B" (30mm tube size) as described in the USP <2040> and EP <2.9.1.2>
- Recommended Spare Part & Consumable Kit
- Full range of certified validation tools



Technical Data

Parameter	Specification
Display	LED
Data Entry	Functional Keys
Timer	1 Sec. to 9 hrs. 59 min. 59 Sec.
Stroke Height	Fix 55 mm
Stroke Frequency	30 Strokes/Minute
Temperature Adjustment	Potentiometer within approx.. 30° - 45°C
Instrument Housing	Stainless steel - powder coated surface for better material protection
Calibration	Built-in calibration procedures for speed, temperature control, OQ/PQ interval programmable including alarm indicator
Bench Space Requirement	50 x 45 cm
Certification	All components certified to USP / EP requirements
CE / EMC Certification	All CE / EMC Certification provided
Validation	All IQ & OQ documents included