

# Introducing the

# **ZT Series**

The new generation of disintegration testing – from manual to fully automated





# From manual to fully automated -

### **ERWEKA ZT Series**

convenient determination of the disintegration time of tablets and other solid dosage forms. The broad range of ERWEKA disintegration testers comprises all types of test equipment from the manual ZT 121 light and the ZT 220/320 series up to our fully automated disintegration testers of the ZT 720 series.

Our compact entry-level device ZT 121 light with ration best suited to your laboratory. one test station and the disintegration testers of the ZT 220 and ZT 320 series with up to 4 test stations

The ERWEKA disintegration testers enable easy and are perfectly suited for the manual determination of the disintegration of test samples. The ZT 720 series automatically detects the disintegration of samples by using magnetic sensors.

> Versatile options and accessories ensure flexibility and enable the adaption to your specific needs. Our sales team will be pleased to discuss the configu-

### **Options for ZT Series**



## Compact disintegration testing -ZT 121 light



The ERWEKA ZT 121 light is the perfect entry-level disintegration tester with one motor driven USP/ EP/JP compliant test station. The compact unit of our light series is equipped with an integrated flow-through heater and a moulded one-piece PET water bath (no leaking/breaking, easy to clean) with cover.

The ZT 121 light can be easily operated via a membrane keypad. Defined test run parameters such as run time and water bath temperature are entered with symbol keys and the actual values are then shown on large and bright LED displays. The runtime counter automatically starts as soon as the basket rack assembly is lowered into the test media.



100% USP/EP/JP compliant



Compact entry-level device



Easy control via a large LED display

#### **Technical Data**

### 1 test station

 $30 \pm 1$  strokes/min.

### $55 \pm 2$ mm stroke height

Function keys and 2x LED display for entering nominal bath temperature and required run-time

Starts/stops to counting run-time automatically when basket rack is lowered

Integrated flow-through heating system (accuracy  $\pm 0.2$  °C)

### Temperature range 30 - 50 °C

Run time up to 9h, 59 min,  $59 s \pm 1 s$ 

Manual lift-in and -out of the baskets

### Highlights

- External electronic temperature sensor PT 100
- Quick Clean Basket type A (6 test tubes) 100% USP compliant

### **Options**

- Water stabiliser with colour indicator
- Qualification documents IQ/OQ/PV
- ERWEKA IQ/OQ/PV service at customer site
- Maintenance service





# Parallel disintegration testing -

### **ZT 220 Series**

The disintegration testers of the ZT 220 series are available with 2, 3 or 4 simultaneously motor driven USP/EP/JP compliant test stations with basket rack assemblies. The standard versions of these units incorporate a high-quality integrated flow-through heating system, a moulded one-piece PET water bath (no leaking/breaking, easy to clean) and a water bath cover.

The unit is easily operated: Test run parameters such as run-time and water bath temperature are entered via a membrane keypad with symbol keys and the actual values are then shown on large and bright LED displays. The run-time counter is automatically started when the basket rack assembly is lifted into the test media.



100 % USP/EP/JP compliant



2 to 4 test stations



Acoustic time signal selectable



### **Options**

- Basket rack assambly type A (6 test tubes) or type B (3 test tubes) 100% USP compliant
- External electronic temperature sensor
- Media pre-heat and disintegration rack storage container located in the water bath (ZT 223 only)
- Quick-Clean-Basket (100 % USP/EP/JP compliant) for fast cleaning of the test stations.
- Water stabiliser with colour indicator
- Immersion thermometer certified
- Qualification documents IQ/OQ/PV
- ERWEKA IQ/OQ/PV service at customer site
- Maintenance service

### **Technical Data**

### 2 to 4 test racks

30 ± 1 strokes/min

### $55 \pm 2$ mm stroke height

Function keys and 2x LED display for entering nominal bath temperature and required run-time

Starts/stops to counting run-time automatically when basket rack is lowered

Integrated flow-through heating system (accuracy ± 0.2 °C)

### Temperature range 30 - 50 °C

Run time up to 99 h, 59 min,  $59 s \pm 1 s$ 

### Manual lift-in and -out of the baskets

USB-A printer interface for documentation print out

# Asynchronous disintegration testing –

### **ZT 320 Series**



The test stations of our ZT 320 series are driven individually. Each test station is controlled by its own keypad. After programming the required test run-time, the basket rack assembly with its loaded samples is automatically lowered into the media. On completion of the preset run-time or when the stop button is pressed, the basket rack is raised from the media to prevent further disintegration of the samples (optional).



100 % USP/EP/JP compliant



Continuous heating of water bath by flow-through heater



1 to 4 asynchronous test stations



Tool free assembly and disassembly

### **Technical Data**

### 1 to 4 test racks

 $30 \pm 1$  strokes/min

### $55 \pm 2 \,\text{mm}$ stroke height

LED display to show remaining run-time and actual bath temperature

### Integrated flow-through heating system (accuracy ± 0.2 °C)

Temperature range 30 - 50 °C

### Run time up to 99 h, 59 min, $59 s \pm 1 s$

Manual lift-in and -out of the baskets

### RS 232 interface

USB-A printer interface for documentation print out

#### **Options**

- Automated lift-in and -out of the basket rack assembly/ies on start / completion of the pre-set run-time of each test station
- Basket rack assembly type A (6 test tubes) or type B (3 test tubes) 100 % USP compliant
- Media pre-heat and disintegration rack storage container located in the water bath (ZT 321 and
- Quick-Clean-Basket (100 % USP/EP/JP compliant) for fast cleaning of the test stations
- Water stabiliser with colour indicator
- Qualification documents IQ/OQ/PV
- ERWEKA IQ/OQ/PV service at customer site
- Maintenance service



# Automated disintegration testing -

### ZT 720 Series

The ERWEKA ZT 720 Series automatically determines the disintegration time of samples by using a unique system of magnets and sensors. The ZT 720 is available with one (ZT 721) or two (ZT 722) individually driven test stations and is equipped with an integrated flow-through heater.

Its temperature sensor PT 100 allows constant control of the water bath temperature. The ZT 720 series is controlled through an intuitive 7" touch-screen and is capable of storing and retrieving up to 100 products/methods with results and parameters.

Select the basket type for your individual need: Basket type A comes with 6 test tubes for standard tablets, basket type B contains 3 test tubes for bigger tablets (according to USP/EP standards).

### **Options**

- AutoBasket type A (6 tubes) & Type B (3 tubes)
- Additional vessel for pre-heating (ZT 721 only)
- Disc remover for removal of type A discs
- Mesh 10 or 40 sieves for AutoBasket type A & B
- IQ/OQ/PV documents and validation service
- Printe

### Touch display

Intuitive navigation due to user-friendly menu structure with a 7" integrated touchscreen display for convenient and easy operation. Access is password protected.

### **Speed control**

Lift drive with stepper motor for direct speed control. Automated lift-in and lift-out of the basket rack at start/completion of the pre-set run-time.

### **AutoBasket**

Automated determination of the disintegration time of each sample by built-in sensors within the AutoBasket.

### Acrylic water bath

Effortless cleaning is easily possible due to the removable acrylic water bath, equipped with an outlet valve.



### The new ZT 720 Series touch display

During the development of the ZT 720 touch display we focused on the features which users find most important: Easy and fast creation of methods, quick launching of tests and documentation of test results. The intuitive touch display enables easy operation of all functions.

ZT 720 is equipped with 4 GB memory to store up to 100 products/methods and about 1 million test results, which can be displayed and exported at any time, ensuring that no test results are lost. Comprehensive integrated calibration functions guarantee accurate results and document each calibration process: Maximum convenience combined with an extensive feature set.

### Highlights

- Intuitive navigation due to user-friendly menu structure
- 4 GB memory for methods and test results
- Data export option: USB or LAN interface exports data in XML or CSV format
- Interconnect your systems: Load data from one system to another via USB/SD interface
- Automatic store function of test results after each test
- Back-up function through USB/SD-Card
- Customizable IQ/OQ/PV validation interval periods

#### Technical Data

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Test stations	1 (ZT 721) or 2 (ZT 722)
Touch display	7"
Memory function	4 GB memory for 100 products/methods and approx. 1 million test results
Lift drive	Step motor
Speed	$30 \pm 1$ mm/min
Height of stroke	55 ± 2 mm
Heating	Integrated flow through heating system
Temperature control	External PT 100 temperature sensor
Automatic determination of the disintegration time	AutoBasket type A (6 test tubes) or AutoBasket type B (3 test tubes plus discs)
Power consumption 230 V/115 V	1750Watt
Voltage ± 10 %	230 VAC / 50 Hz - 60 Hz 115 VAC / 50 Hz - 60 Hz
Interfaces	USB A, USB B and LAN
Printer interface for	Oki laser printer / HP laser printer
Dimension: width/depth/height weight	397 mm / 365 mm / 667 mm 30 - 35 kg

AutoBasket for automated testing uses a magnetic guided disc and sensors under the USP/EP compliant sieves

