

# ELECTROLAB

## Disintegration Testers





## 2 Station Semi Automatic Park Out (ED-2 SAPO)



Park out



Report



LAN

### Features

- Complies with USP, IP, BP and Ph. Eur. specifications
- Disintegration time registration of individual tablets
- Basket park-out from beaker on test completion
- Unique camless drive
- Print report of test results
- Individual motor and timer with external probe for each basket
- Moulded bath with fliptop cover
- Magnetically coupled basket for easy loading
- Stirrer for water bath circulation to maintain uniform temperature
- Water bath level sensor to maintain water level



The baskets are ergonomically designed for user friendly handling. Each basket has 6 color coded rings for easy visual identification during the registration of disintegration time. The baskets are magnetically coupled to the arm using permanent magnets which ensure a strong swivel free and easy attachment with correct orientation on every engagement. The baskets can be completely dismantled for thorough cleaning using a simple knurl screw. A device has been provided to keep the glass tube safely in place whilst assembling or dismantling.

#### Standard accessories:

Acrylic water bath with heater and sensor (1 no.), 1000 ml glass beakers (2 nos.), 6 tube baskets (2 nos.), guided discs (6 x 2 stations), and external temperature probe (1 no.)

#### Optional accessories:

3 tube bolus basket, 1 tube bolus basket, magnetic handling disc device and magnetic disc, Printer (Epson Lx-300 plus)





## Semi Automatic Park out (ED-2 SAPO)



The advanced microcontroller along with The PT 100 sensor and a stirrer in the bath ensures uniform temperature and a control accuracy of within  $\pm 0.2^{\circ}\text{C}$ . The temperature can be set in the range of  $30^{\circ}$  to  $40^{\circ}\text{C}$ . The thin mobile temperature probes are placed in the beaker to monitor and validate the beaker temperature and start the test when the set temperature has been reached. The probes are designed to match the beaker profile and prevent interference with the basket movement. A PC keyboard interface is provided for ease name, product name, batch nos., lot nos., media and set parameters. All such data for up to 10 products can be stored and retained to save time.

### Timer mode

Individual test time can be programmed for each basket. The basket can be run for a set time and it parks out at the end of the test. In both modes of operation for better observation of the disintegrating tablet the baskets are parked out of the media, when the test is halted.



### Registration Mode

In this mode, the disintegration process for each sample can be observed and on completion of this process the respective color coded key can be pressed to register the disintegration time of the corresponding sample. This registered time is displayed on the instrument panel and the result can be printed out. On completion of registration for all the 6 tablets, the basket will park out of the beaker.

### Results

Test results for each basket can be recorded separately. The instrument ensures that parameters like temperature of individual beakers, the bath and strokes per minute are validated online. A report of these parameters can be printed at the end of the test as per cGMP guidelines. In Registration mode, the validation and test results are printed whereas in the Timer mode the validation results are printed out.

### Accessories for ED-2 SAPO



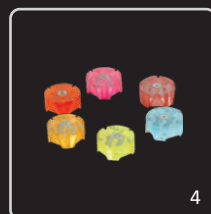
1



2



3



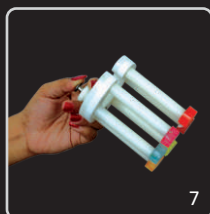
4



5



6



7

1. Magnetic basket (SAPO)
2. Glass tubes
3. Basket cover
4. Magnetic guided discs
5. Glass beaker
6. Temperature probe
7. Disc handling device

## Disintegration Testers



### 3 Station Park Out (ED-3PO)



Single Test



Park out



Report



LAN



The advanced microcontroller along with The PT 100 sensor and a stirrer in the bath ensures uniform temperature and a control accuracy of within  $\pm 0.2^{\circ}\text{C}$ . The temperature can be set in the range of  $30^{\circ}$  to  $40^{\circ}\text{C}$ . The thin mobile temperature probes are placed in the beaker to monitor and validate the beaker temperature and start the test when the set temperature has been reached. The probes are designed to match the beaker profile and prevent interference with the basket movement. A PC keyboard interface is provided for ease name, product name, batch nos., lot nos., media and set parameters. All such data for up to 10 products can be stored and retained to save time.

#### Features

- Complies with USP, IP, BP and Ph. Eur. specifications
- Basket park-out from beaker
- Unique camless drive
- Print report of test results and validation
- Individual motor and timer with external probe for each basket
- Moulded bath with slide-up cover
- Ergonomically designed and magnetically coupled basket for easy loading
- LAN connectivity (optional and external) allows ED - 3PO to be connected to the computers in the local network

RS-232 serial port can be connected for printing the test report on serial printer and if the serial printer is un-available then the test report can be captured from the hyper terminal of the computer

#### Standard accessories:

Acrylic moulded water bath (1no.), 1000 ml glass beakers (3 nos.), 6 tube magnetic baskets (3 nos.), guided discs (6 x 3stations), external temperature probe with clamps (3 nos.), and keyboard (1 no.)

#### Optional accessories:

3 tube bolus basket, 1 tube bolus basket, magnetic handling disc device, magnetic disc, and printer (LX-300 plus)

## Disintegration Testers



### 2 Station Units (ED-2L & ED-2AL)



ED-2L



ED-2AL

#### Features

- Complies with USP, IP, BP and Ph. Eur specifications
- Parking of the baskets at the top position at the end of the test with alarm
- Two individual sensors which measure bath temperature and beaker temperature
- Green illumination from bottom for better visibility
- Programmable timer with dual range in min-sec, hrs-min and in continuous mode
- Snap-click™ loading and a swivel free baskets movement
- Maintenance free smooth drive
- Suitable for veterinary tablets and support for bolus basket also

#### Standard accessories:

Acrylic water bath with heater and sensor (1 no.), 1000 ml glass beakers (2 nos.), 6 tube baskets (2 nos.), guided discs (6 x 2 stations), and external temperature probe (1 no.)

#### Optional accessories:

3 tube bolus basket, 1 tube bolus basket, magnetic disc handling device and magnetic disc



### 4 Station Unit (ED-4AL)



#### Features

- Complies with USP, IP, and Ph. Eur. specifications
- Dual range timer
- Snap click™ loading and swivel free basket movement
- Green illumination at bottom for better visibility of disintegration process
- Programmable temperature controller
- Magnetically coupled pump for water circulation in the bath
- Auto parking of the baskets at the top position at the end of the test
- Ergonomically designed splash proof panel
- External probe for beaker temperature monitoring
- Supports 4 USP baskets
- Maintenance free smooth drive

#### Standard accessories:

Acrylic water bath with heater and sensor ( 1 no.), 1000 ml glass beakers (6 nos.), 6 tube baskets (6 nos.), guided disc (6x 6 stations) and external temperature probe (1 no.)

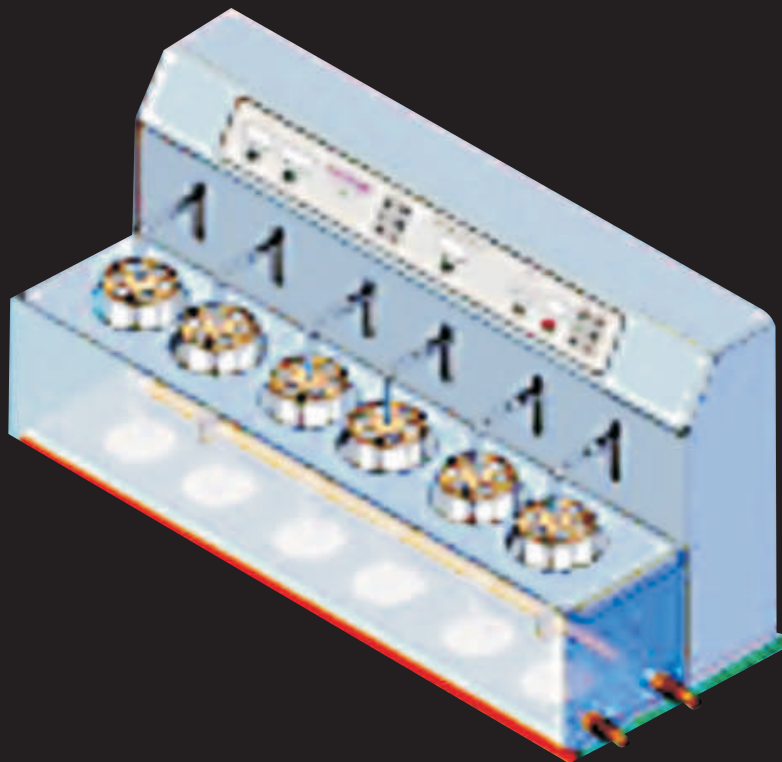
#### Optional accessories:

3 tube bolus basket, 1 tube bolus basket, magnetic disc handling device, magnetic disc





### 6 Station Unit (ED-6AL)



#### Features

- Supports 6 USP basket assembly
- 3 pair of baskets are controlled by independent timer and motor
- Snap click™ loading and swivel free basket movement
- Green illumination for better visibility of disintegration process
- Programmable temperature controller
- Magnetically coupled pump for water circulation in the bath
- Auto parking of the baskets at the top position at the end of the test
- External probe for beaker temperature validation
- Dual range timer
- Maintenance free smooth drive
- Printer connectivity (optional)
- Basket assembly for Isotretinoin capsule analysis (optional)

#### Standard accessories:

Acrylic water bath with heater and sensor ( 1 no.), 1000 ml glass beakers (6 nos.), 6 tube baskets (6 nos.), guided disc (6x6 stations) and external temperature probe (1no.)

#### Optional accessories:

3 tube bolus basket, 1 tube bolus basket, magnetic disc handling device, magnetic disc and isotretinoin basket

## Disintegration Testers



### Suppository Disintegration Tester 3 Station Tester (ESDT-3)

#### Features

- The ESDT - 3 tests the disintegration time of suppositories as per the latest BP.
- 3 independent test stations perform tests
- All test cylinders turn 180° automatically every 10 minutes
- Test cylinders turning interval can be programmed from 1 min to 99 min
- Removable thermostat can be programmed to maintain temperature between 30° to 40°C ( $\pm 0.5^\circ\text{C}$ ) in the bath
- Built in slow water circulation in 12 litres clear Perspex water bath as per BP requirements



**Standard accessories:**  
Baskets (3 nos.)

#### Specifications

No. of stations	3
Bath	6 mm thick clear acrylic water bath
Temperature range	30°C to 40°C
Temperature accuracy	$\pm 0.5^\circ\text{C}$
Temperature resolution	0.1°C
Timer range	1 min to 99 hrs, 59 min and 59 sec.
Display	6 digit LED — 1 digit for step no. 1 to 6 / 4 digit for displaying time
Heater	750 Watt
Motor drive	10 Kg DC synchronous motor
Sweep	180°C after every set time
Power supply	230 VAC, 50 Hz, 580 VA
Dimensions (L x W x H) (mm)	400 x 410 x 420

deconex



deconex is a proven disinfectant solution. Also, it contains special cleaning agents which make cleaning of the bath easier to perform and provide secondary protection to all components exposed to recirculation flow



## Specifications

Models	ED-2L	ED-2AL	ED-2 SAPO	ED-3PO	ED-4AL	ED-6AL
<b>No. of stations</b>	2	2	2	3	4	6
<b>Water bath</b>	6 mm thick transparent acrylic	6 mm thick transparent acrylic	Clear acrylic moulded water bath	Clear acrylic moulded water bath	6 mm thick transparent acrylic	6 mm thick transparent acrylic
<b>No. of strokes</b>	30 + 0.5 strokes/min	30 + 0.5 strokes/min	30 + 0.5 strokes/min	30 + 0.5 strokes/min	30 + 0.5 strokes/min	30 + 0.5 strokes/min
<b>Stroke height</b>	55 mm ± 2 mm	55 mm ± 2 mm	55 mm ± 2 mm	55 mm ± 2 mm	55 mm ± 2 mm	55 mm ± 2 mm
<b>Controlled temperature range</b>	20°C to 39.9°C	20°C to 39.9°C	15°C to 40°C	15°C to 40°C	20°C to 39.9°C	20°C to 39.9°C
<b>Temperature resolution</b>	0.1°C	0.1°C	0.1°C	0.1°C	0.1°C	0.1°C
<b>Timer</b>	Range 1- 1 sec. to 99 min. & 59 sec. Range 2- 1 min. to 9 hrs & 59 min	Range 1- 1 sec. to 59 min. & 59 sec. Range 2- 1 min. to 9 hrs & 59 min	Range-1 sec to 23 hrs 59 min. 59 sec. (for both baskets)	Range-1 sec to 23 hrs 59 min. 59 sec. (for both baskets)	Range 1:1 sec. to 59 min. & 59 sec. Range 2:1 min. to 9 hrs & 59 min	Range 1- 1 sec. to 59 min. & 59 sec. Range 2- 1 min. to 9 hrs & 59 min
<b>Display</b>	4 digit led	4 digit led	20 x 4 LCD	20 x 4 LCD	4 digit led	4 digit led
<b>Printer interface</b>	—	—	Centronics Parallel port	Centronics Parallel port	—	—
<b>PC connectivity</b>	—	—	—	LAN	—	—
<b>No. of motors</b>	1	2	2	3	2	2
<b>Motor type</b>	DC stepper motor of 6V DC and 3.5 kg cm torque	DC stepper motor of 6V DC and 3.5 kg cm torque	DC stepper motor of 6V DC and 10 kg cm torque	DC stepper motor of 6V DC and 10 kg cm torque	DC stepper motor of 6V DC and 3.5 kg cm torque	DC stepper motor of 6V DC and 3.5 kg cm torque
<b>Heater</b>	300 watts, S.S. 304	300 watts, S.S. 304	400 watts, S.S. 304	400 watts, S.S. 304	750 watts, S.S. 304	1kv
<b>Illumination</b>	Green Tube Light	Green Tube Light	White LED	White LED	Green Tube Light	Green Tube Light
<b>Stirrer motor</b>	—	—	DC 6V	DC 6V	—	—
<b>Water level sensor</b>	—	—	Float switch type level sensor	Float switch type level sensor	—	—
<b>Power supply</b>	220/230 VAC, 50/60 Hz, 690 VA 110VAC, 50/60Hz,660VA	220/230 VAC, 50/60 Hz, 690 VA 110VAC, 50/60Hz,660VA	220/230 VAC, 50/60 Hz, 575 VA 110 VAC, 50/60Hz,550VA	220/230 VAC, 50/60 Hz, 575 VA 110 VAC, 50/60Hz,550VA	220/230 VAC, 50/60 Hz, 1380 VA	220/230 VAC, 50/60 Hz, 1380 VA
<b>Fuse</b>	3amp-220vac 6amp=110vac	3amp-220vac 6amp=110vac	2.5amp-220vac 5amp=110vac	2.5amp-220vac 5amp=110vac	6amp-220vac	6amp-220vac
<b>Dimensions (L x W x H) (mm)</b>	400 x 365 x 510	400 x 365 x 510	450 x 360 x 575	450 x 495 x 575	600 x 360 x 575	995 x 345 x 501
<b>Weight (kg)</b>	23	23	25	39	43	50

## Our Products

- Complete range of Dissolution Testers • Dissolution Media Preparator • Friability Testers • Tablet Hardness Testers
- Electromagnetic Sieve Shakers • Tap Density Tester • Bulk Density Tester • Powder Flow Tester • Leak Tester • Peristaltic Pumps



The information contained in this document is believed to be correct but ELECTROLAB accepts no liability for any errors and reserves the right to alter specifications without notice  
August, 2013

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