

# Medical & Laboratory Equipment

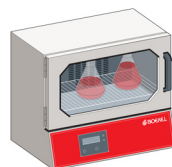
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## Platelet Agitator and Incubator

Boekel Scientific offers two sizes of Platelet Agitators and Platelet Incubators for use in hospital blood banks and blood centers. These medical devices are specifically designed to support the short-term storage needs of blood platelets for human therapeutic use; based on the AABB (American Association for Blood Banks) recommendations. These recommendations include temperature and mixing requirements to ensure product quality. The small Platelet Agitator is designed with six removeable shelves and the large Platelet Agitator has eight removable shelves. The incubator features a compressor-less design to decrease the risk of equipment failure and eliminate the use of refrigerant. The incubator also has a patented inventory management system to help manage platelet expiration, among other revolutionary features.

**Features:**

- Onboard inkless printer for documenting temperature control
- Multitude of system alarms to protect the quality of platelets
- Heating and cooling without refrigerant or a compressor
- Large 7" industrial touch screen with intuitive icons
- Two year warranty & extended warranty available
- Patented Inventory Management System
- Battery backup in the event of a power failure
- Downloadable event and temperature log
- LED incubator lighting
- Certified to 60601-1 UL and CSA Medical Equipment Standards



Small Platelet Incubator and Agitator with Patented Inventory Management System 301550 & 301200



Small Platelet Agitator Part Number 301200



**Small Platelet Incubator Model 301550**

Capacity  
One 301200 Agitator

Default Temperature  
Setpoint: 22°C

Dimensions (Width x Length x Height)  
21.25" x 19.75" x 26"

Electrical  
**301550**.....115V, 60Hz, 50 Watts (UL/CSA/CE)

**Large Platelet Incubator Model 301650**

Capacity  
One 301300 Agitator

Default Temperature  
Setpoint: 22°C

Dimensions (Width x Length x Height)  
25.3" x 26.5" x 30.0"

Electrical  
**301650**.....115 V, 50/60 Hz (UL/CSA/CE)

**Platelet Agitator Model 301200**

Capacity  
6-12 Apherisis / 18 Random

Dimensions (Width x Length x Height)  
15.75" x 11.25" x 13.625"

Electrical  
**301200**.....115 V, 60 Hz, 50 Watts (UL/CSA/CE)

**Platelet Agitator Model 301300**

Capacity  
8 - 17 Apherisis / 48 Random

Dimensions (Width x Length x Height)  
18.5" x 16.5" x 17.5"

Electrical  
**301300**.....115 V, 50/60 Hz (UL/CSA/CE)



Large Platelet Incubator and Agitator with Patented Inventory Management System 301650 & 301300

# Blood Banking

## Plasma Thawer

The Boekel Scientific Plasma Thawer is designed for use in blood banks and laboratories for the thawing of up to four units of Fresh Frozen Plasma (FFP), Cryoprecipitated AHF, or Plasma Frozen Within 24 Hours After Phlebotomy (PF24) for future infusion into a patient. It offers both controlled temperature and agitation to thaw various volumes of plasma via two independently controlled baskets that accommodate up to two plasma bags per basket. The microprocessor-controlled system offers rapid temperature recovery and optimal temperature stability to reduce the time required to thaw multiple bags. The easy-to-program user interface allows multiple time options for thawing various sized bags. Upon completion of a timed cycle the baskets will automatically raise from the bath. Advanced safety features notify the user of an unsafe condition and raise the baskets from the bath upon alarm activation.

### Features:

- Microprocessor based temperature controller with audible and visual high temperature alarm
- Two Basket design to accommodate up to 4 bags of plasma
- Baskets designed to keep plasma bags submerged during the thawing cycle
- Independently controlled basket assemblies agitate plasma units in 36.0° C water bath to efficiently and safely thaw plasma
- Cycles can be interrupted to check units or add additional bags
- Cycle times settable from 0-60 minutes or Hold which enables the end user to control the thawing time
- Polished stainless steel tank and baskets
- Bacteria Resistant Powder Coated exterior
- Chamber volume and high capacity heater enhance heat transfer efficiencies for fast thawing times
- Convenient drain port with quick-connect attachment allows for easy draining and cleaning of the bath
- Large chamber opening for easy cleaning
- Two Year Manufacturers Warranty
- Certified to 60601-1 UL and CSA Medical Equipment Standards
- FDA Cleared Device

### Model 301000

Temperature Accuracy  
+/- 0.3°C

Chamber Volume  
17.98 L (4.75 gal)

Chamber Dimensions (Width x Length x Height)  
15.5" x 11" x 7.5"

Electrical

**301000**....120 V, 50/60 Hz, 7 A, 900 W (UL/CSA/CE)

### Accessories

- Overwrap Protection - Disposable overwrap protection provide security and protection from contamination - **C1905712**
- Chamber cover - **D1905565**
- Antimicrobial Bath cleaner - **B1906001**



**New**

## Touch Screen Blood Collection Mixer

### Features:

- Displays Current Volume, Percentage Full, Elapsed Time, and Estimated Time Remaining
- Vivid Color Touch Screen That Can Easily Be Viewed From Across The Room
- Integrated Lifting Handle and Magnetically Attached Mixing Tray
- Long-Life Interchangeable Battery
- USB and Ethernet Data Ports
- UL, CE, and CSA | Medical Device
- Made in the U.S.A
- Two-year Warranty

### Touch Screen Blood Collection Mixer Model 302000

Bag Capacity Settings: Default Volume Setting: 450ml

Adjustable Preset Volumes: 400ml, 450ml, 500ml, 550ml

Tray Type: Easy On/Off magnetically attached with multiple tubing guides

Scale Performance: High Accuracy Load Cell +/- 1.0 gram

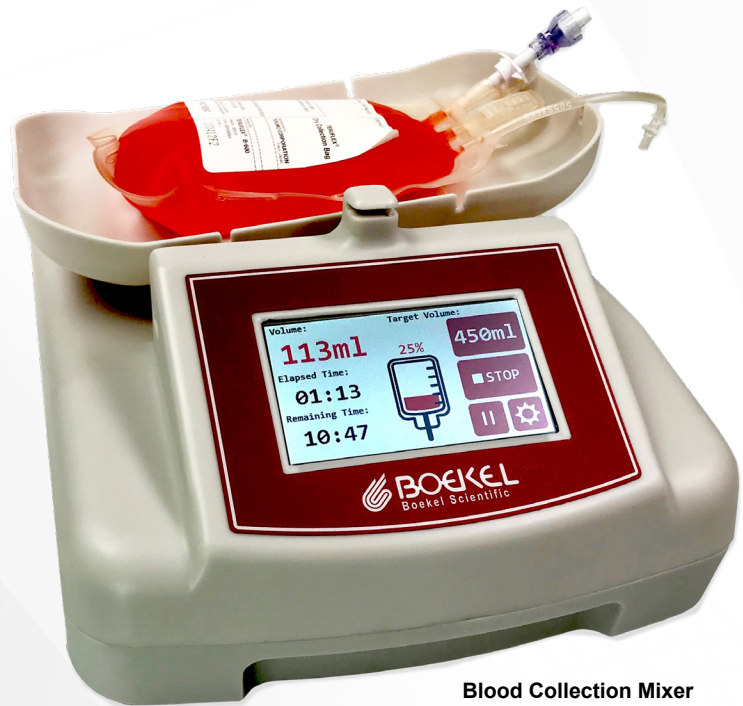
with User Friendly Calibration

Mixing Action: 3 cycles of +/- 12 degree rocking | Off for 2 second | Repeat

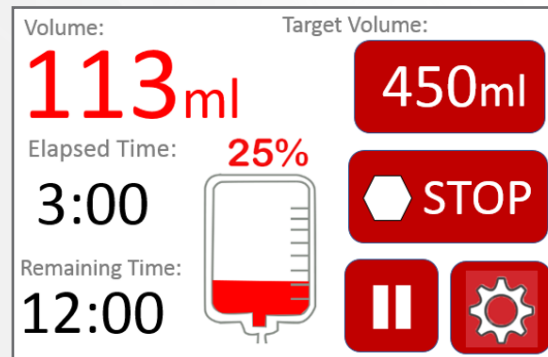
Alarms: Low Flow Rate, Scale Alarm, Motor Alarm, End of Cycle, Battery Alarm

Power

18V, 1.67A via 100-240V – 50/60Hz 0.8A AC Power Supply (UL/CSA)



**Blood Collection Mixer  
Part Number 30200**



**User Interface Image**



### Part Numbers and Accessories

Item	Part Number
Blood Collection Mixer	302000
Transport Case	302001
Calibration Kit	302CAL

Boekel Scientific's new Touch Screen Blood Collection Mixer was designed in conjunction with stationary and mobile blood collection experts. The unit incorporates the functionality needed for the busiest donor stations with new-to-the-industry features to improve efficiency and operation ease. The unit has an easily viewable, bright color touch screen that displays the collection data in real time. The most important collection details such as current volume, target volume, percent full, elapsed collection time and estimated time remaining are displayed during operation. The unit also has a large active pictorial that visually represents the blood collection bag, so phlebotomist can observe the progress from a distance while tending to other donors. The blood collection mixer also has a highly accurate scale, removable long-life battery pack, USB and Ethernet data ports. The system has an integrated handle, removable magnetically attached mixing tray, and a lightweight robust design for easy relocation at mobile donor centers. The system alarms include low flow warning, end of cycle and low battery.

# Blood Banking

## Blood Tube Rockers

Boekel Scientific has a long history of manufacturing devices for shaking, rocking, and rotating samples. The Boekel Blood Tube rockers are designed for continuous use and are available in two sizes. Variable speed models allow for the adjustment of the rocking speed. All units are supplied with a removable rubber mat to ensure samples stay in place while rocking.

### Tube Rockers

#### Features:

- Provides gentle rocking action for mixing of specimens
- Low profile and small footprint minimizes bench space
- Fixed tilt angle - 35°
- Supplied with non-slip autoclavable tube pad (silicon rubber)
- Power pack is CSA, CE and PSE approved

#### **Tube Rocker XL Variable Speed Model 282000**

Speed: 5 - 25 rpm

Tilt Angle: 35° angle fixed

Tube Capacity

Up to 19 tubes maximum 120 mm long

Load Capacity: 2.8 lbs. / 1.3 kgs.

Product Dimensions W x D x H

16" x 4.7" x 5" (50 cm x 12 cm x 12.7 cm)

Power

12 VDC, 0.5 A via 100/240 Volt AC adapter

Shipping Weight: 8 lbs. / 3.6 kgs.



282000

#### **Tube Rocker Mini Variable Speed Model 280150**

Speed: 5 - 25 rpm

Tilt Angle: 35° angle fixed

Tube Capacity

Up to 8 tubes maximum 120 mm long

Load Capacity: 1.8 lbs. / 0.8 kgs.

Product Dimensions W x D x H

8.6" x 4.7" x 5" (21.8 cm x 12 cm x 12.7 cm)

Power

12 VDC, 0.5 A via 100/240 Volt AC adapter

Shipping Weight: 5 lbs. / 2.26 kgs.



280150

#### **Tube Rocker Mini Fixed Speed Model 260450**

Speed: 5 - 25 rpm

Tilt Angle: 35° angle fixed

Tube Capacity

Up to 8 tubes maximum 120 mm long

Load Capacity: 1.8 lbs. / 0.8 kgs.

Product Dimensions W x D x H

8.6" x 4.7" x 5" (21.8 cm x 12 cm x 12.7 cm)

Power

12 VDC, 0.5 A via 100/240 Volt AC adapter

Shipping Weight: 5 lbs. / 2.26 kgs.



260450

# Rapid FISH Slide Hybridizer

The Rapid FISH was designed to simplify Fluorescent In-Situ Hybridization (FISH) procedures for FFPE (formalin fixed paraffin embedded tissue) samples, cell suspensions, and other tissue preparation procedures.

Temperature control and humidity are essential for FISH probes to bind to RNA and DNA. The Rapid FISH has a self-clamping slide tray design that maintains the required humidity. Microscope slides in the Rapid FISH do not require coverslips to be glued because the removable tray of the slide incubator traps moisture in the system. Elimination of this step decreases processing time and ensures that the specimens stay hydrated during processing. The system has an easy to use control system for controlling temperature, time and controlled temperature steps. The device has a small footprint and maintains excellent temperature stability and uniformity because of its dual heater convection system. Please contact Boekel Scientific for more information.



- » Automatic clamping slide tray system
- » Superior specimen humidification
- » Excellent temperature performance
- » Programmable heating modes
- » Easy to use control system
- » Two-year Warranty

## Part Number Information

Item	Part Number
Rapid FISH Slide Hybridizer Voltage: 120V Includes: Unit, Humidity Tray, Slide Holder, and Manual	240200
Rapid FISH Slide Hybridizer Voltage: 230V Includes: Unit, Humidity Tray, Slide Holder and Manual	240200-2

# Slide Hybridization

Rapid, High Performance, In Situ Hybridizing System for Microscope Slides

## Device Specifications

Item	Description
Rapid FISH Slide Hybridizer	240200 (120V)
Part Numbers	240200-2 (230V)
Outer Dimensions (Width x Depth x Height)	11.00" x 15.96" x 8.09"
Slide Capacity	20 1" x 3" Microscope Slides
External Temperature Operating Range	10° C to 30° C
Internal Temperature Control Range	Ambient +5° C to 85° C
Operational Modes	Hold Temperature Programmable Temperature Profile Calibration
Heat up time	Ambient to 65°C in 20 minutes
Materials of Construction	Unit Exterior – Powder Coated Steel Unit Interior – Aluminum Slide Tray – Aluminum Slide Holder – Painted Steel
Stackable	Yes
	Up to 3 Units
Display Type	Backlit 16 x 2 line Blue LCD
Alarms	Yes
	Temperature Deviation, Step Complete, Program Complete
Weight	21.00 lbs
Electrical Certification	UL, CE, and CSA



## Wax Dispensers and Tissue Flotation Baths

### Wax Dispenser

#### Features:

- 5 Liter capacity, Approximately 1.25 Gallon
- Heated valve ensures a consistent flow of molten wax
- Stainless steel outer casing
- Aluminum inner reservoir provides excellent thermal transfer and temperature control
- Dispenser valve allows precise control of flowing wax and can be locked in the open position if desired
- Inner reservoir screen helps to prevent large particulate from clogging the dispenser valve
- Rapid warm-up with an advanced safety over-temperature cut-off
- 2 Year Warranty

### Model 145600 and 145600-2

Overall Dimensions (Diameter x Height)

8.50 in x 16 in

Temperature Range

40° C to 75° C +/- 2° C

Electrical

**145600**.....115 V, 50/60 Hz, 250 W (UL/CSA)

**145600-2** ..230 V, 50/60 Hz, 250 W (CE)



### Tissue Flotation Baths

#### Features:

- Eliminate wrinkles and distortion during preparation of paraffin embedded tissue sections
- L.E.D. illuminated black background with transparent Borosilicate dish; allows specimen to be easily seen
- Digital microprocessor control with advanced safety over temperature protection
- Deluxe model includes Slide Dryer Block to assist in drying of slides and Tissue Orienter Block to smooth wrinkled sections
- 2 Year Warranty

#### Supplied With:

- Removable Borosilicate glass dish, Part Number: 904-0013

#### Accessories

- Borosilicate glass dish, Part Number: 904-0013



145951 Deluxe Lighted Tissue Flotation Bath



14792 Round Tissue Bath Also Available

### Standard Lighted Tissue Flotation Bath Model 145702 & 145702-2

Overall Dimensions (Width x Height x Length)  
14.25 in x 14.25 in x 4.5 in

Temperature Set Range  
Ambient +5° C to 65° C

Accuracy  
+/- 1° C

Electrical

**145702**.....115 V, 50/60 Hz, 272 W (UL/CSA)

**145702-2** ..230 V, 50/60 Hz, 272 W (CE)

### Deluxe Lighted Tissue Flotation Bath Model 145951 & 145951-2

Overall Dimensions (Width x Height x Length)  
14.25 in x 14.25 in x 4.5 in

Temperature Set Range  
Ambient +5° C to 65° C

Accuracy  
+/- 1° C

Electrical

**145951**.....115 V, 50/60 Hz, 272 W (UL/CSA)

**145951-2** ..230 V, 50/60 Hz, 272 W (CE)



145702 Standard Lighted Tissue Flotation Bath



Boekel Scientific manufactures devices and storage solutions for the tissue embedding process. The equipment and supplies are designed to be ergonomic, robust, and user-friendly.

# Histology Storage

## Slide and Cassette Storage

### Slide Storage Cabinets

#### Features:

- Six cabinet drawers hold up to 5000 standard 1 inch x 3 inch microscope slides
- Cabinets can be interlocked up to 10 units high
- Plastic drawer dividers can be removed to store objects up to 5 cm (2 in) wide
- Drawers slide smoothly and easily
- Back of drawer acts as handle for transportation
- Durable cold rolled steel with baked on epoxy finish
- 2 Year Warranty

#### Slide Storage Cabinet Model 141000

Overall Dimensions (Width x Length x Height)  
15.75 in x 19 in x 5 in

#### Cabinet Base Model 141001

Overall Dimensions (Width x Length x Height)  
15.75 in x 18.75 in x 2.75 in

#### Supplied With:

- Sponge block spacers
- Identification labels

#### Accessories:

- Cabinet Base with Rubber Feet, Part Number: 141001
- Drawer Only, Part Number: 141002



### Cassette Storage Cabinets

#### Features:

- Stack up to three units high with the non-tip design
- Easy to remove crystal clear trays with metal outer housing
- Store up to 1,200 cassettes with foam organizers included
- Easy-slide drawers with customizable labels

#### Cassette Storage Unit Model 143000

Overall Dimensions (Width x Length x Height)  
13.25" x 13.5" x 7.75"

Cassette Capacity  
Approximately 1,200 Cassettes per Unit

Unit Stacking Capacity  
3 Shelving Units High

#### Accessories:

- Additional Tray Inserts, Part Number: 143100



**New**

## Programmable Heating Blocks

### Features:

- Readily Recognizable Icons to Start, Stop and Pause Temperature Control on a Bright Color Touch Screen
- Save up to 25 Programs for Rapid Sample Processing
- One, Two and Four Block Models to Fit Your Workflow
- Slim Design to Conserve Bench Space
- Optional External Temperature Probe
- Amazing Price Point
- 2 Year Warranty

### One Block Capacity Touch Screen Models 115001 and 115001-2

Temperature Range: Ambient + 5°C to 120°C With overtemp protection

Temperature Stability: +/- 0.2°C from 37°C to 100°C

Temperature Accuracy: +/- 0.25°C at 37°C

Operating Temperature: 10°C to 30°C

#### Electrical

113004.....115V 50-60 Hz (UL/CSA)

113004-2..230V 50-60 Hz (CE)

### Two Block Capacity Touch Screen Models 115002 and 115002-2

Temperature Range: Ambient + 5°C to 120°C With overtemp protection

Temperature Stability: +/- 0.2°C from 37°C to 100°C

Temperature Accuracy: +/- 0.25°C at 37°C

Operating Temperature: 10°C to 30°C

#### Electrical

113004.....115V 50-60 Hz (UL/CSA)

113004-2..230V 50-60 Hz (CE)

### Four Block Capacity Touch Screen Models 115004 and 115004-2

Temperature Range: Ambient + 5°C to 120°C With overtemp protection

Temperature Stability: +/- 0.2°C from 37°C to 100°C

Temperature Accuracy: +/- 0.25°C at 37°C

Operating Temperature: 10°C to 30°C

#### Electrical

113004.....115V 50-60 Hz (UL/CSA)

113004-2..230V 50-60 Hz (CE)

\*Blocks Sold Separately\*



**Touch Screen Dry Baths  
One Block Model 115001**



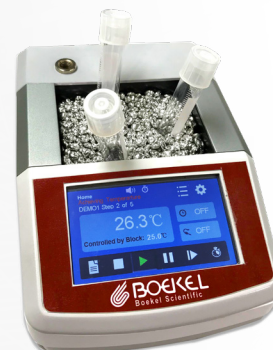
**Touch Screen Dry Baths  
Two Block Model 115002**



**Touch Screen Dry Baths  
Four Block Model 115004**



**Two Block Unit with  
External Temperature Probe**



**One Block Unit with  
Thermal Beads**



# Heating

## Aluminium Heating Blocks

Part Number	Capacity	Tube Type
110006	35	6 mm tubes
110010	20	10 mm tubes
110013	20	13 mm tubes
110016	12	16 mm tubes
110020	6	20 mm tubes
110025	6	25 mm tubes
110035	3	25 mm tubes
	5	13 mm tubes
	6	6 mm tubes

Part Number	Capacity	Tube Type
110040	24	1.5ml tubes
110045	24	0.5ml tubes
110048	48	0.2ml tubes
110051	1	96 well microplate
110096	6	96 well 0.2ml microplate
		0.2ml pcr strips/tubes
110096	24	1.5ml "Dolphin" tubes
110101	12	5ml centrifuge tubes

Part Number	Capacity	Tube Type
110102	12	15ml centrifuge tubes
110103	5	50ml centrifuge tubes

Incubator with a locking door for warming contrast media. Ideal for hospital and lab settings where security is required. Includes two shelves and can accommodate up to four shelves.

## Contrast Media Warmer

### Contrast Media Warmer Models 133001 and 133001-2

Chamber Volume: 0.8 cu. ft.

Chamber Dimensions (in.): 11-1/2 x 12 x 10-1/2

W x D x H (cm): 29.2 x 30.5 x 26.7

Temperature Range: Ambient +5°C to 60°C

Stability @ 37°C: ±1.5°C

Uniformity @ 37°C: ±1°C

Shelves Included: 2

Max. No. Shelves\*: 4

Shelf Area: 1.7 ft.2

Dimensions (in.): 13 x 14 x 16-1/4

W x D x H (cm): 33 x 35.6 x 41.3

Shipping Weight: 22 lb./10 kg

#### Accessories:

- Shelf Kit, Part Number: 1902053KIT



## Tight Temperature Tolerance Incubator

### TTT Incubator

Specifically designed for maximum temperature stability and uniformity the TTT incubator or "Tight Temperature Tolerance" incubator uses mechanical convection and an optimized configuration. Ideal for any small sample temperature sensitive process. The TTT incubator includes a removable shelf, a large viewing window and an easy to use digital control system with a configurable alarm and timer.

### Ordering Information

Part No.	Size	Electrical	Door Style
135000	0.34 cu. ft.	115 volt/50-60 Hz	See-Thru
135000-2	0.34 cu. ft.	230 volt/50-60 Hz	See-Thru

Model	135000
Chamber Volume	0.34 cu. ft.
Temperature Range	Ambient +8.0°C to 70°C
Stability @ 37°C	±0.2°C
Uniformity @ 37°C	±0.5°C
Shelves Included	1
Stackable	Yes
Chamber Dimen. (in.)	12.0 x 6.0 x 8.0
W x D x H (cm)	30.5 x 15.2 x 20.3
Outside Dimensions	14.0 x 12-1/2 x 12-1/2
W x D x H (cm)	35.6 x 31.8 x 31.8
Shipping Weight	24 lbs./10.9 kg
Regulatory Approval	UL, CSA, CE



## Standard Incubators

These gravity convection models are designed for use in labs that require a reliable and economical method of incubating cultures, test kits, eggs and many other biological samples. They are ideally suited for use in physicians' offices, clinical, industrial and school laboratories. The gravity convection offers good temperature uniformity and stability.

### Analog Incubator - 0.8 Cubic Foot

#### Model 132000 and 132000-2

2 Shelves included  
Maximum capacity of 4 shelves

Temperature Range  
Ambient +5°C to 60°C

Electrical

**132000**.....115 V, 50/60 Hz (UL/CSA)

**132000-2** ..230 V, 50/60 Hz (CE)



**Boekel GEN2 CO2  
Incubator**

### Digital Display Incubator - 0.8 Cubic Foot

#### Model 133000 and 133000-2

2 Shelves included  
Maximum capacity of 4 shelves

Temperature Range  
Ambient +5°C to 60°C

Electrical

**133000**.....115 V, 50/60 Hz (UL/CSA)

**133000-2** ..230 V, 50/60 Hz (CE)



**Boekel Scientific offers a wide  
variety of digital and analog incubators.  
Please visit our website for additional  
information at [www.boekelsci.com](http://www.boekelsci.com)**

# Heating Water Baths

## Water Baths

Boekel water baths have advanced features and are manufactured in the United States. Three sizes are available and a shaking variant is available for temperature controlled mixing applications.

## Orbital & Reciprocating Water Baths

### Features:

- Switch from Orbital to Reciprocating motion by simply reversing the tray
- Timer up to 99 hours
- Adjustable speed from 20-200 RPM
- Available in 115 or 230 volt/50-60 Hz (CE)
- 2 Year Warranty

### Model 290400 and 290400-2 - Capacity: 28 Liters

Temperature Range  
Ambient +5° to 100°C or Boiling Mode

### Electrical

290400.....115V 50-60 Hz (UL/CSA)  
290400-2 ..230V 50-60 Hz (CE)

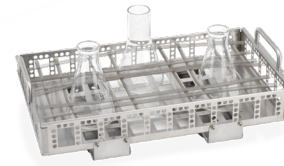
All trays sold separately



Model 290400

Tube Tray  
Part Number 290420

### Removable Trays - Required for Operation



Flask/Beaker Tray  
Part Number 290410

### Model 290410 Universal Flask Tray

Holds any of the flasks as below.

26 - 25 ml	11 - 250 ml
26 - 50 ml	6 - 500 ml
15 - 100 ml	3 - 1L

### Model 290420 Tube Tray

Holds up to five test tube racks. Test tube racks available in different sizes

290421	48 x 10mm tubes
290422	44 x 13mm tubes
290423	24 x 16mm tubes
290424	21 x 19mm tubes
290425	12 x 25mm tubes
290426	10 x 30mm tubes



## General Purpose Water Baths

### Features:

- General purpose water baths offer excellent performance and are ideal for general lab applications.
- The special "boiling mode" is a convenient feature for melting agar and other applications requiring boiling temperature.
- Temperature Range of +5°C to 100°C\*\* or Boiling Mode
- 2 Year Warranty

### Model 290100 and 290100-2 - Capacity: 6 Liters

### Electrical

290100.....115V 50-60 Hz (UL/CSA)  
290100-2 ..230V 50-60 Hz (CE)

### Model 290200 and 290200-2 - Capacity: 14 Liters

### Electrical

290200.....115V 50-60 Hz (UL/CSA)  
290200-2 ..230V 50-60 Hz (CE)

### Model 290300 and 290300-2 - Capacity: 28 Liters

### Electrical

290300.....115V 50-60 Hz (UL/CSA)  
290300-2 ..230V 50-60 Hz (CE)



Model 290100

Model 290200

Model 290300

### Stainless Steel Gabled Covers (not shown)

Gabled Covers direct condensed water to edge and back into the tank.

**\*\*NOTE:** Stainless steel gabled covers are required for use when the water bath is placed in boiling mode.

### For Water Bath Model

290100  
290200  
290300 & 290400

### Lid Model No.

290120  
290220  
290320

## Mini Tube Vortex Mixer

The Boekel Scientific Mini Tube Vortex Mixer is compact, simple lab vortex mixer with a low profile and small footprint. Ideal for mixing centrifuge tubes, culture tubes, blood tubes, and test tubes. The unit has a pressure sensitive cup for touch activated operation or the unit can run in continuous mode. The suction cup feet prevent the unit from moving during operation.



### Mini Tube Vortex Mixer

#### Features:

- Compact, with low profile and small footprint
- Pressure sensitive cup
- Continuous or touch operation
- Rubber suction pads prevent walking, absorb vibration
- Low voltage supply for safe cold room use
- Power pac is UL, CSA and CE approved
- Unit is CE marked

#### Model 270100

- Speed: 300 to 6000 rpm/ continuous or burst
- Orbit: 2 mm
- Tube Diameter (maximum): 20 mm
- Operating Temperature: +4°C to +40°C
- Product Dimensions W x D x H: 4.13" x 5.9" x 3.35"  
(10.5 cm x 15 cm x 8.5 cm)
- Power: 12 V dc, 0.5 A via 115/ 230 VAC adapter
- Shipping Weight: 4 lbs. / 1.8 kgs.

## Microplate Shakers

The Boekel Scientific Microplate Shaker is a reliable, programmable laboratory shaker for microplates. The unit provides regulated and timed shaking for two or four microplates. Ideal for any lab.



### Microplate Shakers

#### Features:

- Compact with low profile and small footprint
- Reliable, regulated shaking for two or four microplates
- Simple screw attachments allow quick and easy fitting of any standard depth 96- or 384-well plates, holding the plates securely in place
- LCD Display
- Power pac is UL, CSA and CE approved
- Unit is CE marked

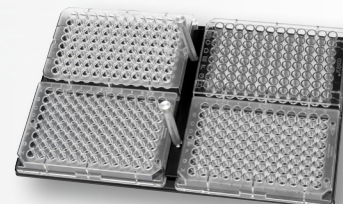
#### Models

**270300 (2 Plate Capacity)**  
**270340 (4 Plate Capacity)**

- Speed: 250 to 1000 rpm
- Orbit: 2 mm
- Timer (with auto shut off): 1 min to 96 hrs
- Time setting resolution: 10 sec
- Product Dimensions W x D x H: 7" x 7.25" x 3.5"  
(17.5 cm x 18.5 cm x 9 cm)
- Power: 12 V dc, 0.5 A via 115/ 230 V AC adapter
- Shipping Weight: 10 lbs. / 4.5 kgs.

#### Accessories:

- Platform for four microplates, Part Number: 270390



# Mixing

## Jitterbug-2 & Jitterbug-4 Microplate Thermoshakers

The Boekel Scientific Jitterbug 2 and Jitterbug 4 are heated microplate shakers are ideal for immunoassays like ELISA, PCR and other research procedures requiring heating and mixing of microplates. Equipped with a heated lid to provide greater uniformity and prevent condensation. Independently control set temperature, mixing speed and mixing duration.



### Jitterbug-2 & Jitterbug-4 Microplate Thermoshaker

#### Features

- Accommodates two or four standard microplates or strip trays
- Independently set temperature, shaking speed and mixing duration
- Chamber in a chamber design for excellent stability
- Smooth, quiet operation
- Temperature calibration
- Heated lid to provide greater uniformity
- Accommodates Std. 96, 384, and 536 Plates
- Power pac is UL, CSA and CE approved
- Unit is CE marked

### Jitterbug-2 Model 270400 (2 Plate Capacity) Jitterbug-4 Model 270440 (4 Plate Capacity)

- Speed: 250 to 1200 rpm
- Orbit: 2 mm
- Stability:  $\pm 0.1^{\circ}\text{C}$
- Uniformity:  $\pm 0.2^{\circ}\text{C}$
- Timer (with auto shut off): 1 min to 96 hrs
- Time setting resolution: 1 min
- Temperature range: Ambient +5 to  $60^{\circ}\text{C}$
- Product Dimensions (270400) W x D x H: 10.5" x 10.6" x 6" (26.6 cm x 26.7 cm x 14.5 cm)
- Product Dimensions (270440) W x D x H: 15.5" x 15.5" x 6" (38.5 cm x 27 cm x 14 cm)
- Power: 12 V DC, 4.5 A via 115/ 230 V AC adapter
- Shipping Weight: 16 lbs. / 7.25 kgs.

## Mini Tube Rotator

The Boekel Scientific Mini Tube Rotator is ideal for mixing laboratory tubes. Molecular Biology, Histochemistry, and Clinical applications. Supplied with carousel for 36 x 1.5/2.0mL Tubes. Additional tube carousels available. Cold room and Incubator compatible.



### Mini Tube Rotator

#### Features

- A Variable Speed with LCD display
- Includes 260751 Carousel for 36 x 1.5/2.0ml tubes
- Provides complete 360° Rotation
- An adjustable 0-90° Mixing Angle
- Small footprint for your bench – we know you need all the space you can get!
- Interchangeable carousels for all common laboratory tubes
- Cold Room and Incubator compatible
- AC Adapter 115v to 240V with UL/CSA and CE markings

### Model 260750

- Speed: Variable 4-18 RPMs
- Mixing Angle: Adjustable 0-90°
- Load Capacity: 1.75 lbs
- Carousel Capacity: (36) 1.5/2.0 ml tubes, (10) 10/15 ml and (16) 5/7 ml tubes, (6) 50ml tubes
- Operating Temperature: +4°C to 40°C
- Product dimensions (W x D x H): 9" x 5" x 6" (22.8 cm x 12.7 cm x 15.2 cm)
- Power Requirements: 12v DC via 100-240 V AC Adapter
- Shipping Weight: 4.5 lbs. / 2.0 kgs.

#### Accessories

- Carousel, 36 x 1.5/2.0 ml Tubes, Part Number 260751
- Carousel, 10 x 10/15ml Tubes and 16 x 5/7ml Tubes, Part Number 260752
- Carousel, 6 x 50 ml Tubes, Part Number 260753

## Mini Orbitron™ Rotator

Small nutating lab mixer that provides gentle continuous mixing of specimens in blood tubes, microcentrifuge tubes, glass vials, or plates. Supplied with a non-slip dimpled mat and a non-slip flat mat. Variable speed from 4-24 rotations per minute.

### Mini Orbitron™ Platform Rotators

#### Features

- Provides gentle, continuous mixing of specimens
- Extremely quiet
- Auto reverse
- Low profile and small footprint minimizes bench space
- Accommodates a variety of blood tubes, Centrifuge tubes, glass vials, or plates
- Supplied non-slip mats can be cleaned with soap and water and autoclaved too.

#### Models

**260100 - (115 VAC)**  
**260100-2 - (230 VAC)**

Speed: 24 rpm Fixed  
Tilt Angle: 20° Fixed  
Load Capacity: 0.8 kg (1.8 lbs)  
Operating Temperature: +4°C to 40°C  
Tray Size W x D: 9.75" x 5.25" (24.3 cm x 13.1 cm)  
Product Dimensions W x D x H: 7.5" x 5" x 5.5" (19 cm x 12.7 cm x 13.97 cm)  
Net Weight: 2.21 lbs / 1 kg  
Power:  
260100 - 115 VAC, 60 Hz, 0.2 amps  
260100-2 - 230 VAC, 50 Hz, 0.2 amps  
Shipping Weight: 3 lbs. / 1.3 kgs.



## Orbitron V™ Platform Rotator

The Boekel Scientific Orbitron V is a laboratory shaker with a belly dancer like motion. The unit has variable speed control and provides gentle or vigorous mixing. There is a built-in timer and the angle of mixing can be changed with the adjustable platform for two dimension flat orbital mixing or three dimensional wave mixing. A shelf kit can add extra capacity to the unit. Supplied with 12 x 12 non skid mat.

### Orbitron V™ Platform Rotators

#### Features

- 3D gyrating motion
- 12" square aluminum tray with flat mat (standard)
- 8" square or 12" square double stacking tray (optional)
- Easy to adjust angle, no tools required
- Dimpled rubber mat (optional)
- Supplied with flat mat
- Unit is UL/CSA & CE marked

#### Accessories

Optional 8 inch Tray (Includes Platform, 1 each, flat and dimpled mat, 260288  
Dimpled rubber mat 12", C 2202208  
Flat rubber mat 12", C 2202162  
Dimpled rubber mat, 8" C 2202774  
Flat rubber mat 8", C 2202775  
Stacking tray 12", 260312

#### Models

**281111 - (115 VAC)**  
**281111-2 - (230 VAC)**

Variable speed: 5-120 rpm orbits/min

Variable tilt angle: 0° - 12°

Operating Temperature:  
Can operate at 4°C to 40°C

Timer: Adjustable up to 12 hours

Product Dimensions W x D x H: 14" x 12" x 11"  
(35.5 cm x 30.4 cm x 27.9 cm)

Load Limit: 20 lbs. / 9 kgs.

#### Power

281111 - 115 VAC; 50/60Hz,  
6 watts, 0.6 amps

281111-2 - 230VAC; 50/60Hz, 60 Watts,  
0.7 amps CE marked

Shipping Weight: 25 lbs. / 11.4 kgs.

