









Bench top shaking incubator has a compact design that saves your precious lab space. Stainless steel interiors with exceptional durability and trouble-free cleaning require less maintenance. Large transparent lid provides easy observation. Microprocessor controller permits easy operation. A variety of platforms and other lab accessories allows configuration to meet your demands.

Used in Cell Cultures, Cell Aeration, Microbiology, Increasing Solubility Rates, Metabolism Studies, Bacterial Cultures, Bacteriology.

Also known as Laboratory Incubator Shaker, Incubator Shaker.

#### **BSBT-301 BENCHTOP SHAKING INCUBATOR**



Speed can be set as 60-400 rpm

The electronic control of closed cycle adjustable heating system

Sainless steel interior and Electrostatic sprayed exterior

Call to restore function, without power supply

With strong influence of intermittent rapid heating system of 200 type and 100B type with air pressure regulating valve

Flexible and convenient, wide variety of detachable accessories

#### **SPECIFICATIONS**

| Model                  | BSBT-301                              |
|------------------------|---------------------------------------|
| Speed Range            | 20-300 rpm                            |
| Standard Capacity      | 500 mlx3, 250 mlx3, 100 mlx4, 50 mlx4 |
| Temperature            | RT+5°C~60°C                           |
| Temperature Accuracy   | ±0.1°C                                |
| Temperature Uniformity | ±1°C                                  |
| Shaking Speed Accuracy | ±1 rpm                                |
| Timing Range           | Optional                              |
| Motion                 | Orbital                               |
| Amplitude              | 24 mm                                 |
| Tray                   | 1                                     |
| Platform Dimension     | 4375x405 mm                           |
| Inner Dimension        | 428x456x360 mm                        |
| Overall Dimension      | 640x605x520 mm                        |
| Display                | LCD                                   |
| Weight                 | 72 kg                                 |
| Power                  | 365 W                                 |
| Power Supply           | 220 V±10%                             |

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# **BSBT-302 BENCHTOP SHAKING INCUBATOR**



The electronic control of closed cycle adjustable heating system

Sainless steel interior and Electrostatic sprayed exterior

Call to restore function, without power supply

With strong influence of intermittent rapid heating system of 200 type and 100B type with air pressure regulating valve  $\,$ 

Flexible and convenient, wide variety of detachable accessories

## **SPECIFICATIONS**

| Model                  | BSBT-302                              |
|------------------------|---------------------------------------|
| Speed Range            | 20-300 rpm                            |
| Standard Capacity      | 500 mlx4, 250 mlx4, 100 mlx5, 50 mlx5 |
| Temperature            | 4°C~60°C                              |
| Temperature Accuracy   | ±0.1°C                                |
| Temperature Uniformity | ±1°C                                  |
| Shaking Speed Accuracy | ±1 rpm                                |
| Timing Range           | Optional                              |
| Motion                 | Orbital                               |
| Amplitude              | 26 mm                                 |
| Tray                   | 1                                     |
| Platform Dimension     | 450x400 mm                            |
| Inner Dimension        | 508x458x360 mm                        |
| Overall Dimension      | 800x700x530 mm                        |
| Display                | LCD                                   |
| Weight                 | 100 kg                                |
| Power                  | 580 W                                 |
| Power Supply           | 220 V±10%                             |



Microprocessor controller with timing function

Large LCD display

High quality compressor and fan motor

Digital control of time, temperature and shaking speed for accuracy and repeatability Stainless steel inner chamber and platform

Clear large lid provides excellent visibility minimizing the need to open the lid

Adjustable counterbalance system provides vibration-free operation

Smooth start and stop system prevents liquid spillage

Auto-controller of fan speed prevents damage to samples

Refrigerant: CFC R134a

Open lid cut off switch immediately stops shaking when lid is open Interchangeable platforms for shaking-incubating different vessels

#### **SPECIFICATIONS**

| Model                           | BSBT-101   | BSBT-102                         | BSBT-104 | BSBT-105 |
|---------------------------------|------------|----------------------------------|----------|----------|
| Speed Range                     | 40-25      | 40-250 rpm 40-300 rpm            |          |          |
| Temperature                     |            | RT+5-65°C 4-6                    |          |          |
| Temperature Accuracy            |            | ±0.1°0                           | -        |          |
| Temperature Uniformity          |            | ±1°C                             |          |          |
| Temperature Fluctuation         |            | ±1°C                             |          |          |
| Temperature Resolution          |            | 0.1℃                             |          |          |
| Permissible Ambient Temperature |            | 5-40°C                           |          |          |
| Shaking Speed Accuracy          |            | ±1 rpm                           |          |          |
| Speed Increment                 |            | ±1 rpm                           |          |          |
| Shaking Orbit                   |            | 20 mm                            |          |          |
| Timing Range                    |            | 0-5999 min                       |          |          |
| Motion                          |            | Orbital                          |          |          |
| Amplitude                       |            | 20 mm                            |          |          |
| Platform Dimension              | 280x280 mm | 280x280 mm 350x350 mm 450x450 mm |          |          |
| Weight                          | 56         | 56 kg                            |          | 110 kg   |
| Power                           | 50         | 500 W 750 W 11                   |          | 1100 W   |
| Power Supply                    | 220V       | 220V, 50Hz 220V, 60Hz            |          |          |









BSBT-101

BSBT-102

BSBT-104

BSBT-105



PID controller

Forced convection circulation

Stainless steel internal material

Audio and visual alarm for over-temperature

Alarm: Over-speeds, Independent over-temperature protector, Shutdown protection for door opening, Leakage or over-current protection.

Optional accessories: UV lamp, humidity controller, inlet air pipe, light system, etc.

## **SPECIFICATIONS**

| Model                      | BSBT-201                                       | BSBT-202  |  |
|----------------------------|--|---|--|
| Speed Range                | 30~400 rpm                                     |   |  |
| Standard Capacity          | 100 mlx9 50 mlx4, 100 mlx4, 250 mlx3, 500 mlx3 |   |  |
| Maximum Configuration      | 50 mlx9, 100 mlx9, 250 mlx5                    | 50 mlx16, 100 mlx16, 250 mlx12, 500 mlx9, 1000 mlx5 |  |
| Temperature                |  | RT+5°C~60°C   |  |
| Temperature Accuracy       |  | ±0.1°C  |  |
| Temperature Uniformity     |  | ±0.25°C   |  |
| Shaking Speed Accuracy     |  | ±1 rpm  |  |
| Timing Range               | 0~500 h  |   |  |
| Motion                     | Orbital  |   |  |
| Vibrational Amplitude (mm) | Φ25 mm   |   |  |
| Drive Mode                 | Unishaft drive                                 |   |  |
| External Material          | ABS  |   |  |
| Platform Dimension         | 260x260 mm                                     | 400x370 mm  |  |
| Overall Dimension          | 440Wx420Dx420H mm                              | 610Wx610Dx510H mm                                   |  |
| Package Dimension          | 570Wx570Dx590H mm                              | 710Wx710Dx660H mm                                   |  |
| Display                    | LCD  |   |  |
| Weight                     | 50 kg 85 kg                                    |   |  |
| Heating Consumption        | 150 W  | 400 W   |  |
| Power                      | 280 W 490 W                                    |   |  |
| Power Supply               |  | AC110V/220V±10%,50/60Hz                             |  |



BSBT-201



BSBT-202

# **BSBT-203 BENCHTOP SHAKING INCUBATOR**



PID controller Forced convection circulation Stainless steel internal material CFC-Free, R134a refrigerant Audio and visual alarm for over-temperature

Alarm: Over-speeds, Independent over-temperature protector, Shutdown protection for door opening, Leakage or over-current protection.

Optional accessories: UV lamp, humidity controller, inlet air pipe, light system, etc.

## **SPECIFICATIONS**

| Model                      | BSBT-203   |
|----------------------------|--|
| Speed Range                | 30~400 rpm   |
| Standard Capacity          | 50 mlx5,100 mlx5, 250 mlx4, 500 mlx3                           |
| Maximum Configuration      | 50 mlx25, 100 mlx25, 250 mlx16, 500 mlx9, 1000 mlx9, 2000 mlx5 |
| Temperature                | 4°C~60°C   |
| Temperature Accuracy       | ±0.1°C   |
| Temperature Uniformity     | ±0.25°C  |
| Shaking Speed Accuracy     | ±1 rpm   |
| Timing Range               | 0~500 h  |
| Motion                     | Orbital  |
| Vibrational Amplitude (mm) | Φ25 mm   |
| Drive Mode                 | Unishaft drive   |
| External Material          | ABS  |
| Platform Dimension         | 420x400 mm   |
| Overall Dimension          | 700Wx740Dx560H mm  |
| Package Dimension          | 800Wx840Dx710H mm  |
| Display                    | LCD  |
| Weight                     | 130 kg   |
| Cooling Consumption        | 118 W  |
| Heating Consumption        | 400 W  |
| Power                      | 580 W  |
| Power Supply               | AC110V/220V±10%,50/60Hz  |

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# **BSBT-401 INCUBATOR SHAKER**



PID speed control technology.

Integrate incubator and shaker. Save lab space.

Compact constant temperature space, good temperature uniformity, low noise.

Micro-processor controls temperature and shaking speed. Built-in timing function. Sound alarms after program finishes, it can also be set to untimed continuous operation.

Brushless DC motor, long life and maintenance-free.

## **SPECIFICATIONS**

| Model                  | BSBT-401                         |  |  |  |
|------------------------|----------------------------------|--|--|--|
| Speed Range            | 50 ~300 rpm                      |  |  |  |
| Temp. control range    | 4 ~60°C @Ambient temp.≤25°C      |  |  |  |
| Temp. setting range    | 4 ~60°C                          |  |  |  |
| Shaking Orbit          | 20 mm (circle)                   |  |  |  |
| Max. drop temp.        | R.T. decrease 20°C@R.T.≥25°C     |  |  |  |
| Temp. stability        | ±0.3°C                           |  |  |  |
| Temp. Display accuracy | 0.1°C                            |  |  |  |
| Timing range           | 1min ~99h59min                   |  |  |  |
| Voltage                | AC 220V , 50/60Hz                |  |  |  |
| Power                  | 1200W                            |  |  |  |
| Fuse                   | 250 V, 5 A/10 A, φ5x20           |  |  |  |
| Dimension              | W.560xD.823xH.449                |  |  |  |
| Net weight             | 61 Kgs                           |  |  |  |
| Platform               | PW-420 (W.410 x D.420 x H.65 mm) |  |  |  |



Unique air flow technology adopts continuous flow fan technology, air stability, no turbulence, temperature is uniform

Cycle fan speed can be automatically controlled, it can avoid the samples volatile too fast due to cycle fan is too fast

Patented single-axis drive and balancing technology, running stable, low noise and low consumption

Adopts pneumatic support, transparent cover height can be adjustable to any position, convenient the operation

Colorful touch screen can continuously, accurately and real-time display temp, rotation speed and work time

The menu operation interface is easy to understand

Combine incubator, shaker functions together with small space

Patented overall design, transparent big view windows, dynamic master the culture effect

Shaking platform and chamber are made of stainless steel, anti-corrosion and easy to clean

Protection on instruments: Comply international standard secondary temp. limiter alarm system, alert the operator with sound and light alarms, ensure operator is safe without any accident

Protection on key components: Key components have over current, over temp., over load etc safety protection, it can prevent instruments accidents without precautions Brushless DC motor, large start torque, wide speed adjustment, free maintenance

#### **SPECIFICATIONS**

| Model                  | BSBT-1701         | BSBT-1702         | BSBT-1703            | BSBT-1704         |  |
|------------------------|-------------------|-------------------|----------------------|-------------------|--|
| Speed Range            | 40-250 rpm        |                   | 40-300 rpm           |                   |  |
| Temp. Range            |                   | RT+5 - 65°C       | RT+5 - 65°C 4 - 65°C |                   |  |
| Temp. Control accuracy |                   | 0.1               | L°C                  |                   |  |
| Frequency accuracy     |                   | ±1 :              | rpm                  |                   |  |
| Platform Dimension     | 250x250 mm        | 350x350 mm        | 450x450 mm           |                   |  |
| Inside height          | 195 mm            | 265 mm            | 330 mm               |                   |  |
| Overall Dimension      | 390Wx590Dx370H mm | 490Wx690Dx450H mm | 590Wx825Dx550H mm    | 590Wx975Dx550H mm |  |
| N.W                    | 32 Kg             | 42 Kg             | 52 Kg                | 75 Kg             |  |
| Amplitude              |                   | 20 mm             |                      |                   |  |
| Running time           |                   | 1 - 991           | 59min                |                   |  |
| Power requirement      | AC 220 V / 50 Hz  |                   |                      |                   |  |
| Rated power            | 450 W             | 650 W             | 1000 W 1300 W        |                   |  |
| Standard configuration | 250mlx8pcs        | 250mlx13pcs       | 250ml                | x18pcs            |  |

| Model                  | BSBT-1705            | BSBT-1706                        | BSBT-1707         | BSBT-1708         |
|------------------------|----------------------|----------------------------------|-------------------|-------------------|
| Speed Range            | 40-500 rpm           |                                  |                   |                   |
| Temp. Range            | RT+5 - 65°C 4 - 65°C |                                  |                   | 4 - 65°C          |
| Temp. Control accuracy | 0.1℃                 |                                  |                   |                   |
| Frequency accuracy     | ±1 rpm               |                                  |                   |                   |
| Platform Dimension     | 250x250 mm           | 250x250 mm 350x350 mm 450x450 mm |                   |                   |
| Inside height          | 195 mm               | 265 mm 330 mm                    |                   |                   |
| Overall Dimension      | 390Wx590Dx370H mm    | 490Wx690Dx450H mm                | 590Wx825Dx550H mm | 590Wx975Dx550H mm |

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| N.W                    | 32 Kg      | 42 kg                   | 52 Kg | 75 Kg  |
|------------------------|------------|-------------------------|-------|--------|
| Amplitude              | 4 mm       | 5 mm                    |       |        |
| Running time           |            | 1 - 99h59min            |       |        |
| Power requirement      |            | AC 220 V / 50 Hz        |       |        |
| Rated power            | 450 W      | 650 W 1000 W 1300 W     |       |        |
| Standard configuration | 250mlx8pcs | 250mlx13pcs 250mlx18pcs |       | x18pcs |

















0301-1703

BSBT-1706

BSBT-1708



Adopt 4.3 inches touch screen, intelligent touch screen control, parameters real time display, operation easily

Temp., rotation speed and time etc parameters fast setting Silent working.

Colorful touch screen display, multi data display at one screen, easily to observe and operate

Platform is stainless steel, easy to detach and clean

Various kinds of clamps and racks for selection, easily change racks and clamps improve work efficient

User's set parameters can be stored automatically when power off suddenly, and it resume last program settings when power on

PID microcomputer control temp. and shake frequency with timer, it starts shake gently to prevent liquid coming out from the vessels and stop the machine working Brushless DC motor, large start torque, wide speed adjustment, free maintenance

Three-eccentric axis balance drive ensures all samples in the shaker platform movements at the same rotation frequency. Durable structure guarantees the shaker incubator can work properly no matter full load or high speed working

Multi-segment temp., speed, time program at the same time. It has normal mode or programmable mode for running. Preset parameter and work data can be shown at the same time. It simplified complicated culture requirements and realize auto control and run

Equip with USB as options, record temp. parameter changes

Equip with RS232 data interface, through software to remote control machine performance

## **SPECIFICATIONS**

| Model                  | BSBT-2101   | BSBT-2102         | BSBT-2103                         | BSBT-2104 |  |
|------------------------|---|-------------------|-----------------------------------|-----------|--|
| Speed Range            | 40-300 rpm  |                   |                                   |           |  |
| Amplitude              |   | 26 mm             |                                   |           |  |
| Timing Range           |   | 1 - 99h59min      |                                   |           |  |
| Max load               | 250mlx48pcs or 500mlx30pcs or 1000mlx20pcs or 250mlx63pcs or 500mlx35pcs or 1000mlx35 2000mlx12pcs (single shelf) 250mlx63pcs or 500mlx35pcs or 1000mlx35 |                   |                                   |           |  |
| Platform Dimension     | 800x600 mm  |                   | 920x640 mm                        |           |  |
| Platform quantity      | 1 pcs   | 2 pcs             | 1 pcs                             | 2 pcs     |  |
| Overall Dimension      | 895Wx740Dx460H mm   | 895Wx740Dx900H mm | mm 1115Wx835Dx460H mm 1115Wx835Dx |           |  |
| Rated power            | 250 W   |                   |                                   |           |  |
| Power supply           | AC 220 V 50 HZ  |                   |                                   |           |  |
| Standard configuration | 500mlx30pcs (single shelf) 1000mlx35pcs (single shelf)  |                   | s (single shelf)                  |           |  |









BSBT-2101 BSBT-2102 BSBT-2103 BSBT-2104

## 2200 BENCHTOP SHAKING INCUBATOR



Large LCD screen to display more data at same time

R134a refrigerant, imported compressor and fan motor

Big observation windows

304 Stainless steel chamber and platform, easy to clean

The parameters can be automatically stored in case of power failure, and it will continue run as presetting program after turn on

Microprocessor PID controller for temperature and shaking speed with timing function

## **SPECIFICATIONS**

| Model                  | BSBT-2201     | BSBT-2202   | BSBT-2203  | BSBT-2204  |
|------------------------|---------------|-------------|------------|------------|
| Model                  | D3D1-22U1     | D3D1-22U2   | D3D1-22U3  | D3D1-22U4  |
| Speed Range            | 40-300 rpm    |             |            |            |
| Electrical Requirement |               | 220 V 50 Hz |            |            |
| Amplitude              | 26 mm         |             |            |            |
| Display Resolution     | 0.1℃          |             |            |            |
| Power Consumption      | 1050 W 1300 W |             |            | 00 W       |
| Platform Dimensions    | 750x460 mm    | 920x500 mm  | 750x460 mm | 920x500 mm |

| External Dimension | 1080Wx620Dx915H mm | 1250Wx660Dx915H mm | 1080Wx620Dx915H mm | 1250Wx660Dx915H mm |
|--------------------|--------------------|--------------------|--------------------|--------------------|
| Timing range       |                    | 0~599              | 99 min             |                    |









BSBT-2203 BSBT-2204



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