

Incubating Rocking & Waving Shakers



OHAUS Incubating Rocking and Waving Shakers are designed to incubate samples from 5°C above ambient to 65°C to provide accurate and repeatable results. Rocking shakers provide a see-saw like motion, while waving shakers offer a smooth, low-foaming three-dimensional “wave” motion. All models feature LED displays with touchpad controls. Both models include safety features that protect both the user and samples.

- Independent LEDs and Touchpad Control for Temperature, Speed/Tilt Angle and Time
- Microprocessor Control with PID Temperature Control for Precise Control
- Electronic Tilt Adjustment While Unit Is Operating

Incubating Rocking & Waving Shakers

- Electronic tilt adjustment from 0 to 15° while unit is operating
- LED displays for temperature, speed and tilt angle, and time
- Timer with audible alarm

The OHAUS Incubating Rocking Shaker combines smooth rocking motion and general purpose incubation in one compact bench top unit.

Operating Features:

Microprocessor Control: The microprocessor control provides electronic tilt angle adjustment which allows user to easily adjust rocking angle from 0 to 15° while unit is operating. Precise speed control provides smooth, low-speed rocking motion down to 1 rpm.

PID Temperature Controller: Maintains precise temperature control from ambient +5°C to 65°C. Easy-to-use controls allow users to adjust temperature in 1°C increments.

LED Display: Touch pad controls with easy-to-read, independent LED displays for temperature, speed and tilt angle, and time allow operator to view all settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

Safety Features:

Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.

Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.

Audible Alarm: In timed mode, alarm will sound when the time reaches zero.

Caution Hot Indicator: Symbol illuminates when the temperature of the air in the chamber reaches 40°C and remains lit until temperature cools down.

Spill-Resistant Design: Channels fluids away from internal components.

Polycarbonate Lid: Permits viewing of samples without disturbing internal temperature.

Operating Conditions:

Unit can be run in conditions from 5 to 40°C, maximum 80% relative humidity, non-condensing.

Applications:

Cell cultures, staining and destaining gels, hybridization procedures, and blotting techniques.

Ordering Information:

Unit includes a detachable, 3-wire cord and plug.



| Specifications | |
|---------------------------------|-----------------------|
| Temperature Range | Ambient +5°C to 65°C |
| Temperature Uniformity | ± 0.5°C at 37°C |
| Speed Range | 1 to 50 rpm * |
| Speed Accuracy | ± 1 rpm |
| Tilt Angle | 0 to 15° * |
| Timer | 1 second to 160 hours |
| Maximum Weight Capacity | 4.5 kg ** |
| Tray Material | Aluminum |
| Tray Dimensions (L × W) | 25.4 × 19.1 cm |
| Interior Dimensions (L × W × H) | 27.3 × 19.7 × 9.7 cm |
| Overall Dimensions (L × W × H) | 43.2 × 27.9 × 26.7 cm |
| Ship Weight | 10 kg |

* Maximum speed/tilt angle may vary with heavy or unbalanced loads.

** Centered on tray.

| Description | Model | Item Number |
|---------------------------|-----------|-------------|
| Incubating Rocking Shaker | ISRK04HDG | 30391975 |

Incubating & Incubating Cooling Shakers

Incubating Rocking & Waving Shakers

- Electronic tilt adjustment from 0 to 20° while unit is operating
- LED displays for temperature, speed and tilt angle, and time
- Timer with audible alarm

The OHAUS Incubating Waving Shaker combines the unique vertical and horizontal “wave” motion with general purpose incubation in one compact bench top unit.

Operating Features:

Microprocessor Control: The microprocessor control provides electronic tilt angle adjustment which allows user to easily adjust waving angle from 0 to 20° while unit is operating. Precise speed control provides smooth, low-speed waving motion down to 1 rpm.

PID Temperature Controller: Maintains precise temperature control from ambient +5°C to 65°C. Easy-to-use controls allow users to adjust temperature in 1°C increments..

LED Display: Touch pad controls with easy-to-read, independent LED displays for temperature, speed and tilt angle, and time allow operator to view all settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

Safety Features:

Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.

Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.

Audible Alarm: In timed mode, alarm will sound when the time reaches zero.

Caution Hot Indicator: Symbol illuminates when the temperature of the air in the chamber reaches 40°C and remains lit until temperature cools down.

Spill-Resistant Design: Channels fluids away from internal components.

Polycarbonate Lid: Permits viewing of samples without disturbing internal temperature.

Operating Conditions:

Unit can be run in conditions from 5 to 40°C, maximum 80% relative humidity, non-condensing.

Applications:

Cell cultures, hybridization procedures, and blotting techniques.

Ordering Information:

Unit includes a detachable, 3-wire cord and plug.



| Specifications | |
|---------------------------------|-----------------------|
| Temperature Range | Ambient +5°C to 65°C |
| Temperature Uniformity | ± 0.5°C at 37°C |
| Speed Range | 1 to 30 rpm * |
| Speed Accuracy | ± 1 rpm |
| Tilt Angle | 0 to 20° * |
| Timer | 1 second to 160 hours |
| Maximum Weight Capacity | 2.3 kg ** |
| Tray Material | Aluminum |
| Tray Dimensions (L × W) | 23.5 × 18.4 cm |
| Interior Dimensions (L × W × H) | 27.3 × 19.7 × 8.6 cm |
| Overall Dimensions (L × W × H) | 43.2 × 27.9 × 26.7 cm |
| Ship Weight | 10 kg |

* Maximum speed/tilt angle may vary with heavy or unbalanced loads.

** Centered on tray.

| Description | Model | Item Number |
|--------------------------|-----------|-------------|
| Incubating Waving Shaker | ISWV02HDG | 30391982 |

Open Air and Incubating & Incubating Cooling Shakers Accessories

Universal Platforms

Allows for mounting of flask clamps, test tube racks, and bottle clamps. Platform slides over top of included tray and is tightened with adjustment screws. Optional accessories screw directly into mounting point openings. The two-tier braces allow stacking of platforms with a 25.4 cm clearance (available for select sizes). An optional non-skid rubber mat can be placed on the platform for an added non-slip surface. The platform is constructed of type 304 stainless steel.



| Description | Used on Shakers | Item Number |
|------------------------------------|--|-------------|
| 27.9 × 33 cm Universal Platform | Analog/Digital 16 kg Shakers and Reciprocating Shakers | 30400052 |
| 33 × 33 cm Universal Platform | Analog/Digital 16 kg Shakers and Reciprocating Shakers | 30400053 |
| 45.7 × 45.7 cm Universal Platform* | Analog/Digital 16 kg Shakers and Reciprocating Shakers** | 30400054 |
| 45.7 × 61 cm Universal Platform* | Analog/Digital 16 kg & 23 kg Shakers** and Reciprocating Shakers** | 30400056 |
| 61 × 61 cm Universal Platform | Digital 45 kg Shakers | 30400057 |
| 45.7 × 76.2 cm Universal Platform* | Analog/Digital 23 kg Shakers | 30400058 |
| 61 × 91.4 cm Universal Platform | Digital 68 kg Shakers | 30400059 |
| Two-Tier Braces (set of 4) | Analog/Digital 16 kg & 23 kg Shakers | 30400051 |

Rubber Mats

| Description | Used on Shakers | Item Number |
|------------------------------------|---|-------------|
| 11 × 13" (27.9 × 33 cm) Rubber Mat | Analog/Digital 16 kg Shakers and Reciprocating Shakers | 30400060 |
| 33 × 33 cm Rubber Mat | Analog/Digital 16 kg Shakers and Reciprocating Shakers | 30400061 |
| 45.7 × 45.7 cm Rubber Mat | Analog/Digital 16 kg Shakers and Reciprocating Shakers | 30400062 |
| 18 × 24" (45.7 × 61 cm) Rubber Mat | Analog/Digital 16 kg Shakers, Reciprocating Shakers and Analog Digital 23kg Shakers | 30400063 |
| 61 × 61 cm Rubber Mat | Digital 45 kg Shakers | 30400064 |
| 61 × 91.4 cm Rubber Mat | Digital 68 kg Shakers | 30400065 |

Culture Platforms

Ideal for slow speed applications; Petri dishes, culture flasks, and other flat bottom, low profile vessels. The two-tier braces (available for both sizes) allow stacking of platforms with a 25.4 cm clearance. The platform is constructed of type 304 stainless steel. The platform has a non-skid rubber surface.



| Description | Used on Shakers | Item Number |
|----------------------------------|---|-------------|
| 45.7 × 45.7 cm Culture Platform* | Analog/Digital 16 kg Shakers* and Reciprocating Shakers** | 30400066 |
| 45.7 × 61 cm Culture Platform* | Analog/Digital 16 kg* & 23 kg Shakers and Reciprocating Shakers** | 30400067 |
| Two-Tier Braces (set of 4) | Analog/Digital 16 kg & 23 kg Shakers | 30400051 |

* Two-tier ready

**Stacking of platforms is not recommended for Reciprocating Shaker

Accessories

Open Air and Incubating & Incubating Cooling Shakers Accessories

Dedicated Platforms

Pre-mounted flask clamps for maximum utilization of platform space for flasks of all one size. The two-tier braces allow stacking of platforms with a clearance (available for select sizes). Platform is constructed of type 304 stainless steel. Flask clamps are constructed of PVC. Ideal for polycarbonate flasks.



| Description | Flask Capacity | Used on Shakers | Item Number |
|---|----------------|---|-------------|
| 33 × 33 cm Dedicated Platform / 125 mL Flask Clamp | 16 | Analog/Digital 16 kg Shakers and Reciprocating Shakers | 30400075 |
| 33 × 33 cm Dedicated Platform / 250 mL Flask Clamp | 12 | Analog/Digital 16 kg Shakers and Reciprocating Shakers | 30400076 |
| 33 × 33 cm Dedicated Platform / 500 mL Flask Clamp | 8 | Analog/Digital 16 kg Shakers and Reciprocating Shakers | 30400077 |
| 33 × 33 cm Dedicated Platform / 1 L Flask Clamp | 4 | Analog/Digital 16 kg Shakers and Reciprocating Shakers | 30400078 |
| 45.7 × 45.7 cm Dedicated Platform / 125 mL Flask Clamp* | 27 | Analog/Digital 16 kg Shakers and Reciprocating Shakers ** | 30400079 |
| 45.7 × 45.7 cm Dedicated Platform / 250 mL Flask Clamp* | 20 | Analog/Digital 16 kg Shakers and Reciprocating Shakers ** | 30400080 |
| 45.7 × 45.7 cm Dedicated Platform / 500 mL Flask Clamp* | 13 | Analog/Digital 16 kg Shakers and Reciprocating Shakers ** | 30400081 |
| 45.7 × 45.7 cm Dedicated Platform / 1 L Flask Clamp | 9 | Analog/Digital 16 kg Shakers and Reciprocating Shakers ** | 30400082 |
| Two-Tier Braces (set of 4) | | Analog/Digital 16 kg Shakers | 30400051 |

Adjustable Platforms

Adjustable clamping bars accommodate various vessel types. Constructed of stainless steel. The base tray has a non-skid rubber surface.



| Description | Bar Size | Overall Dimensions | Used on Shakers | Item Number |
|---------------------------|----------|--------------------|-------------------------------|-------------|
| 2-bar Adjustable Platform | 21.8 cm | 21.8 × 29.7 cm | Digital 4 kg Shakers | 30400121 |
| 4-bar Adjustable Platform | 45.7 cm | 45.7 × 45.7 cm | Analog/ Digital 16 kg shakers | 30400068 |
| 4-bar Adjustable Platform | 45.7 cm | 45.7 × 61 cm | Analog/ Digital 23 kg shakers | 30400069 |

Replacement Parts

| Description | Used with Platforms | Item Number |
|---|---------------------|-------------|
| 21.8 cm Adjustable Bar (with Mounting Hardware) | 30400121 | 30400122 |
| 45.7 cm Adjustable Bar (with Mounting Hardware) | 30400068 & 3040069 | 30400073 |

* Two-tier ready

**Stacking of platforms is not recommended for Reciprocating Shaker

Open Air and Incubating & Incubating Cooling Shakers Accessories

Large Vessel Carrier Platforms

Ideal for large sample containers like carboys, jugs, and bottles. The platforms' high side walls secure samples, has a heavy-duty design and is constructed of stainless steel. The base tray has a non-skid rubber surface.

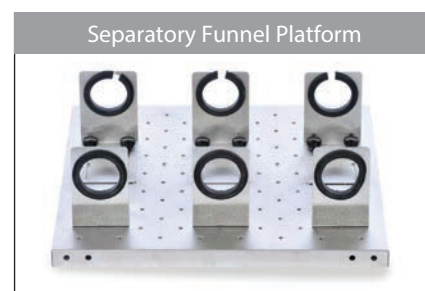


| Description | Bar Size | Overall Dimensions (L x W x H) | Used on Shakers | Item Number |
|-------------------------------------|----------|--------------------------------|------------------------------|-------------|
| 4-bar Large Vessel Carrier Platform | 45.7 cm | 76.4 x 45.9 x 35.3 cm | Analog/Digital 23 kg Shakers | 30400070 |
| 4-bar Large Vessel Carrier Platform | 61 cm | 61.9 x 61.7 x 36.0 cm | Digital 45 kg Shakers | 30400071 |
| 5-bar Large Vessel Carrier Platform | 61 cm | 93.7 x 61.7 x 36.0 cm | Digital 68 kg Shakers | 30400072 |

| Replacement Part | Used with Carrier | Item Number |
|---|---------------------|-------------|
| 45.7 cm adjustable bar (with mounting hardware) | 30400070 | 30400073 |
| 61 cm adjustable bar (with mounting hardware) | 30400071 & 30400072 | 30400074 |

Separatory Funnel Platform

Holds 3 funnels at once on a 45.7 x 45.7 cm platform. Platform can accommodate 500 mL to 2 L separatory funnels and is constructed of stainless steel. Includes platform, clamps and hardware to secure 3 funnels.



| Description | Used on Shakers | Item Number |
|---|--|-------------|
| 45.7 cm adjustable bar (with mounting hardware) | Analog/Digital 16 kg Shakers and Reciprocating Shakers | 30400083 |

Microplate Clamp

Can hold one standard microplate or deep-well plate. Constructed of type 304 stainless steel.

| Platform Capacities for Microplate Clamps | | |
|---|----------------------|-------------------|
| Platform Size | Platform Item Number | Microplate Clamps |
| 27.9 x 33 cm | 30400052 | 4 |
| 33 x 33 cm | 30400053 | 6 |
| 45.7 x 45.7 cm | 30400054 | 12 |
| 45.7 x 61 cm | 30400056 | 18 |
| 45.7 x 76.2 cm | 30400057 | 21 |
| 61 x 61 cm | 30400058 | 24 |
| 61 x 91.4 cm | 30400059 | 36 |



| Description | Used on Shakers | Item Number |
|------------------|---|-------------|
| Microplate Clamp | Analog/Digital 16 kg, 23 kg, 45 kg, & 68 kg Shakers | 30400104 |

Accessories

Open Air and Incubating & Incubating Cooling Shakers Accessories

Universal Harness

Attaches to tray to secure low profile plates.

| Description | Used on Shakers | Item Number |
|-------------------|---------------------------------------|-------------|
| Universal Harness | Digital 4 kg Open Air Orbital Shakers | 30400123 |



Dimpled Mat

Designed to hold centrifuge tubes, vials, culture tubes, and micro-tubes securely in place. Mat can easily be removed for cleaning and transporting of tubes from bench to tray.

| Description | Used on Shakers | Item Number |
|-----------------------------|--------------------------------|-------------|
| Dimpled Mat, 32.4 × 25.4 cm | Digital Rocking Shaker | 30400140 |
| Dimpled Mat, 29.9 × 22.2 cm | Digital Waving Shaker | 30400142 |
| Dimpled Mat, 25.4 × 19.1 cm | Incubating Rocking Shaker | 30400141 |
| Dimpled Mat, 23.5 × 18.4 cm | Incubating Waving Shaker | 30400143 |
| Dimpled Mat, 29.9 × 22.2 cm | Open Air 4 kg Orbital Shaker | 30400124 |
| Dimpled Mat, 35.6 × 27.9 cm | Analog Rocking & Waving Shaker | 30400144 |



Stacking Tray

Easily attaches to the units' included tray to add a second tier for higher capacity applications. Second tier tray mounts 8.9 cm above lower tray. The tray includes hardware and a rubber mat.

| Description | Used on Shakers | Item Number |
|-------------------------------|------------------------|-------------|
| Stacking Tray, 32.4 × 25.4 cm | Digital Rocking Shaker | 30400137 |
| Stacking Tray, 29.9 × 22.2 cm | Digital Waving Shaker | 30400138 |
| Stacking Tray, 35.6 × 27.9 cm | Analog Rocking Shaker | 30400139 |



Dilution Cup Tray

Constructed of type 304 stainless steel. Holds 24 × 28 mm dilution vials.

| Description | Used on Unit | Item Number |
|-------------------|---------------------------------------|-------------|
| Dilution Cup Tray | Digital 4 kg Open Air Orbital Shakers | 30400125 |



Micro-Tube Rack

Optional 1.5 to 2 mL Micro-Tube Rack attaches to tray to hold up to 70 × 1.5 mL or 2 mL micro-tubes. Tray can accommodate up to 2 micro-tube racks.

| Description | Used on Unit | Item Number |
|-----------------|---|-------------|
| Micro-Tube Rack | Digital Open Air and Incubating Microplate Shaker | 30400114 |





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