

# **Do More with OHAUS**



Laboratory Equipment





SHRK07AL2

SHLDMP03DG ISWV02HDG

## Shakers

Shake It up in the laboratory with OHAUS Shakers! Perfect for life science applications such as ELISA assays, cell cultures, protein studies, solubility studies, and more, OHAUS Shakers are perfectly designed to help you Shake It up in the laboratory.

### Top questions to ask

### What type of motion are you looking for?

You can choose your model among OHAUS selection of orbital, rocking, waving and reciprocating shakers.

### Do you need a specific speed and orbit?

The larger the sample the larger the orbit and a slower speed is needed for a good mix. For smaller samples, it is the opposite, smaller orbit and faster speed for a good mix.

### What size of shaker do you need? 3

You can easily find a shaker that can meet required capacity and sample kind. The most common samples are either Erlenmeyer flasks or tubes. The OHAUS Equipment Catalog has a guide in the accessory section listing the number of tube racks or flask clamps each shaker can hold.

### Do you need a temperature control?

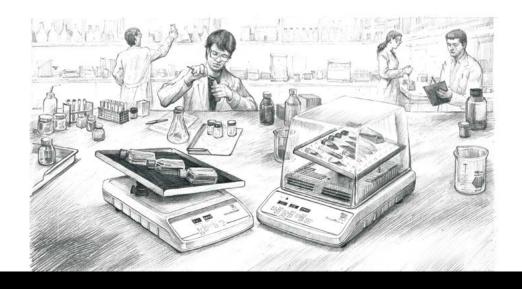
Incubating models are available as well as incubating/cooling. Remember, incubating models can begin to control temperature at ~5°C above whatever the ambient (room) temperature is, so if the customer needs a temperature close to ambient, select a model that can cool.

### How important is reproducibility of your settings?

If it is important, you should recommend a digital (DG) shaker as opposed to an analog (AL). Analog settings are not exact, digital settings are.

### Do you need a simple means for capturing your data?

The OHAUS Thermal Shaker units (ISTHBLHTS and ISTHBLCTS) have a USB. Downloading the data is as simple as inserting a flash drive into the port and selecting USB mode on the utilities menu. Your customer does not need special software. The data is uploaded to a .csv file, similar to an Excel spreadsheet.



# SHAKE IT

Туре	Model	Motion	Capacity	Speed Range RPM	Item No
	SHLD0415AL	Orbital, 15 mm	3.6 kg	40 to 300	30391893
	SHLD0403DG	Orbital, 3 mm	3.6 kg	100 to 1200	30391900
	SHLD0415DG	Orbital, 15 mm	3.6 kg	40 to 300	30391914
	SHLDMP03DG	Orbital, 3 mm	4 microplates or 2 micro-tube racks	100 to 1200	30391907
	SHEX1619DG	Orbital, 19 mm	16 kg	15 to 500	30391816
	SHHD1619AL	Orbital, 19 mm	16 kg	25 to 500	30391802
	SHHD1619DG	Orbital, 19 mm	16 kg	15 to 500	30391811
(ers	SHHD2325AL	Orbital, 25 mm	22.7 kg	25 to 500	30391837
Shal	SHHD2325DG	Orbital, 25 mm	22.7 kg	20 to 500	30391844
Open Air Shakers	SHHD4525DG	Orbital, 25 mm	45.4 kg	15 to 500	30391865
nəc	SHHD4550DG	Orbital, 51 mm	45.4 kg	15 to 300	30391872
õ	SHHD6825DG	Orbital, 25 mm	68 kg	15 to 500	30391879
	SHHD6850DG	Orbital, 51 mm	68 kg	15 to 300	30391886
	SHRK07AL1	Rocking, 0 to 15°	7.3 kg	1 to 75	30391954
	SHRK07AL2	Rocking, 0 to 15°	7.3 kg	1 to 75	30391961
	SHRK04DG	Rocking, 0 to 15°	4.5 kg	1 to 50	30391989
	SHWV02AL	Waving, 0 to 16°	2.3 kg	1 to 75	30391968
	SHWV02DG	Waving, 0 to 20°	2.3 kg	1 to 30	30391949
	SHRC0719DG	Reciprocating, 19 mm	6.8 kg	20 to 300	30391830
	ISTHBLHTS	Orbital, 3 mm	1 thermal block	300 to 3000	30392005
٤	ISTHBLCTS	Orbital, 3 mm	1 thermal block	300 to 3000	30391998
ake	ISLD04HDG	Orbital, 3 mm	3.6 kg	100 to 1200	30391919
g Sh	ISLDMPHDG	Orbital, 3 mm	4 microplates or	100 to 1200	30391933
Iting	ISLDMPHDGL	Orbital, 3 mm	2 micro-tube racks	100 to 1200	30391926
Incubating Shakers	ISICMBCDG	Orbital, 3 mm	2 microplates 2 modular blocks	100 to 1200	30391940
-	ISRK04HDG	Rocking, 0 to 15°	4.5 kg	1 to 50	30391975
	ISWV02HDG	Waving, 0 to 20°	2.3 kg	1 to 30	30391982





SHHD1619AL

ISWV02HDG





SHEX1619DG

ISICMBCDG



SHHD2325DG



ISTHBLCTS

AL - Analog models (e.g., SHLD0415AL), DG - Digital models ( e.g., SHLD0403DG)

www.ohaus.com



### Top questions to ask



Do you need to vary the speed of your mix? OHAUS has analog and digital models with variable speed control.

Do you need to use an accessory or run multiple tubes at high speeds? Most vortex mixers have speed limitations when using an accessory attachment. The OHAUS Microplate, Heavy-Duty and Multi-Tube Vortexers are designed to run at high speeds with their accessories.



2

Would you like to vortex 50 samples at a time? OHAUS has analog and digital models that can handle that capacity.



Do you need to know the exact speed when vortexing? Select a digital model for accurate speed values.

Model	Туре	Control	Duty Rating	Orbit	Item No.
VXMNFS	Mini	Fixed Speed	Intermittent	4.9 mm	30392110
VXMNAL	Mini	Analog	Intermittent	4.9 mm	30392117
VXMNDG	Mini	Digital	Intermittent	4.9 mm	30392124
VXMNPS	Mini	Pulsing	Intermittent	2.5 mm	30392131
VXHDDG	Heavy-Duty	Digital	Continuous	4.9 mm	30392136
VXHDAL	Heavy-Duty	Analog	Continuous	4.9 mm	30392141
VXMPDG	Microplate	Digital	Continuous	3.5 mm	30392150
VXMPAL	Microplate	Analog	Continuous	3.5 mm	30392155
VXMTAL	Multi-Tube	Analog	Continuous	3.6 mm	30392166
VXMTDG	Multi-Tube	Digital	Continuous	3.6 mm	30392173





Vortex Mixers

Mix It up in the laboratory with OHAUS Vortex Mixers! Perfect for life science applications such as re-suspending liquids, mixing reagents, genotyping, cell disruptions, and more, OHAUS Vortex Mixers are perfectly designed to help you Mix It up in the laboratory.





# Dry Block Heaters

**Heat It** up in the laboratory with OHAUS Dry Block Heaters! Perfect for life science applications such as incubation and activation of cultures, ELISA and other immunoassays, isothermal incubations, and more, OHAUS Dry Block Heaters are perfectly designed to help you Heat It up in the laboratory.

### Top questions to ask

3

P



### on to have a models that carried up to 150 c.

### How important is reproducibility of your settings?

If it is important, you should recommend a digital block heater as opposed to an analog. Analog settings are not exact, digital settings are.

#### Do you need to calibrate your heater to a traceable temperature device?

OHAUS models can be calibrated to an external temperature device such as a thermometer, probe or thermocouple.

## Is the formation of condensation on your sample lids, caps, and covers causing a problem with your assays?

If it is, recommend the Block Heater with the Heated Lid.

Model	Nnmber of Blocks	Control	Temperature Range	Stability @ 37°C	Uniformity Within the Block @ 37°C	Item No.
HB1DG	1	Digital	Ambient + 5°C to 120°C	± 0.2°C	± 0.2°C	30392061
HB2DG	2	Digital	Ambient + 5°C to 120°C	± 0.2°C	± 0.2°C	30392082
HB4DG	4	Digital	Ambient + 5°C to 120°C	± 0.2°C	± 0.2°C	30392089
HB6DG	6	Digital	Ambient + 5°C to 120°C	± 0.2°C	± 0.2°C	30392096
HB1AL	1	Analog	Law David Archievet	± 1.5°C	± 0.2°C	30392047
HB2AL	2	Analog	Low Range: Ambient +5°C to 100°C	±2°C	± 0.2°C	30392054
HB4AL	4	Analog	High Range: 75°C to	± 2.5°C	± 0.2°C	30392068
HB6AL	6	Analog	150°C	± 2.5°C	± 0.2°C	30392075
HB2DGHL	2	Digital	Ambient + 5°C to 100°C	± 0.2°C	± 0.2°C	30392103





Stirrer (auto) HSMNAS4CAL Hotplate HSMNHP4CAL Hotplate-Stirrer HSMNHS4CAL

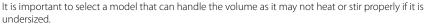
# Stirrers, Hotplates & Hotplate-Stirrers

**Stir It** up in the laboratory with OHAUS Mini Hotplates and Stirrers! Perfect for life science applications such as dissolving buffers and reagents, preparing media, concentrating samples, and more, OHAUS Mini Hotplates and Stirrers are perfectly designed to help you Stir It up in the laboratory.

### Top questions to ask

3

### What is the volume of your sample?



### Are you looking for a specific top plate material?

The OHAUS Mini Hotplate Stirrers are available with ceramic tops. Ceramic tops are ideal if working with chemicals as they are easy to clean and offer a reflective white surface.

Are safety features an important part of your decision process?

Cool touch, chemical resistant housing, ramping feature, and an off centered support rod holder are some of the safety features offered with the OHAUS models.

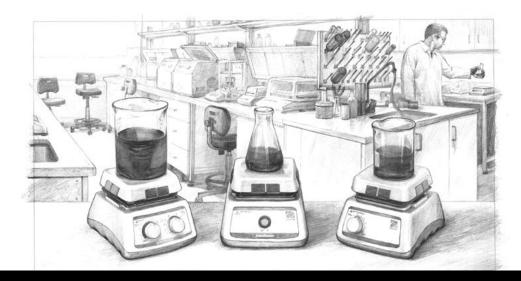
Do you need to stir and heat your sample at the same time?

In this case choose OHAUS Hotplate-Stirrer which can heat up to 500°C and stir up to 1200rpm.

### Do you need to purchase a stir bar in addition to your stirrer or hotplate stirrer?

The OHAUS stirring models include a 3.8 cm PTFE coated stir bar.

Model	Function	Capacity	Plate Construction	Plate Size	Temperature Range	Speed Range RPM	ltem No.
HSMNHP4CAL	Heating	1000 mL	Ceramic	10.2 x 10.2 cm	Ambient – 500°C	—	30392012
HSMNHP4CFT (fix T)	Heating	1000 mL	Ceramic	10.2 x 10.2 cm	500℃	_	30392033
HSMNST4CAL	Stirring	1000 mL	Ceramic	10.2 x 10.2 cm		100 - 1200	30392019
HSMNAS4CAL (auto)	Stirring	1000 mL	Ceramic	10.2 x 10.2 cm		100 - 1200	30392040
HSMNHS4CAL	Heating and Stirring	1000 mL	Ceramic	10.2 x 10.2 cm	Ambient – 500°C	100 – 1200	30392026



# HOLD IT

3-Prong Dual Adjust Clamp

and the second second

Clamp Lab-lift Lab-frame

# LabJaws Clamps and Supports

**Hold It** in the laboratory with OHAUS LabJaws Clamps! Perfect for life science applications such as chromatography, distillations, titrations, fume hood applications, and more, OHAUS LabJaws Clamps are perfectly designed to help you Hold It in the laboratory.

### Top questions to ask

### Do you need to use clamps at high temperatures?

Utility clamps are supplied with vinyl and fiberglass sleeves/finger covers. The fiberglass covers are designed for applications above 100°C.



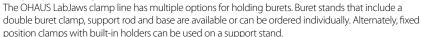
3

6

#### Are your clamps corroding from exposure to caustic chemicals?

The OHAUS LabJaws line offers 20 of the most popular clamps in premium stainless steel which provide exceptional chemical resistance.

### Are you performing titrations with burets?



### Are you looking for a lab-frame to fit in a specific area?

OHAUS offers pre-configured kits in 5 sizes. Also, kits for the 4 most common size fume hoods are available.

### Are you looking for a lab-frame set up but not finding one to fit your needs?

If the kits are not what you are looking for, we can aid you in selecting the right rod lengths, connectors and other components based on your specifications.

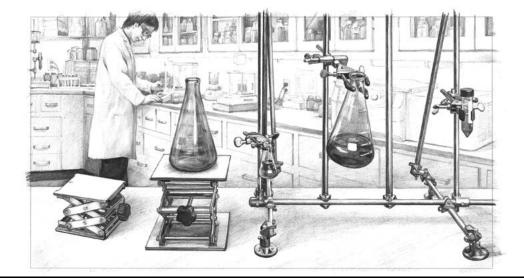
#### Do you need OHAUS offers

### Do you need to hold small appliances at varying heights?

OHAUS offers several options. Lab-lifts are designed to support (not raise) various loads based on size. Support plates, available in various sizes, can be secured to a lab-frame or stand.

### What is the weight of your sample that you will be supporting or holding?

While we do not rate our clamps and supports by weight capacity, the OHAUS LabJaws line offers heavy-duty versions of support stands. Cast iron bases offer additional stability compared to the regular stainless steel support stands.



# HOLD IT

Arm

Dia.

8 mm

11 mm

13 mm

11 mm

13 mm

Overall

Length

168 mm

229 mm

406 mm

273 mm

451 mm

Item No.

30392204

30392201

30392202

30392198

30392199



Small 30392204

Medium 30392201

Large 30392198





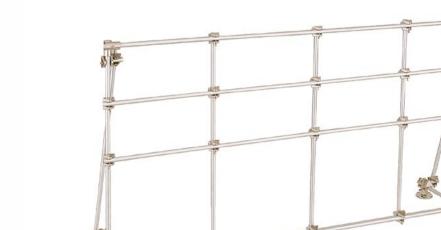
Medium Lab-Frame 30392324



30400002

30400003

30400004



### Medium (extended) Large

Size

Small

Medium

**3-Prong Dual Adjust Clamps** 

Min. to Max

**Grip Size** 

0 to 46 mm

0 to 69 mm

0 to 69 mm

0 to 105 mm

0 to 105 mm

### LabJaw Lifts

Large (extended)

76 × 76 mm	64 to 127 mm	45.36 kg	30400000
102 × 102 mm	64 to 127 mm	45.36 kg	30400001
152 × 152 mm	76 to 248 mm	60.33 kg	30400002
203 × 203 mm	76 to 248 mm	102.97 kg	30400003
254 × 254 mm	89 to 330 mm	112.04 kg	30400004
305 × 305 mm	102 to 495 mm	45.36 kg	30400005
406 × 406 mm	102 to 495 mm	45.36 kg	30400006

Prong

Width

11 mm

19 mm

19 mm

29 mm

29 mm

Arm

Length

102 mm

127 mm

305 mm

127 mm

305 mm

### LabJaw Frames

610 × 610 mm	457 mm wide	30392304	30392323
610 × 1219 mm	457 mm wide	30392305	30392324
1219 × 1219 mm	457 mm wide	30392306	30392325
1219 × 1829 mm	—	30392307	30392326

www.ohaus.com





## Centrifuges

Spin It in the laboratory with OHAUS Centrifuges! Perfect for life science applications such as sample preparation, cell pelleting, nucleic acid extraction, immunoprecipitation, and more, OHAUS Centrifuges are perfectly designed to help you Spin It in the laboratory.

### Top questions to ask

What is the highest RCF that you need to prepare your samples for your workflow? OHAUS centrifuges have models can reach up to 18,000 rpm generating over 24,000 g.

### Which sample tube sizes do you use in your lab?

An extensive rotor and adapter selection can accommodate just about any lab setup with volume ranging from 0.2 – 250 mL.

#### Do your samples need to be kept cool during centrifugation?

The refrigerated centrifuge models can keep your samples cool even when running at the maximum speed.

### Do you have to protect against aerosol discharge? Γ

2

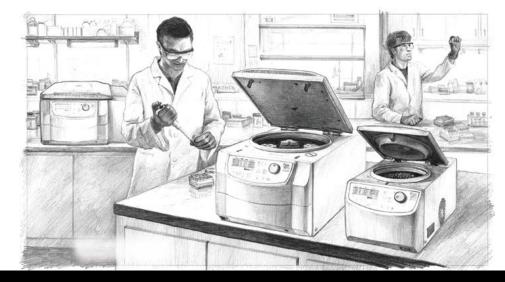
3

Aerosol tight sealable rotors are available in some of the most common sizes.

### How many tubes do you want to run at once?

OHAUS offers a few different rotors that can handle high throughput applications at various RCF.

Model	Speed Range RPM	Maximum Speed RPM	Maximum Rela- tive Centrifuge Force (x g)	Maximum Capacity(Rotor)	Refrigeration Range	ltem No.
FC5718	200 - 18,000	_	23,542 g	4 × 100 ml	—	30314813
FC5718R	200 - 18,000		23,542 g	4 X 100 mi	-20 °C - 40 °C	30314815
FC5816	200 - 15,000	_	21,379 g	6 x 250 ml	—	30314817
FC5816R	200 - 16,000		24,325 g	0 X 250 IIII	-20 °C - 40 °C	30314819
FC5714	200 - 14,000		18,624 g	4 × 100 ml		30314811
FC5515	200 - 15,200	_	21,953 g	44 x 1.5 / 2.0ml;	—	30130867
FC5515R	200 - 15,200		21,953 g	12 x 5 ml	-20 °C - 40 °C	30130869
FC5706	200 – 6,000		4,427 g	6 x 50 ml		30130876
FC5306	_	6,000	2,000 g	8 x 1.5 / 2.0 ml	—	30134157



Note	Note	



### **OHAUS** Corporation

Headquartered in Parsippany, NJ, OHAUS Corporation manufactures an extensive line of high-precision electronic and mechanical balances and scales that meet the weighing needs of virtually every industry. We are a global leader in the laboratory, industrial, and education channels as well as a host of specialty markets, including the food preparation, pharmacy and jewelry industries. An ISO 9001:2008 manufacturer, OHAUS products are precise, reliable and affordable, and are backed by industry-leading customer support. For additional information, contact OHAUS Corporation or visit www.ohaus.com.

Ingeniously Practical

OHAUS Europe GmbH Im Langacher 44, CH-8606 Greifensee, Switzerland ssc@ohaus.com, tsc@ohaus.com