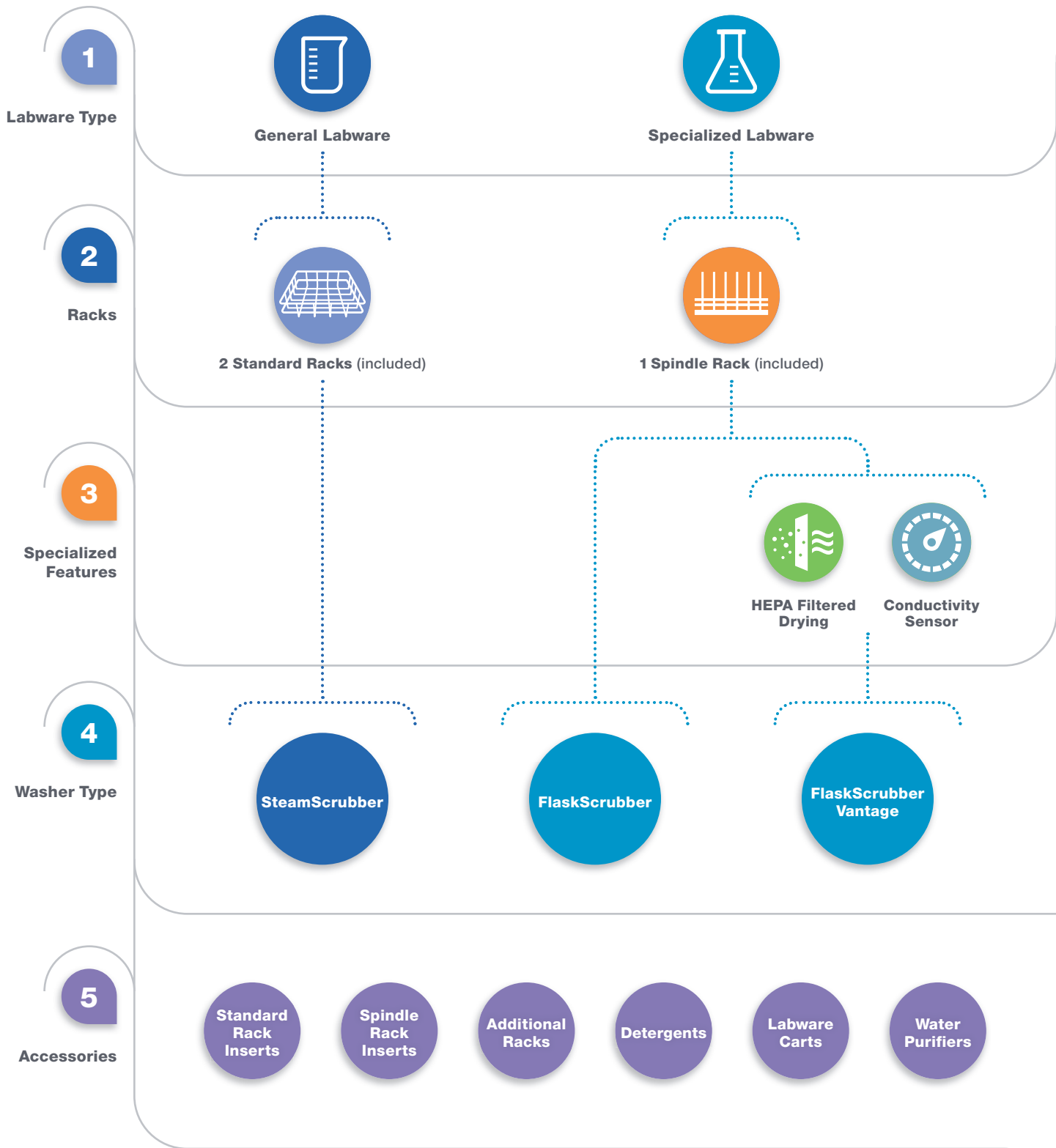


# Labconco Laboratory Glassware Washers

## Steps to Selecting a Washer



# Labconco Laboratory Glassware Washers

FlaskScrubber® and SteamScrubber® Product Lines

## Laboratory Glassware Washers



SteamScrubber



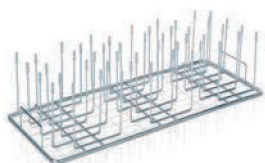
FlaskScrubber



FlaskScrubber Vantage Series



## Accessories



Standard/Spindle Rack Inserts



Additional Racks



Detergents



Labware Carts



Water Purifiers

# Labconco Laboratory Glassware Washers

## CleanWorks OS



With CleanWorks™ OS, users have comprehensive control over wash parameters such as:

- Easily create, copy or edit wash programs via the program wizard to tailor programs to application needs
- Review, store or transfer complete log files of wash programs. Files can be viewed on touch screen display or downloaded via USB or Ethernet in either CSV or PDF format
- Password protection, calibration, maintenance reminders, network connectivity and more

**CleanWorks OS factory programs.** Users may set up to 200 additional custom programs.

Factory Programs	Pre-Wash	Steam Cycle	Washes	Wash Temp. (Max)	Rinse(s)	Rinse Temp. (Max)	Dry Temp. (Max)	SpeedVent	Total Water Consumption (L)	Total Time† (min)
Selectable Range	On/Off	On/Off	0-2	38-93° C	0-8	38-93° C	25-80° C	On/Off		
Rinse Only	—	—	—	—	1	38° C	—	—	12.9	10
Plastic	•	—	1	50° C	2	50° C	60° C	—	51.6	58
Glass	•	—	1	60° C	3	60° C	70° C	—	64.5	87
Glass Plus	•	•	1	70° C	3	70° C	80° C	—	64.5	164
Life Scientific	•	•	1	80° C	4	70° C	70° C	—	77.4	159
Analytical	•	—	1	70° C	4	70° C	80° C	—	77.4	129
Intense*	•	—	2	93° C	5	93° C	70° C	—	103.2	224
Extreme*	•	•	2	93° C	5	93° C	80° C	—	103.2	249
Dry Only	—	—	—	—	—	—	80° C	•	—	72
Eco Wash	•	—	1	60° C	1	38° C	80° C	—	38.7	56
Clean Washer	•	—	—	—	—	—	80° C	—	12.9	70
CleanPoint**	•	—	1	93° C	Up to 8	38° C	80° C	—	51.6-129	196

\*Requires optional automatic detergent dispenser. Standard on FlaskScrubber Vantage washers.

\*\*Available on FlaskScrubber Vantage washers only.

†Total time based on optimal feedwater temperature on three-phase model. Actual times may vary.

# Labconco Laboratory Glassware Washers

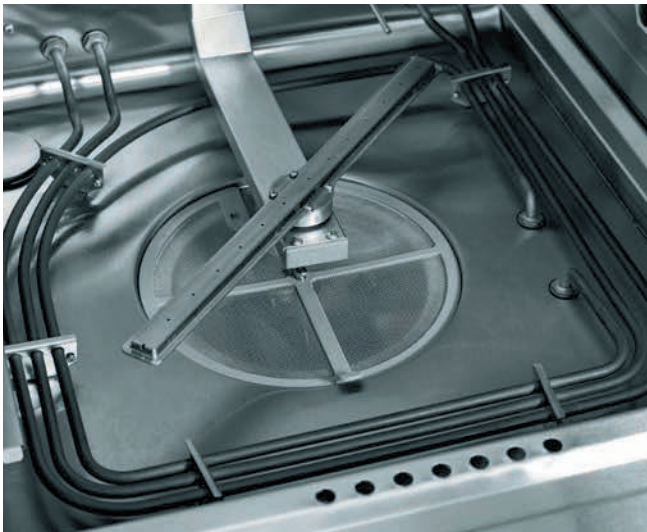
## Features



**Flexible Spindle Racks** feature interchangeable spindle rows, which provides users the ability to customize every row. Standard and specialty inserts (sold separately) accommodate a wide variety of labware, ensuring high performance cleaning.



**Adjustable height upper rack** allows users to easily adjust the height of the upper rack between two positions to accommodate various sizes of labware. No tools required.



**Faster heating** with available 6 kW heating system (on 208/230V, 3-phase models) provides three-fold increase in water heating time.



**SpeedVent™ Technology** rapidly shortens drying time by venting residual heat to the room by automatically opening the washer door.



# FlaskScrubber® Laboratory Glassware Washers

## Features & Benefits



### CleanWorks™ OS

provides intuitive control of washer's cycle programs and performance data.

### Steam Generator

produces hot vapor to penetrate and soften dried contaminants for more effective cleaning.

### Type 304 stainless steel

door and tank. Freestanding models also have stainless steel sides and top.

### Powerful dual pumps

recirculate water to provide thorough cleaning and separate drain pump to reduce the potential for cross-contamination.

**Forced air drying**  
through spindles.

### Versatile and easily adjustable rack options

Standard open racks are interchangeable with optional upper and lower spindle racks.

### SpeedVent™ Technology

shortens drying time by venting residual heat from the washer.

### Robust heating

Water temperature reaches 93° C to remove stubborn contaminants.

### Lower Spindle Rack included

with 36 spindles. Accommodates a variety of optional accessory inserts.

### 2 year warranty

## CleanWorks OS



### Progress Bar

Displays segment progression of a running program from Home screen.

### Programs

Stores up to 200 programs. Users can simply create and store programs.

### Data Logging

View data as table or graph. Customize table view to show up to 6 data columns.

### Accessories

Enable or disable system accessories.

### Diagnostics

Access installation and troubleshooting tools. Results can be exported via USB.

### Data Export

Backup programs and data log files to USB.



# FlaskScrubber® Laboratory Glassware Washers

## Ordering Information



- Ideal for flasks and narrow-neck glassware
- Heats to 93° C
- Touch screen interface
- Forced air chamber and spindle drying

**Catalog Number Configurator** Use this key to configure the nine digit catalog number.

4 1     0 1 0    

Select the **STYLE** of your glassware washer. This is the third digit. Shipping weight noted below.

- 1** = Undercounter. 206 lbs. (93.4 kg)
- 2** = Freestanding. 230 lbs. (104.3 kg)

Select the **OPTIONS** of your glassware washer. This is the fourth digit. Add 4 lbs. (1.8 kg) to shipping weight for window.

- 0** = None
- 1** = Viewing Window and LED Light

Select the **ELECTRICAL CONFIGURATION** of your glassware washer. These are the eighth and ninth digits.

- 00** = 115V, 60 Hz, 1P
- 10** = 230V, 50/60 Hz, 1P
- 13** = 230V, 50/60 Hz, 3P

### All models require (not included):

- Dedicated electrical circuit (select based on model)
  - Single-phase 115V, 60 Hz: 20A circuit
  - Single-phase 208/230V, 50/60 Hz: 20A circuit
  - Three-phase 208/230V, 50/60 Hz: 30A circuit
- Recommended inlet water temperature 120° F (49° C)
- Water consumption per fill 3.4 gal (12.9 L)
- Hot tap water pressure of 20-120 psi (138-827 kPa)
- Hot water inlet flowrate of ≥1.25 gpm (4.7 lpm), pure water inlet flowrate ≥0.9 gpm (3.4 lpm)
- Optional purified water pressure 0 psi (0 kPa)

# FlaskScrubber® Vantage® Laboratory Glassware Washers

## Features & Benefits



### CleanWorks™ OS

provides intuitive control of washer's cycle programs and performance data.

### HEPA-filtered drying

Particulate-free forced air quickly removes moisture.

### Steam Generator

produces hot vapor to penetrate and soften dried contaminants.

### Lower Spindle Rack included

with 36 spindles. Accommodates a variety of optional accessory inserts.

### Automatic detergent & rinse aid dispensers

Peristaltic pumps automatically draw a programmed amount of liquid detergent & rinse aid during the wash & rinse cycles.

### Powerful dual pumps

recirculate water to provide thorough cleaning and separate drain pump to reduce the potential for cross-contamination.

### CleanPoint™ Technology

Measures conductivity & bypasses unnecessary pure water rinses.

### SpeedVent™ Technology

shortens drying time by venting residual heat from the washer.

### Robust heating

Water temperature reaches 93° C to remove stubborn contaminants.

### 2 year warranty

## CleanWorks OS



### Progress Bar

Displays segment progression of a running program from Home screen.

### Programs

Stores up to 200 programs. Users can simply create and store programs.

### Data Logging

View data as table or graph. Customize table view to show up to 6 data columns.

### Accessories

Enable or disable system accessories.

### Diagnostics

Access installation and troubleshooting tools. Results can be exported via USB.

### Data Export

Backup programs and data log files to USB.



# FlaskScrubber® Vantage® Laboratory Glassware Washers

## Ordering Information



- Ideal for flasks and narrow-neck glassware
- Touch screen interface
- HEPA-filtered drying
- CleanPoint water conductivity monitoring

**Catalog Number Configurator** Use this key to configure the nine digit catalog number.

4 2 2 1 0 1 0

Select the **ELECTRICAL CONFIGURATION** of your glassware washer. These are the eighth and ninth digits. Shipping weight 294 lbs. (133.4 kg)

**10** = 230V, 50/60 Hz, 1P

**13** = 230V, 50/60 Hz, 3P

### All models require (not included):

- Dedicated electrical circuit (select based on model)
  - Single-phase 208/230V, 50/60 Hz: 20A circuit
  - Three-phase 208/230V, 50/60 Hz: 30A circuit
- Recommended inlet water temperature 120° F (49° C)
- Water consumption per fill 3.4 gal (12.9 L)
- Hot tap water pressure of 20-120 psi (138-827 kPa)
- Hot water inlet flowrate of ≥1.25 gpm (4.7 lpm), pure water inlet flowrate ≥0.9 gpm (3.4 lpm)
- Optional purified water pressure 0 psi (0 kPa)



# FlaskScrubber® Laboratory Glassware Washers

## Specifications

### All models feature:

#### Materials/Construction

- \* Lower spindle rack, of 304 stainless steel, with 36 detachable large spindles, 18 glassware holders, 36 adjustable height clips, 10 small spindles with clips, 36 spindle plugs and 12 spindle arm plugs
- 304 stainless steel top, door, tank, upper and lower wash arms. Freestanding models also have stainless steel exterior sides and top
- One-piece, tool-free, stainless steel, fine mesh particle drain filter
- Four leveling feet offering increased height adjustability
- Aluminum-backed insulation and fiberglass thermal blanket
- Factory-installed drain hose and band clamp
- \* Two year warranty on parts and labor
- Made in the USA
- IQ/OQ available. Visit [labconco.com](http://labconco.com) or call (800) 821-5525

#### Performance

- Water temperature up to 93° C (199° F)
- \* Steam generator that produces hot vapor to help remove stubborn labware contaminants
- Pump rated at 96 gal/min (363 L/min) when operated at 115V, 60 Hz and 208/230V, 50 Hz and 112 gal/min (424 L/min) on 208/230V, 60 Hz
- Synchronous drain pump rated at up to 4.2 gal/min (16 L/min)
- Purified water pump to bring non-pressurized purified water into the tank for up to eight pure water rinses
- Forced air drying into the tank and through spindles programmable up to 240 minutes and from 25-80° C (77-176° F)
- Electronic door latch with SpeedVent Technology to facilitate faster drying
- Detergent dispenser for powder or liquid detergent
- Level-sensing 6 ml rinse aid solution dispenser
- Operation at or below 62 decibels

#### Controls/User Interface

- \* Full color touch screen display with CleanWorks OS providing full user control
- \* 9 factory-set programs: RINSE ONLY, PLASTIC, GLASS, GLASS PLUS, LIFE SCIENTIFIC, ANALYTICAL, DRY ONLY, ECO WASH, CLEAN WASHER. Up to 200 user-defined programs
- Clear and specific alarm displays
- Calibratable setpoints such as: temperature, fill volume, detergent dispensing

- \* Labconco exclusive feature

- Self diagnostics to aid in servicing and troubleshooting
- Password protection to secure washer from unauthorized changes
- User configurable delayed start (up to 12 hours)
- USB data output

### Standards conformance & regulations:

- UL Standard 61010-1 (all models)
- CAN/CSA C22.2 No. 61010-1 (all models)
- CE Conformity marking (230V, 50/60 Hz models)
- Suitable with ADA-height casework (all models)

### Options include:

- Freestanding and undercounter styles
- Clear tempered safety glass viewing window and 25-watt LED interior light that illuminates washing chamber
- Single-phase (1.2 kW, 2 kW) or three-phase (6 kW) electrical

### All models require (not included):

- Dedicated electrical circuit (select based on model)
  - Single-phase 115V, 60 Hz: 20A circuit
  - Single-phase 208/230V, 50/60 Hz: 20A circuit
  - Three-phase 208/230V, 50/60 Hz: 30A circuit
- Hot water connection with a male ¾-11½ GHT hose fitting
- Recommended inlet water temperature 120° F (49° C)
- Water consumption per fill 3.4 gal (12.9 L)
- Hot tap water pressure of 20-120 psi (138-827 kPa)
- Hot water inlet flowrate of ≥1.25 gpm (4.7 lpm), pure water inlet flowrate ≥0.9 gpm (3.4 lpm)
- Optional purified water pressure 0 psi (0 kPa)

### Optional accessories:

- Upper and lower Standard and Spindle Racks. See pages 16-17
- Baskets and inserts. See pages 18-20
- Glassware Holders. See page 20
- Base Stand. See page 19
- Freestanding-to-Mobile Conversion Kits. See page 21
- Drain Water Cooling Kits. See page 21
- LabSolutions detergents and rinse. See page 22
- WaterPro® RO System. See page 24



# FlaskScrubber® Vantage® Laboratory Glassware Washers

## Specifications

### All models feature:

#### Materials/Construction

- ✱ Lower spindle rack, of 304 stainless steel, with 36 detachable large spindles, 18 glassware holders, 36 adjustable height clips, 10 small spindles with clips, 36 spindle plugs and 12 spindle arm plugs
- 304 stainless steel exterior sides, top, door, tank, upper and lower wash arms
- Clear tempered safety glass viewing window and 25-watt LED interior light that illuminates the washing chamber
- One-piece, tool-free, stainless steel, fine mesh particle drain filter
- Four leveling feet offering increased height adjustability
- Aluminum-back insulation and fiberglass thermal blanket
- Factory-installed drain hose and band clamp
- ✱ Two year warranty on parts and labor
- Made in the USA
- IQ/OQ available. Visit [labconco.com](http://labconco.com) or call (800) 821-5525

#### Performance

- Water temperature up to 93° C (199° F)
- ✱ Steam generator that produces hot vapor to help remove stubborn labware contaminants
- Pump rated at 96 gal/min (363 L/min) when operated at 208/230V, 50 Hz and 112 gal/min (424 L/min) on 208/230V, 60 Hz
- Synchronous drain pump rated at up to 4.2 gal/min (16 L/min)
- Purified water pump to bring non-pressurized purified water into the tank for up to eight pure water rinses
- HEPA-filtered forced air drying into the tank and through spindles programmable up to 240 minutes and up to 80° C (176° F). HEPA filter is 99.97% efficient on particulates 0.3 micron
- Electronic door latch featuring SpeedVent Technology to facilitate faster drying
- Water conductivity monitor featuring CleanPoint pure water saving technology
- Automatic liquid detergent and rinse aid dispensers with peristaltic pumps
- Detergent dispenser for powder or liquid detergent
- Level-sensing 6 ml rinse aid solution dispenser
- Operation at or below 62 decibels

#### Controls/User Interface

- ✱ Full color touch screen display with CleanWorks OS providing full user control

- ✱ Labconco exclusive feature

- ✱ 12 factory-set programs: RINSE ONLY, PLASTIC, GLASS, GLASS PLUS, LIFE SCIENTIFIC, ANALYTICAL, INTENSE, EXTREME, DRY ONLY, ECO WASH, CLEAN WASHER, CLEANPOINT. Up to 200 user-defined programs
- Clear and specific alarm displays
- Calibratable setpoints such as: temperature, fill volume, conductivity, detergent dispensing
- Remote email monitoring of washer
- Self diagnostics to aid in servicing and troubleshooting
- Password protection to secure washer from unauthorized changes
- User configurable delayed start (up to 12 hours)
- USB/Ethernet data output

### Standards conformance & regulations:

- UL Standard 61010-1 (all models)
- CAN/CSA C22.2 No. 61010-1 (all models)
- CE Conformity marking (230V, 50/60 Hz models)
- Suitable with ADA-height casework (all models)

### Options include:

- 208/230V single-phase (2 kW) and three-phase (6 kW) electrical

### All models require (not included):

- Dedicated electrical circuit (select based on model)
  - Single-phase 208/230V, 50/60 Hz: 20A circuit
  - Three-phase 208/230V, 50/60 Hz: 30A circuit
- Hot water connection with a male ¾-11½ GHT hose fitting
- Recommended inlet water temperature 120° F (49° C)
- Water consumption per fill 3.4 gal (12.9 L)
- Hot tap water pressure of 20-120 psi (138-827 kPa)
- Hot water inlet flowrate of ≥1.25 gpm (4.7 lpm), pure water inlet flowrate ≥0.9 gpm (3.4 lpm)
- Optional purified water pressure 0 psi (0 kPa)

### Optional accessories:

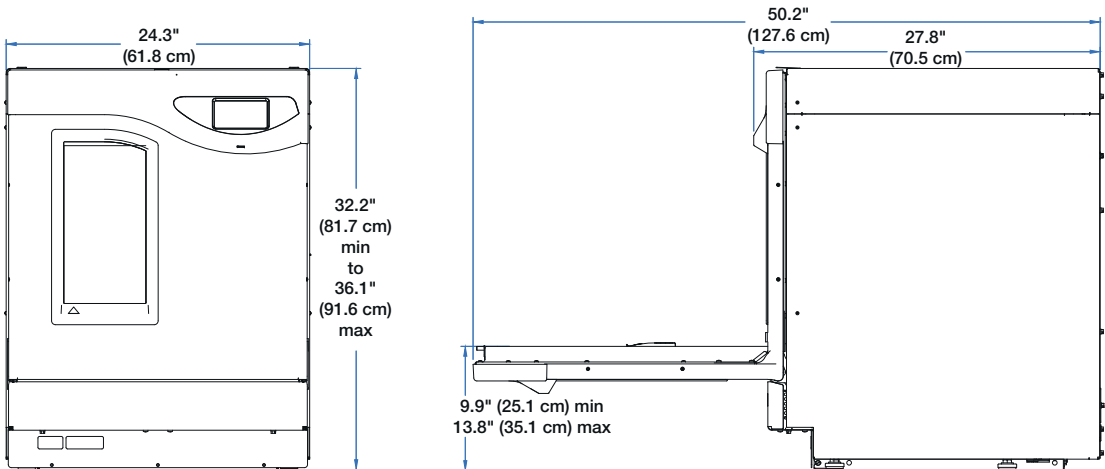
- Upper and lower Standard and Spindle Racks. See pages 16-17
- Baskets and inserts. See pages 18-20
- Glassware Holders. See page 20
- Base Stand. See page 19
- Freestanding-to-mobile Conversion Kits. See page 21
- Drain Water Cooling Kits. See page 21
- LabSolutions detergents and rinse. See page 22
- WaterPro® RO System. See page 24



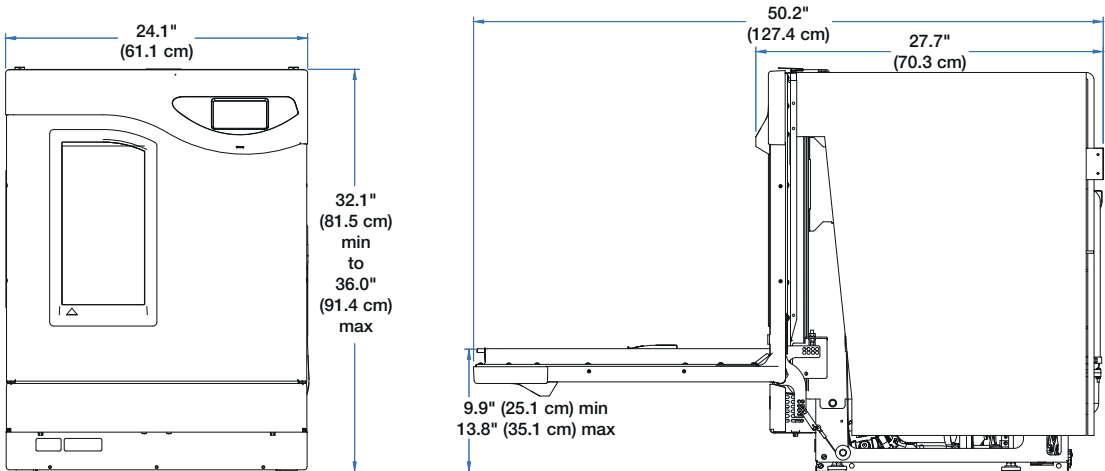
# Labconco Laboratory Glassware Washers

## Dimensional Data

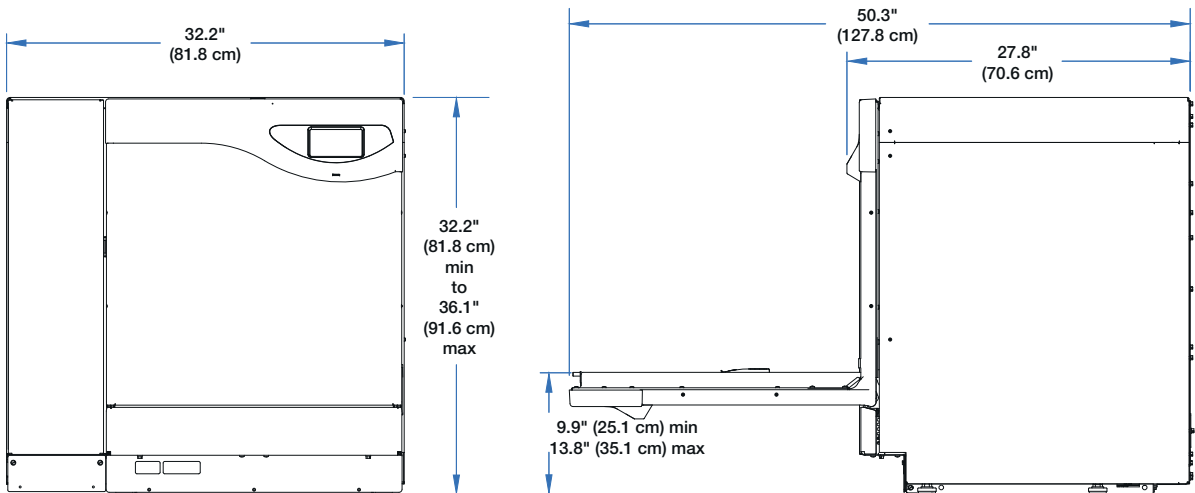
### Freestanding Models



### Undercounter Models



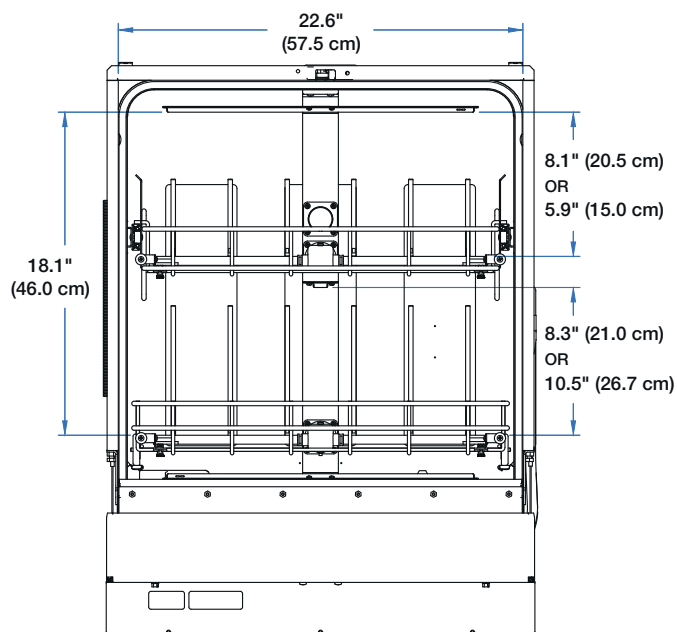
### Vantage Models



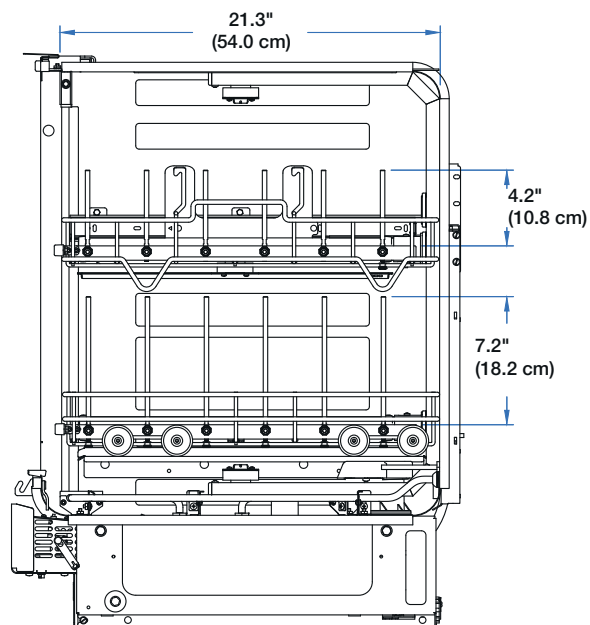
# Labconco Laboratory Glassware Washers

## Dimensional Data

### Interior Dimensions with Lower and Upper Spindle Racks (all models)

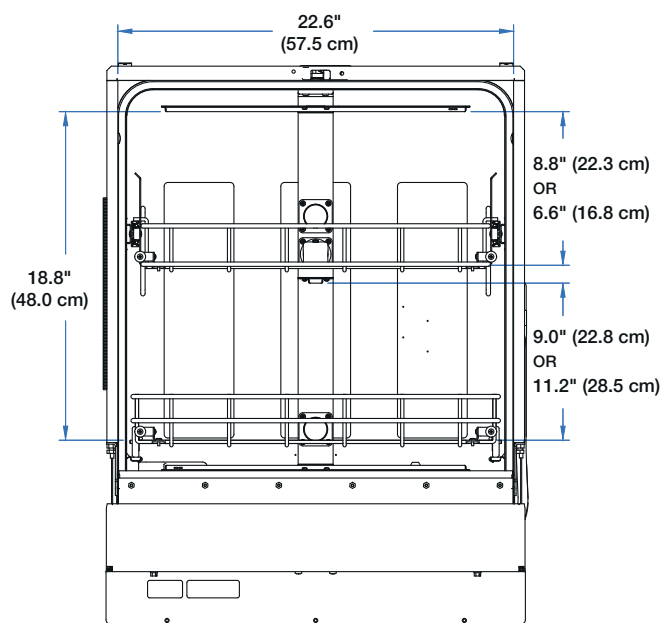


FRONT

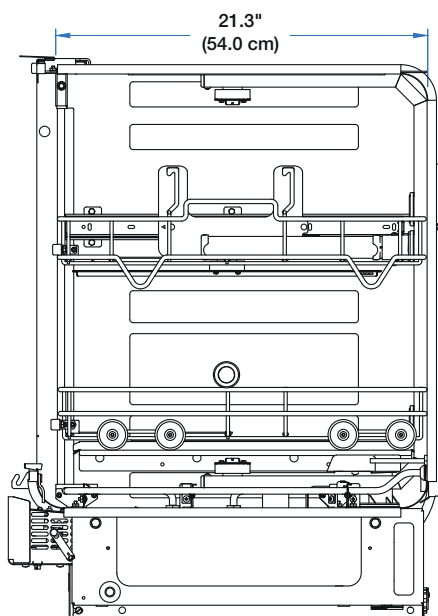


SIDE

### Interior Dimensions with Lower and Upper Standard Racks (all models)



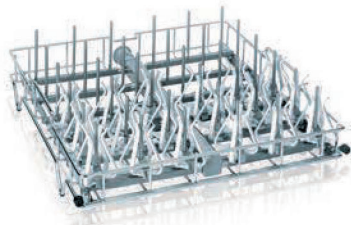
FRONT



SIDE



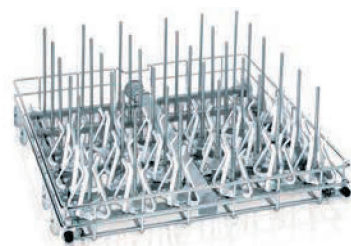
# Accessories



**Upper Spindle Racks.** 304 stainless steel. Includes 36 removable spindles, 36 adjustable height clips, 18 plastic glassware holders, 10 small spindles with clips, 36 spindle plugs, 12 spindle arm plugs and wash arm. Spindles or spindle arms may be removed and plugged to accommodate accessory inserts (sold separately). Spindle dimensions: 4.5" h x 0.25" OD. Overall dimensions: 20.8" w x 21.6" d x 6.9" h. Accommodate glassware up to 8.9" h.

**4668500—Rack for FlaskScrubber and FlaskScrubber Vantage.** Includes slide rails for tank side wall installation. Provides direct injection cleaning and forced air drying through the spindles. Shipping weight 23 lbs. (10 kg)

**4668600—Rack for SteamScrubber.** Provides direct injection cleaning through the spindles. Shipping weight 21 lbs. (10 kg)



**4668900—Lower Spindle Rack.** One is included with every FlaskScrubber and FlaskScrubber Vantage. May be used in place of the Lower Standard Rack in any SteamScrubber. 304 stainless steel. Includes 36 removable spindles, 36 adjustable height clips, 18 glassware holders, 10 small spindles with clips, 36 spindle plugs and 12 spindle arm plugs. Spindles and spindle arms may be removed and plugged to accommodate accessory inserts (sold separately). Spindle dimensions: 7.5" h x 0.25" OD. Overall dimensions: 21.4" w x 20.9" d x 8.6" h. Accommodate glassware up to 17.5" h without upper rack in place. Accommodate glassware up to 10.2" h with upper rack in place. Shipping weight 21 lbs. (10 kg)

**Upper Small Spindle Racks.** High-capacity design provides 60 spindles, 60 adjustable height clips, 60 spindle plugs, 12 spindle arm plugs, spindle tool and wash arm for cleaning of small narrow-neck glassware. 304 stainless steel. Spindle dimensions: 4.4" h x 0.125" OD. Overall dimensions: 21.5" w x 20.8" d x 7.3" h. Accommodate glassware up to 8.9" h.

**4668501—Rack for FlaskScrubber and FlaskScrubber Vantage.** Includes slide rails for tank side wall installation. Provides direct injection cleaning and forced air drying through the spindles. Shipping weight 23 lbs. (10 kg)

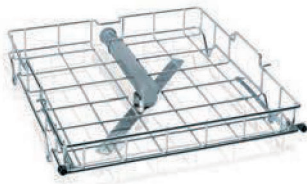
**4668601—Rack for SteamScrubber.** Provides direct injection cleaning through the spindles. Shipping weight 21 lbs. (10 kg)

**4668901—Lower Small Spindle Rack.** High-capacity design provides 60 spindles, 60 adjustable height clips, 60 spindle plugs, 12 spindle arm plugs and spindle tool for cleaning of small narrow-neck glassware. 304 stainless steel. For use in any Labconco glassware washer. Spindle dimensions: 4.4" h x 0.125" OD. Overall dimensions: 21.4" w x 20.9" d x 8.6" h. Accommodate glassware up to 17.5" h without upper rack in place. Accommodate glassware up to 10.2" h with upper rack in place. Shipping weight 21 lbs. (10 kg)



**4669540—Protective Spindle Covers.** Opaque silicone tips cover the ends of 0.25" spindle tips to prevent additional scratching of glass and metal labware. 40 silicone tips per package. For use with upper or lower Spindle Racks. Shipping weight 2.0 lbs. (0.9 kg)

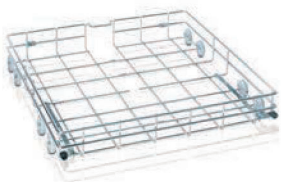
# Accessories



**Upper Standard Racks.** One is included with every SteamScrubber. May be used in any FlaskScrubber or FlaskScrubber Vantage. 304 stainless steel. Includes side release latches and wash arm. Add accessory inserts to suit your glassware mix (sold separately). Overall dimensions: 21.5" w x 20.8" d x 6.0" h.

**4668700—Rack for FlaskScrubber and FlaskScrubber Vantage.** Includes slide rails for tank side wall installation. Shipping weight 20 lbs. (9 kg)

**4668800—Rack for SteamScrubber.** Shipping weight 16 lbs. (7 kg)



**4669000—Lower Standard Rack.** One is included with every SteamScrubber. May be used in place of Lower Spindle Rack in any FlaskScrubber or FlaskScrubber Vantage. 304 stainless steel. Add accessory inserts to suit your glassware mix (sold separately). Overall dimensions: 21.4" w x 20.9" d x 3.5" h. Shipping weight 12 lbs. (5 kg)



4574700

**Test Tube Holders.** For use with Test Tube Spindle Conversion Kit. Keep tubes upright. 304 stainless steel. Two Holders may be stacked for increased capacity. **Requires Test Tube Spindle Conversion Kit 4575300 and Lower Spindle Rack 4668900 (not included).** Overall dimensions: 8.4" w x 18.5" d x 5.3" h. Shipping weight 9.0 lbs. (4.1 kg)

**4574700—10-13 mm.** Holds up to 48 10-13 mm tubes.

**4574800—14-20 mm.** Holds up to 24 14-20 mm tubes.

**4574900—20-25 mm.** Holds up to 24 20-25 mm tubes.



**4575300—Test Tube Spindle Conversion Kit.** Converts Lower Spindle Rack for washing test tubes. Includes 6 spindle rows with 8 spindles per row and a supportive base. **Requires Test Tube Holder Insert 4574700, 4574800, or 4574900 (not included).** For use with Lower Spindle Rack 4668900. Overall dimensions: 7.2" w x 18.5" d x 2.3" h. Shipping weight 8.0 lbs. (3.6 kg)



4575400

**Pipette Inserts.** Securely holds pipettes vertically to clean and dry pipettes. 304 stainless steel. For use in Lower Spindle Rack only.

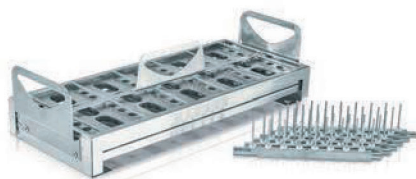
**4575400—24 Pipette Insert.** Holds up to 24 pipettes. Maximum pipette height: 12.5". Overall dimensions: 4.5" w x 8.7" d x 5.8" h. May use up to four at one time. Shipping weight 8.0 lbs. (3.6 kg)

**4575500—6 Pipette Insert.** Holds up to 6 pipettes. Maximum pipette height: 12.5". Overall dimensions: 1.2" w x 8.7" d x 5.5" h. May use up to six at one time. Shipping weight 3.0 lbs. (1.4 kg)



**4575700—Spray Nozzle.** Full-coverage spray nozzle distributes water to maximize cleanability of wide-mouth labware. Used in place of standard spindle. Overall dimensions: 0.13" diameter x 3.7" h. For use with Upper or Lower Spindle Rack. Shipping weight 2.0 lbs. (0.9 kg)

# Accessories



4574400

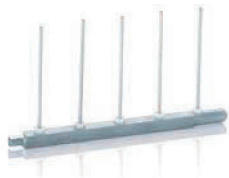
**Vial Inserts.** Hold vials for washing and drying. Includes retainer lid to secure vials during washing. 304 stainless steel. May use up to two inserts per Spindle Rack. Overall dimensions: 8.7" w x 19.2" d x 7.9" h. For use with Lower Spindle Rack only. Shipping weight 8.0 lbs. (3.6 kg)

**4574400—12 x 32 mm.** Holds up to 48 12 x 32 mm vials.

**4574500—15 x 45 mm.** Holds up to 48 15 x 45 mm vials.



**4574600—Graduated Cylinder Insert.** Holds up to three graduated cylinders, each 1L or smaller. Includes three full-coverage spray nozzles for maximum cleanability. 304 stainless steel. May use up to two inserts per rack at one time. **For use with Lower Spindle Rack 4668900 (required, not included).** Overall dimensions: 7.6" w x 9.2" d x 10.0" h. Shipping weight 2.0 lbs. (0.9 kg)



**4575800—5 Spindle Spray Arm.** Interchangeable spindle spray arm with five direct-injection spindles for cleaning of small narrow-neck labware. For use with Upper or Lower Spindle Rack. Shipping weight 2.0 lb. (0.9 kg)



**4596000—Small Spindles with Clips.** Ten are included with every Spindle Rack. 304 stainless steel. Spindles may be used in any spindle location on any Upper or Lower Spindle Rack to provide direct injection cleaning of small narrow-neck glassware. Each spindle is 4.3" h x 0.12" OD. Package of 10 small spindles with 10 height adjustment clips, tool to remove large spindles, 36 nylon plugs and 18 height adjustment clips for large spindles. Shipping weight 3.0 lbs. (1.4 kg)



4424800

4585204

**Glassware Holders.** Grip glassware over spindles. For use with Upper or Lower Spindle Racks. Shipping weight 0.4 lb. (0.2 kg)

**4424600—4.0" Vinyl Holder.** 4.0" h vinyl-coated 304 stainless steel wire with height adjustment screw.

⚠ **WARNING:** Cancer—P65Warnings.ca.gov (California only)

**4424800—6.0" Vinyl.** 6.0" h vinyl-coated 304 stainless steel wire with height adjustment screw.

⚠ **WARNING:** Cancer—P65Warnings.ca.gov (California only)

**4585204—3.9" Plastic.** 3.9" h plastic with 304 stainless steel height adjustment clip. Eighteen are included with every FlaskScrubber and FlaskScrubber Vantage.

## Accessories



**4575200—Utensil Holder.** For spatulas, spoons, scoops and other miscellaneous utensils. Utensils fit vertically in six compartments, 2.6" w x 4.4" d x 4.9" h. 304 stainless steel. Overall dimensions: 8.2" w x 8.2" d x 8.0" h. For use in Upper or Lower Standard or Spindle Racks. Shipping weight 5.0 lbs. (2.3 kg)



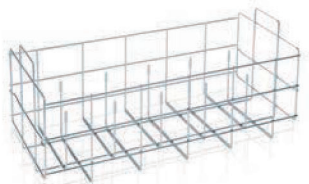
**4573100—Utensil Basket.** For miscellaneous labware such as stoppers, spatulas and other small lightweight items. Includes cover. 304 stainless steel. Overall dimensions: 8.9" w x 8.9" d x 4.0" h. May use up to four per rack at one time. For use in Upper or Lower Standard or Spindle Racks. Shipping weight 3.0 lbs. (1.4 kg)



**4573400—Mesh Basket.** Full-sized, open mesh basket can be used for a variety of utensils and loose labware. 304 stainless steel. Overall dimensions: 18.6" w x 19.0" d x 6.7" h. May use one per rack at one time. For use with Upper or Lower Standard Racks. Shipping weight 5.0 lbs. (2.3 kg)

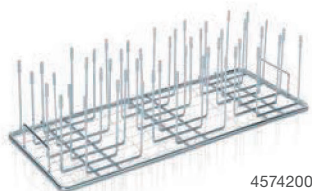


**4573500—Bulk Tube Insert.** Quick-loading design holds up to 600 each 13 mm tubes or 244 each 20 mm tubes. Divider securely holds tubes during wash cycle. Overall dimensions: 8.6" w x 17.7" d x 8.4" h. May use up to two per rack at one time. For use in Upper or Lower Standard or Spindle Racks. Shipping weight 6.0 lbs (2.7 kg)



4401501

**Labware Inserts.** Pins hold a variety of wider-mouth flasks, beakers and other labware in inverted position. Retainer Top is recommended for use with plastic and lightweight glassware. 304 stainless steel. Pins have silicone tips to protect glassware from scratching. May use up to two per rack at one time. For use with Upper or Lower Standard or Spindle Racks.



4574200

**4401501—10-Pin Insert.** Overall dimensions: 8.6" w x 19.3" d x 8.0" h. Shipping weight 3.0 lbs. (1.4 kg)

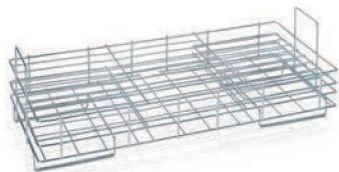
**4401801—32-Pin Insert.** Overall dimensions: 8.8" w x 19.3" d x 5.9" h. Shipping weight 3.0 lbs. (1.4 kg)

**4574200—48-Pin Insert.** Overall dimensions: 8.8" w x 18.7" d x 5.1" h. Shipping weight 4.0 lbs. (1.8 kg)

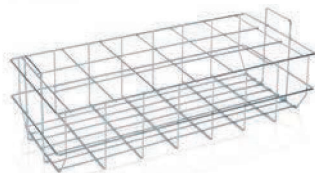
**4401901—Pin Insert Retainer Top.** For use with 10-Pin and 32-Pin Inserts only. Overall dimensions: 8.0" w x 18.5" d x 0.13" h. Shipping weight 1.0 lb. (0.5 kg)



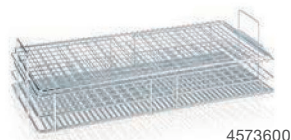
## Accessories



**4589701—Petri Dish Insert.** For Petri dishes, watch glasses and microtiter plates. Holds up to 24 dishes or plates. 304 stainless steel. Overall dimensions: 8.6" w x 19.2" d x 6.2" h. May use up to two per rack at one time. For use with Upper or Lower Standard or Spindle Racks. Shipping weight 3.0 lbs. (1.4 kg)



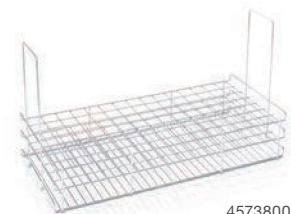
**4589201—BOD Bottle Insert.** Holds up to 18 bottles. 304 stainless steel. Grid size: 70 mm x 70 mm. Overall dimensions: 8.8" w x 19.5" d x 6.0" h. May use up to two per rack at one time. For use with Upper or Lower Standard or Spindle Racks. Shipping weight 2.0 lbs. (0.9 kg)



4573600

**Culture Tube Inserts.** Three inserts designed to hold tubes from 10 to 24 mm OD. 304 stainless steel. For use in Standard or Spindle Racks. May use up to two per rack at one time.

**4573600—10-12 mm.** Holds up to 244 ea 10-13 mm OD tubes. Retainer Top 4573900 included. Overall dimensions: 8.5" w x 18.5" d x 4.5" h. For upper or lower rack. Shipping weight 5.0 lbs. (2.3 kg)

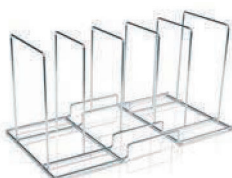


4573800

**4573700—15-18 mm.** Holds up to 162 ea 15-18 mm OD tubes. Overall dimensions: 8.5" w x 18.7" d x 6.5" h. For upper or lower rack. Shipping weight 3.0 lbs. (1.4 kg)

**4573800—20-24 mm.** Holds up to 105 ea 20-24 mm OD tubes. Overall dimensions: 8.5" w x 18.5" d x 9.8" h. For lower rack only. Shipping weight 3.0 lbs. (1.4 kg)

**4573900—Culture Tube Retainer Top.** Secures tubes loaded into Culture Tube Inserts. May be used with inserts 4573600, 4573700, or 4573800. 304 stainless steel. Overall dimensions: 8.5" w x 19.1" d x 0.25" h. Shipping weight 1.5 lb. (0.7 kg)



**4573000—Tray Insert.** For pans, instrument trays, multipurpose trays and other shallow containers. Holds up to 5 trays. 304 stainless steel. Overall dimensions: 9.5" w x 18.0" d x 9.3" h. May use one at a time. For use with Lower Standard or Spindle Racks. Shipping weight 3.0 lbs. (1.4 kg)



4679301

**Heater Covers.** Provide barrier layer between labware and heating coils. Unique design provides additional filtration layer to protect from broken glass. 304 stainless steel. Overall dimensions: 22.5" w x 20.4" d x 2.0" h. Shipping weight 6.0 lbs. (2.7 kg)

**4679300—Heater Cover.** For use with SteamScrubber.

**4679301—Heater Cover.** For use with FlaskScrubber and FlaskScrubber Vantage.

**4678000—Ethernet Kit.** Provides connectivity for remote updates and access to data. For use with FlaskScrubber and SteamScrubber glassware washers. Shipping weight 2.0 lbs. (0.9 kg)

## Accessories



**Drain Water Cooling Kits.** Provide plumbing components, solenoid valve and electrical connections necessary to reduce drain water temperature to <140° F (<60° C). When the washer's drainage pump is activated, the solenoid valve opens, releasing the flow of cold tap water to the drain. Requires cold water connection. For use with any FlaskScrubber, SteamScrubber or FlaskScrubber Vantage. Shipping weight 6.0 lbs. (2.7 kg)

**4678400—Drain Water Cooling Kit.** For use with 115V, 60 Hz washers.

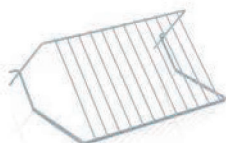
**4678401—Drain Water Cooling Kit.** For use with 230V, 50/60 Hz washers.



**Freestanding-to-Mobile Conversion Kits.** Add mobility to freestanding FlaskScrubber and SteamScrubber washers. Allow washers to be plugged into a 20A electrical wall outlet and connected to a standard laboratory sink faucet. Include four 2" diameter casters, two aerator adapters for connection to standard 55/64"-27 male and 15/16"-27 female laboratory faucets, drain hose and installation instructions. Not for use with undercounter washers or FlaskScrubber Vantage. Shipping weight 60 lbs. (27 kg)

**4596110—Freestanding-to-Mobile Conversion Kit.** For use with 115V washers.

**4596111—Freestanding-to-Mobile Conversion Kit.** For use with 230V washers.



**7426400—Vantage Cabinet Shelf.** Wire shelf for use within FlaskScrubber Vantage side cabinet. Shelf supports small items such as Printer 4681301. Overall dimensions: 7.4" w x 12.2" d x 6.4" h. Shipping weight 2.0 lbs. (0.9 kg)



**Printers.** Compact thermal printer produces summary report of washer cycle. Includes USB data cable and rechargeable NiMH AA batteries. Overall dimensions: 6.0" w x 3.0" d x 2.0" h. Shipping weight 2.0 lbs. (0.9 kg)

**4681300—Printer.** For use with FlaskScrubber and SteamScrubber.

**4681301—Printer.** For use with FlaskScrubber Vantage.



**Base Stands.** Elevate washers 17" for washer loading convenience and storage of supplies. 304 stainless steel stationary stand, fully assembled with four leveling feet.

**4653500—Base Stand.** For use with FlaskScrubber and SteamScrubber. Includes one storage compartment with hinged door. Overall dimensions: 25.4" w x 24.1" d x 17.0" h. Shipping weight 145 lbs. (66 kg)

**4653300—Vantage Base Stand.** For use with FlaskScrubber Vantage. Includes one storage compartment with hinged door. Overall dimensions: 32.0" w x 25.1" d x 17.0" h. Shipping weight 179 lbs. (81 kg)



**4643000—Detergent Storage Cabinet.** Convenient compartment to store automatic detergent dispense bottles for FlaskScrubber and SteamScrubber washers. 304 stainless steel. Door on front swings open on left-side hinges. Overall dimensions: 8.1" w x 20.7" d x 18.7" h. Shipping weight 30 lbs. (14 kg)

# Accessories

## LabSolutions™ Detergents and Rinse & Detergent Dispensers



4422100

**LabSolutions Non-Foaming Powder Detergent.** Specially formulated for Labconco glassware washers. Removes lab contaminants such as grease, agar, blood and protein digestates. Rinses completely. Non-foaming formula does not promote leaks. A 1% solution has a pH of approximately 12.5. Contains phosphates. Non-hazardous formula may be shipped anywhere.

**4422000—Small Pail.** For approximately 140 loads. Shipping weight 10 lbs. (5 kg)

**4422100—Large Pail.** For approximately 400 loads. Shipping weight 28 lbs. (13 kg)



**4522000—LabSolutions Low-Foaming Liquid Detergent.** Specially formulated for Labconco glassware washers. Removes a wide range of laboratory contaminants. Rinses completely. Non-corrosive formula won't degrade stainless steel, glass or plastic. Phosphate-free for environmentally safe disposal. Chlorine-free and tissue culture-safe. May be used in hot or cold water. For ground shipment to U.S. or Canada only. 1 gallon (3.8 L) bottle for approximately 180 loads. Shipping weight 12 lbs. (5 kg)



**4522200—LabSolutions Neutralizing Acid Rinse.** Specially formulated for rinse aid reservoir in Labconco glassware washers. Mild acid corrects pH reducing alkaline detergent residue. Removes hard water deposits, mineral deposits, accumulated lime scale that can cloud glassware. Rinses completely. 34 ounce (1 L) bottle fills reservoir approximately six times. Shipping weight 3.0 lbs. (1.4 kg)



**4587520—Liquid Detergent Dispenser Kit.** Connects to any FlaskScrubber or SteamScrubber to automate liquid detergent dispensing. Includes peristaltic pump, float switch, tubing and one gallon plastic container. **Detergent required (not included).** Shipping weight 3.0 lbs. (1.4 kg)



**4595120—Neutralizing Acid Rinse Dispenser Kit.** Connects to any FlaskScrubber or SteamScrubber to automate acid neutralizing rinse aid dispensing. Includes peristaltic pump, float switch, tubing and one liter plastic container. **Rinse aid required (not included).** Shipping weight 3.0 lbs. (1.4 kg)



**4679700—Detergent and Acid Rinse Dispenser Kit.** Connects to any FlaskScrubber or SteamScrubber to automate liquid detergent and acid neutralizing rinse aid dispensing from bulk containers. Detergent is dispensed from one gallon plastic container and rinse aid is dispensed from one liter plastic container. **Detergent and rinse aid required (not included).** Shipping weight 12 lbs. (5 kg)

# Companion Products

## Carts



**8027000—ScrubberMate™ Glassware & Rack Cart.** Designed for Labconco glassware washers. Provides convenient storage and transport of extra Labconco washer racks, inserts or miscellaneous glassware. Accommodates up to two Labconco washer racks or four wire inserts. Alternatively, 48 adjustable and removable pins, 0.5" w x 4.75" h, may be arranged in the drawers to hold inverted flasks, beakers and other glassware. Rails are provided to allow a lower washer rack to slide directly onto the cart from the washer. In addition, the lower drawer pulls out for simple loading of inserts or glassware. An upper washer rack may be docked above the upper drawer. The upper drawer accommodates two wire inserts and is removable so that tall glassware may be loaded in the lower drawer. Durable and chemical-resistant, high-density polyethylene construction. Includes 2.5" diameter casters with toe locks. Overall dimensions: 23.3" w x 22.6" d x 31.6" h. Fully assembled. Shipping weight 70 lbs. (32 kg)



**Glassware Carts.** Safely transport clean and dirty labware. Come with two large or four small interchangeable vinyl-coated wire baskets and removable drip pan below the baskets to catch spills. Include 4" diameter casters (two with toe locks). Frame is welded 1" square mar-resistant, powder-coated tubular steel. Overall dimensions: 34.9" w x 19.0" d x 36.4" h. Fully assembled. Lifetime warranty. Shipping weight 43 lbs. (20 kg)  
⚠ **WARNING:** Cancer—P65Warnings.ca.gov (California only)

**8032500—2-Basket Glassware Cart.**

**8045000—4-Basket Glassware Cart.**



**8000300—Carboy Caddy.** Provides a safe way to move a large container of purified water without heavy lifting. Includes 3" diameter casters that elevate the support shelf 4.25" above the floor. Shelf constructed of phenolic board with a melamine high-pressure laminate surface. Frame is welded 1" square mar-resistant, powder-coated tubular steel. Handle dimensions: 38.5" h x 19.0" w. Shelf dimensions: 20.0" w x 23.6" d. Supports loads up to 360 lbs. (163 kg). Fully assembled. Lifetime warranty. Shipping weight 35 lbs. (16 kg)



# Companion Products

## Water Purification Systems



**WaterPro® RO Systems.** Connect to Labconco glassware washers to provide purified water for the rinse cycles. Deliver 1 L/min of reverse osmosis purified, Type III water when feedwater purity is 100 µS or better. For wall mounting. Powder-coated steel cabinet with 304 stainless steel front panel. Three bowls made of white polypropylene. Includes integral 17 L polyethylene storage tank with outlet port for connection to washer; ON/OFF switch; µS, TEMP ° C, TIME DISP. and TANK FULL indicator lights; and DISPENSE switch. If TIME DISP. is activated, water dispensing from the valve automatically shuts off once user-set time has elapsed. LED display shows actual water quality from 1 to 999 microsiemens (µS), actual water temperature in ° C or dispense time in minutes. Requires Prefilter/Carbon Filter Kit 9067201 and Reverse Osmosis Membrane 9078700 for operation (not included). Overall dimensions: 31.1" w x 7.6" d x 30.8" h. Shipping weight 90 lbs. (41 kg)

**9075020—WaterPro RO System.** For 115V, 60 Hz, 15A AC operation. Includes 115V, 60 Hz, 15A plug.

**9075030—WaterPro RO System.** For 230V, 50/60 Hz, 6A AC operation. Includes Schuko plug.

**9075040—WaterPro RO System.** For 230V, 50/60 Hz, 6A AC operation. Includes 230V plug for North America.

**9075060—WaterPro RO System.** For 230V, 50/60 Hz, 6A AC operation. Includes plug for Britain (UK).

**9075070—WaterPro RO System.** For 230V, 50/60 Hz, 6A AC operation. Includes plug for China/Australia.

**9075080—WaterPro RO System.** For 230V, 50/60 Hz, 6A AC operation. Includes plug for India.



**WaterPro® RO Bladder Tanks.** Connect to the WaterPro RO System to provide additional storage capacity for RO-purified water and means to deliver it from two pressurized ports to destinations such as a polishing station and glassware washer. Tanks are connected to the permeate of the WaterPro RO and incorporate a pressurized bladder which, when empty, have an external pressure of 5 psi. As water from the WaterPro RO is forced into the bladder, it expands and the pressure inside the tank increases. At approximately 40 psi, the WaterPro RO System shuts off automatically. As the tank empties due to demand, the reduced system pressure triggers the WaterPro RO System to refill the tank. Actual capacity of the Bladder Tanks depends on the pressure of the empty tank and the shut off pressure of the WaterPro RO System. With the shut off pressure of the WaterPro RO System set at 40 psi, the actual capacity of the 20 Gallon Tank is approximately 12.8 gallons (48.7 L) and the 14 Gallon Tank is approximately 9 gallons (34.1 L). Each tank includes 1/2" diameter tubing, clamp and fittings to connect the tank to the WaterPro RO System and then to a Labconco glassware washer or WaterPro PS System.

**9201000—Bladder Tank, 20 Gallons (75.7 L).** Actual capacity amended due to pressures: 12.87 gal (48.7 L). Overall dimensions: 15.4" dia x 31.75" h. Shipping weight 38 lbs. (17 kg)

**9201001—Bladder Tank, 14 Gallons (53 L).** Actual capacity amended due to pressures: 9 gal (34.1 L). Overall dimensions: 15.4" dia x 22.2" h. Shipping weight 30 lbs. (14 kg)