

# Washing

## Cub Laboratory Glassware Washing Machines

Underbench machines offering a choice of:

### Washer only

#### Washer/Hot Air Dryer

- ◆ Compact size
- ◆ 10 standard programmes covering most chemical or biological washing applications
- ◆ Microprocessor controlled programming
- ◆ Membrane keypad and backlit, graphics LCD readout with clock, calendar, timer, temperature, programme or machine status outputs, alarm function and troubleshooting menu
- ◆ Drop-down door for easy loading
- ◆ Hot and cold water filling
- ◆ No special plumbing required
- ◆ Dispenser for liquid detergent
- ◆ Wash and rinse temperatures up to 95°C
- ◆ Built-in water softener
- ◆ Acid rinse and distilled/deionised water rinse facilities
- ◆ Front opening easy access door
- ◆ Separate RS232 serial ports for printer and PC connection if required

#### Additional Features for Dryer Model

- ◆ Drying by HEPA-filtered hot air
- ◆ Drying time/temperature selection
- ◆ Programme cycle times can be extended by up to 60 minutes each

## Facilities

**Ten standard programmes** are provided by the microprocessor controller, all individually designed and tested for specific chemical or biological washing applications. In addition a further 40 custom programmes may be defined by the operator, if required.

**Detergent.** Built-in dispensers for liquid detergent.

**Distilled/Deionised Water Rinse.** Built-in pump for non-pressurised (e.g. storage aspirator) distilled/deionised water rinse. Can also be operated on pressurised distilled/deionised water supplies.

**Neutralization/Acid Rinsing.** Built-in pump automatically injects required amount of solution directly into washing machine chamber.

**Water softener:** Regeneration takes place automatically, only needs periodic addition of salt.

**Hot Air Drying.** The integral, compact unit directs hot air either into the individual spigots of the jet rack used, or into the wash chamber when using baskets, trays and special purpose racks.

Cleaning concentrates for use in washing machines – see *CL565 to CL615*

## Installation and Services

Hot and cold water supplies are through flexible hoses. A separate distilled /deionised water inlet is provided. The emptying hose requires a discharge drain tube with inlet set from the floor minimum 320mm, maximum 800mm.

**Water pressure:** 1.5 to 5 bar for hot, cold and pressurised distilled. 0 to 0.5 bar for unpressurised distilled.

**Power requirements:** 230V 50Hz single phase, 30A, 2.8kW.

### Dimensions

	H x W x D, mm
Washing chamber	610 x 520 x 490
Overall	
Washer model	845 x 600 x 645*
Washer/Dryer model	845 x 900 x 645*
Weight empty	85kg (120kg Dryer model)

\*The door extends a further 610mm when open.

### Effective washing heights

With basket trays on two levels  
bottom level = 280mm, top level = 190mm

With Jet racks on two levels  
bottom level = 240mm, top level = 205mm

With Jet rack on bottom level only = 460mm

### Fittings

The washing machine is supplied empty and requires basket trays with spray arms or jet racks for operation. Please refer to WB218/WB220 for details.

continued on next page



WB200



WB210

# Washing

## Cub Washing Machines continued

### Glassware Washer, Cub

As described. Supplied empty without basket trays and spray arms that are required for operation. For 230V 50Hz single phase supplies, 30A.

**WB200-45** Washer

### Glassware Washer/Dryer, Cub Extra

As described. With integral hot air drying unit. Supplied empty without basket trays and spray arms that are required for operation. For 230V 50Hz single phase supplies, 30A.

**WB210-50** Washer/Dryer

#### Note

Orders for glassware washers can only be processed after completion of an installation check list detailing the user's water/electrical supply requirements. Please contact us for details.

### Standard Basket Trays

With spray arms. Universal basket trays suitable for washing wide mouth vessels, beakers, petri dishes, evaporating basins etc. and for test tubes held vertically in accessory baskets. One each upper and lower level baskets are recommended for use in WB200/WB210.

**WB218-10** Upper level tray

**WB218-20** Lower level tray

### Jet Racks

Provide thorough internal washing of narrow necked vessels, volumetric flasks, medical flats, small cylinders etc.

	For machines	Hollow spigots	For levels
<b>WB220-30</b>	WB200/205	40 each	both
<b>WB220-35</b>	WB210/215	40 each	both

## Bottle/Tube Washers

### Baskets, Stainless steel mesh, wedge shape

For test tubes. For use on lower basket tray.

**WB224-20** 105mm high

**WB224-26** 165mm high

**WB224-32** 200mm high

### Petri Dish Rack

Plastic coated stainless steel. For use on lower level only. For 31 dishes, 100mm diameter.

**WB230-20** Petri dish rack

### Beaker/Bottle Support

Supports up to 28 items. Two supports can be used on each of the upper and lower basket trays.

**WB232-10** Beaker/Bottle support

### Bottle Washer

For rinsing the interior of bottles and other containers with neck diameters between 9.5 and 100mm and approximately 75mm minimum height. The spring loaded nozzle, when depressed by an inverted bottle, ejects jets of water. Waste water is dispersed through channels in the sloping distributor. The water flow ceases when the bottle is removed from the nozzle. Supplied with centre vertical nozzle, four-arm horizontal distributor, heavy base and 1 metre of hose.

**WB450-10** Bottle washer

### Brushing Washer

For cleaning the inside of small bottles, test tubes and similar glassware using an electrically driven brush. Comprising a quiet running motor with quick release chuck within an enamel painted aluminium housing. A transparent plastic shield extends over the rotating brush and stainless steel drip tray. Overall 270 x 630 x 255mm W x D x H. Weight 14kg. For 220-240V 50Hz single phase supplies. Without brushes.

**WB500-10** Brushing washer

## Pipette/Burette Washers

### Accessory Brushes

For bottles and similar containers.

	Approximate capacity ml
<b>WB504-20</b>	100/125
<b>WB504-30</b>	200/250

### For test tubes

	Approximate diameter mm
<b>WB506-10</b>	6
<b>WB506-20</b>	10
<b>WB506-30</b>	13
<b>WB506-40</b>	16
<b>WB506-45</b>	19
<b>WB506-55</b>	25

### Pipette/Burette Washers

Heavy duty polyethylene. The complete system comprises a basket which holds the items to be cleaned and fits inside the soaking jar. After soaking the basket is transferred to the siphoning rinser which is connected to a mains water supply. The fill/drain siphoning cycle repeats automatically for as long as the rinsing water flows at the correct rate. Require a source of mains water and a suitable waste water drain. For pipettes and burettes up to 600mm long.

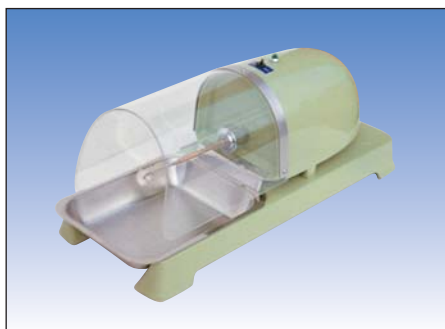
	Item	Int. dia. mm	Ht. mm
<b>WB610-14</b>	Washer	165	740
<b>WB610-24</b>	Jar	165	650
<b>WB610-34</b>	Basket	130	650

Burette Brushes etc. – see *Brushes* section.

Cleaning Baths – see *Ultrasonics* section.



**WB450**



**WB500 in use**



**WB610-14**



**WB610-24**



**WB610-34**