



advanced washing
& disinfection solutions

LANCER 1300 UP Laboratory Glassware Washer / Dryer



General Data and Specifications

The LANCER 1300 UP is a fully automatic, microprocessor controlled, freestanding glassware washer designed to wash inside narrow necked laboratory glassware using injectors and open glassware using rotary spray arms. It has stainless steel construction throughout and is finished on all six sides with bodywork of AISI 304L stainless steel. LANCER's drop down door provides a loading platform eliminating the need for a loading cart and minimizing the overall footprint of the machine while providing a positive door seal to prevent leakage and ensure proper rack placement.

The electronic programmable microprocessor of the 1300 UP is capable of storing 40 programs, each containing up to 53 user-definable functions. By using pre-programmed cycles with recommended treatment parameters, it will effectively pre-wash, wash, rinse, thermal disinfect, and dry glassware, utensils, surgical instruments, and parts prior to any necessary sterilization.

The heating elements are capable of heating water up to 95°C and holding temperatures up to 30 minutes. The wash pump and hydraulic circuit provide a high flow rate and low pressure delivery for thorough cleaning without breakage of washed items. The drying circuit consists of electrical heating elements and a blower that forces hot air into the wash chamber for thorough drying.

With the capability of washing on up to three levels, the 1300 UP utilizes spindle header racks allowing water, detergent and acid to be injected into inverted glassware. Jet racks are capable of being interchanged on all wash levels. Adjustable rack position on the middle level ensures maximum flexibility in wash chamber configuration. The individual jet spindles are threaded making them easy to replace or exchange and include polypropinol adjustable star feet for support and to protect glass from chipping.

STANDARD FEATURES:

Quality and Standards

- Manufactured under ISO 9001 accreditation.
- UL-921, Standard for Safety for Commercial Electric Dishwashers.

Peristaltic Detergent & Acid Pumps

- Allow for precise addition of either chemical agent for critical cleaning applications.

Built in Automatic Water Softener

- Automatic regeneration after each wash cycle with low salt alarm.

Water Level Sensors

- Two independent sensors control chamber water level and prevent overflow.

Electronic Thermostat

- For independent selection of temperature for pre-wash, wash and final rinse between ambient and 95°C.

Forced Air Drying System

- 2 kW heating elements and a blower provide drying up to 110°C.

Main Recirculation Pump

- 1 ½ HP with a capacity of 132 gal/min (500 l/min).

Wash Solution Heating System

- 9 kW electric heating elements provide heating up to 95°C.

Drop Down Door

- Provides a loading platform eliminating the need for a loading cart.

Fully Extendable Load Bearing Arms

- Support jet racks for easy loading and unloading of glassware without the need of a loading cart.

Three Available Levels of Washing

- With automatic actuation when inserting jet racks.

40 Flexible Programs

- "UP" Universal Programming controlled by microprocessor, individually selected programs available and stored in memory.

Systems Monitoring and Alarms

- Self-diagnostic monitoring of all functions with audible and visual fault alarms provide quality control to each wash cycle.

Version 2 - 8/03

Systems Control Panel

- 4 ½ inch LCD with up to 16 character program naming capability.

DIMENSIONS AND CAPACITIES:

External: 57 ¾" H x 26" W x 27 ¼" D (1,470 x 660 x 690 mm).

Internal: 25 ¼" H x 19 ¼" W x 19 ¾" D (640 x 492 x 500 mm)

Effective Wash Chamber Loading Area:

- 381 square inches (2,458 square cm) on each of the 3 levels for a total of 1,143 square inches (7,374 square cm), minimum.

Water Consumption:

- 4 ½ Gallons approximately per fill.

Heat Loss:

- 3,410 Btu/hr (999 W) maximum.

Sound Level:

- 65.5 dB.

CONSTRUCTION:

Exterior

- #4 sanitary high-grade finish AISI 304L stainless steel.

Interior

- #4 sanitary high-grade finish AISI 304L stainless steel. Electronically welded under Argon protection.

Insulation

- Machine of double wall construction fully insulated with synthetic rubber based, closed cell foam.

Wash/Rinse Recirculation System

- All components in contact with wash and rinse solutions are of stainless steel or other materials impervious to the effects of detergents, additives and general laboratory chemical residues.

Door

- Front-loading door is counterbalanced for ease of operation and loading of glassware baskets and accessories. To minimize heat loss and eliminate noise, a window is not included on the door.

One Upper and One Lower Rotating Spray Arm

- #4 sanitary high-grade finish AISI 304L stainless steel, easily disassembled for cleaning and maintenance.

CONSTRUCTION: (continued)

Triple Filter System

- In wash chamber for recirculation and drain pump protection.
- Easily removed for rapid cleaning.

Water Inlet Filters

- On all incoming water lines.

UTILITY REQUIREMENTS:

Electrically Heated Washer

- Provide a power cord or hard wire connection and a fusible disconnect switch.
- Electrically Heated Washer, with Drying
 - 208 V, 60 Hz, 1-Phase, 7.5 kW, 38 A/Phase
 - 230 V, 60 Hz, 1-Phase, 7.5 kW, 38 A/Phase
 - 208 V, 60 Hz, 3-Phase, 10.5 kW, 34 A/Phase
 - 230 V, 60 Hz, 3-Phase, 10.5 kW, 34 A/Phase
 - 480 V, 60 Hz, 3-Phase, 10.5 kW, 18 A/Phase
- Steam Heated Washer, with Drying
 - 208 V, 60 Hz, 1-Phase, 2 kW, 14 A/Phase
 - 230 V, 60 Hz, 1-Phase, 2 kW, 11 A/Phase
 - 208 V, 60 Hz, 3-Phase, 2 kW, 14 A/Phase
 - 230 V, 60 Hz, 3-Phase, 2 kW, 11 A/Phase
 - 480 V, 60 Hz, 3-Phase, 2 kW, 8 A/Phase

Hot Water

- Provide a shut off valve with a threaded ¾ inch male hose thread nozzle. Flow Rate: 5 ¼ gal/min (20 l/min) with a pressure between 29 to 87 psig (200 to 600 kPa). Maximum Temperature: 50°C (122°F).
- Washer is equipped with a 5 foot (1,524 mm) long, ½ inch (12mm) diameter hose with ¾ inch female hose thread fitting.

Cold Water

- Provide a shut off valve with a threaded ¾ inch male hose thread nozzle. Flow Rate: 5 ¼ gal/min (20 l/min) with a pressure between 29 to 87 psig (200 to 600 kPa).
- Washer is equipped with a 5 foot (1,524 mm) long, ½ inch (12mm) diameter hose with ¾ inch female hose thread fitting.

Purified Water

- Provide a shut off valve with a threaded ¾ inch male hose thread nozzle. Flow Rate: 5 ¼ gal/min (20 l/min) with a pressure between 29 to 87 psig (200 to 600 kPa).
- Washer is equipped with a 5 foot (1,524 mm) long, ½ inch (12mm) diameter hose with ¾ inch female hose thread fitting.

Drain Connection

- Provide a fixed standpipe and plumbing trap with a minimum inside diameter of 1 ½ inches (40 mm). Height above finished floor level between 40 to 42 inches (1000 to 1050 mm). Flow Rate: 5 gal/min (20 l/min).
- Washer is equipped with a 5 foot (1,524 mm) long, ¾ inch (19 mm) diameter hose with gooseneck for connection to standpipe.

Overflow Safety Discharge

- Provide a floor drain connection or fixed discharge tube with an outside diameter of 1 ¼ inches (32 mm). Maximum height above finished floor level 12 inches (300 mm).
- Washer is equipped with a 5 foot (1,524 mm) long, ¾ inch (19 mm) diameter hose with 1 ¼ inch (32 mm) end piece for connection to discharge tube.

Steam Feed (only when steam option purchased)

- Provide a shut off valve and flexible steam hose for connection to washer's ½ inch male BSP threaded inlet.
- Steam pressure between 29 to 87 psig (200 to 600 kPa). Maximum consumption 75 lbs/hr.

Steam Condensate Return (only when steam option purchased)

- Provide a shut off valve and flexible steam hose for connection to washer's ½ inch male BSP threaded outlet.

Compressed Air (only when steam option purchased)

- Provide a shut off valve with a ¾ inch hose barb fitting.
- Air pressure between 58 to 116 PSI (400 to 800 kPa). Consumption is minimal.

OPTIONAL FEATURES:

Chamber Elevation (Includes door jacks)

- + 150 mm (6") or + 250 mm (10").
- Increases chamber height for washing of large items.

Drain Discharge Cool Down

- Cooling of drain effluent by quench to < 60°C.

Steam Heating

- A 316L stainless steel exchanger provides quick heating up to 95°C.

Thermocouple Entry Ports

- Enable independent verification of wash chamber temperature.

Gravity Drop Drain

- Pneumatic valve discharges waste water to floor level drain.

pH Neutralization

- Automatically adds a base or acid solution to lower or raise pH level of the discharge.

Door Lock

- Prevents interference with wash cycle once it is in operation.

Custom Programming

- Customized program options for special requirements and wash applications.

Printer

- Provides documented evidence of the cleaning process in a detailed format: Date, Start Time, Filling Time, Detergent / Acid Intake, Heating Time, Phase Duration, Probe Temperature, Emptying Time, and Drying Time.

Steam Condenser

- Removes vapor and steam whenever chamber temperature exceeds 50°C and directs all condensate, vapor, and steam to drain.

Chemical Level Sensors

- Alert the operator by audible and visual alarm when the volume of detergent or acid becomes too low.

AVAILABLE ACCESSORIES:

Manual Transfer Carts & Stationary Hold/Transfer Table

- Specially made in matching stainless steel to enable loaded racks to be easily removed and transferred to different locations.

Customized Baskets

- Modification of existing racks or design and manufacture of custom racks to thoroughly clean specific items or load configurations.

Starter Kit

- Versatile accessory with direct injectors (PS/271XLC) enables washing of a wide variety of glassware in the same batch.

Jet Racks

- 15 different configurations from 20 to 100 jets.
- Capable of cleaning a wide variety of glassware.

Basic Basket Tray & Basket Tray with Spray Arm

- Used to clean beakers and other large neck items.

Tall and Short Baskets with Lids

- Perfect for cleaning test tubes and small parts.
- Adjustable lids and partitions ensure items are held in place during the cleaning process.

Mesh Covers for Jet Racks and Basket Trays

- Covers used to hold down glassware and to prevent smaller items from being dislodged from the jets.

Pipette Rack and Combination Racks

- LANCER's combination racks produce excellent cleaning results while maximizing chamber space.

SERVICES:

Maintenance Contracts

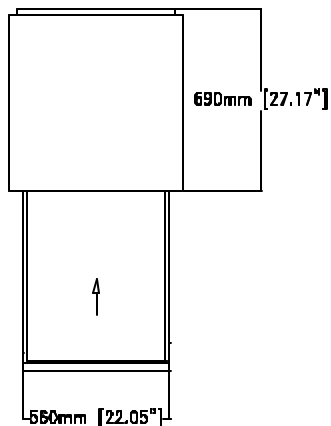
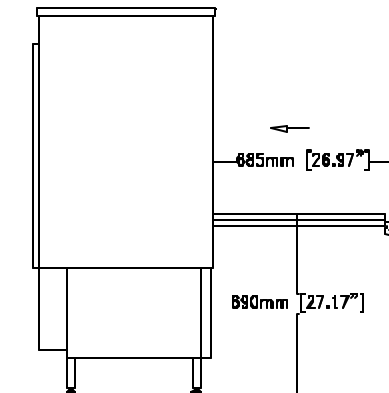
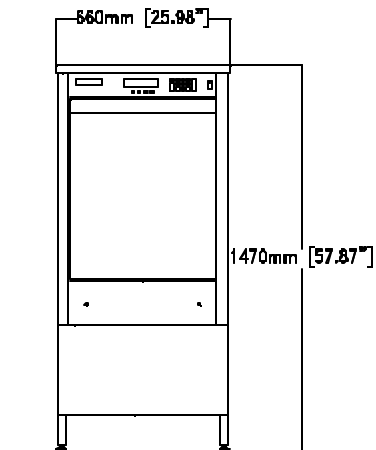
- Available for all machines after warranty period. LANCER recommends semiannual preventative maintenance visits as a cost effective way to ensure proper operation and extended equipment life.

Cleaning Chemicals

- LANCER's Cleaning Chemical division supplies its own range of cleaning solutions.
- Specially formulated to provide the best possible results from LANCER washing machines.
- In addition to the popular LANCERCLEAN detergent and LANCERINSE acid, other detergents, decontaminants, and products commonly used in automated washing equipment are available.

Validation Services

- Installation Qualification (IQ) and Operational Qualification (OQ) testing can be executed at the LANCER factory or at the customer site.
- Additional validation and documentation services available. Please consult LANCER for details.



1300 UP	
TOLERANCE : ± 5 mm	
DIMENSIONS EXTERIEURS EXTERNAL DIMENSIONS (*)	DIMENSIONS CUVE DE LAVAGE CHAMBER DIMENSIONS
Hauteur / Height : 1470mm Largeur / Width : 660mm Profondeur / Depth : 890mm	Hauteur / Height : 640mm Largeur / Width : 492mm Profondeur / Depth : 500mm
<p>(*) LES DIMENSIONS EXTERIEURES SONT SUSCEPTIBLES DE SUBIR DES CHANGEMENTS SUIVANT LES OPTIONS SELECTIONNEES CI-DESSOUS (Imprimante / Enregistreur / Conductivimétre)</p> <p>(*) OVERALL DIMENSIONS SUBJECT TO CHANGE ACCORDING TO FOLLOWING SELECTED OPTIONS (Printer / Recorder / Conductivity meter)</p>	



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Tag # / N° Identification:	---	- GENERAL DRAWING OF THE WASHER -
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