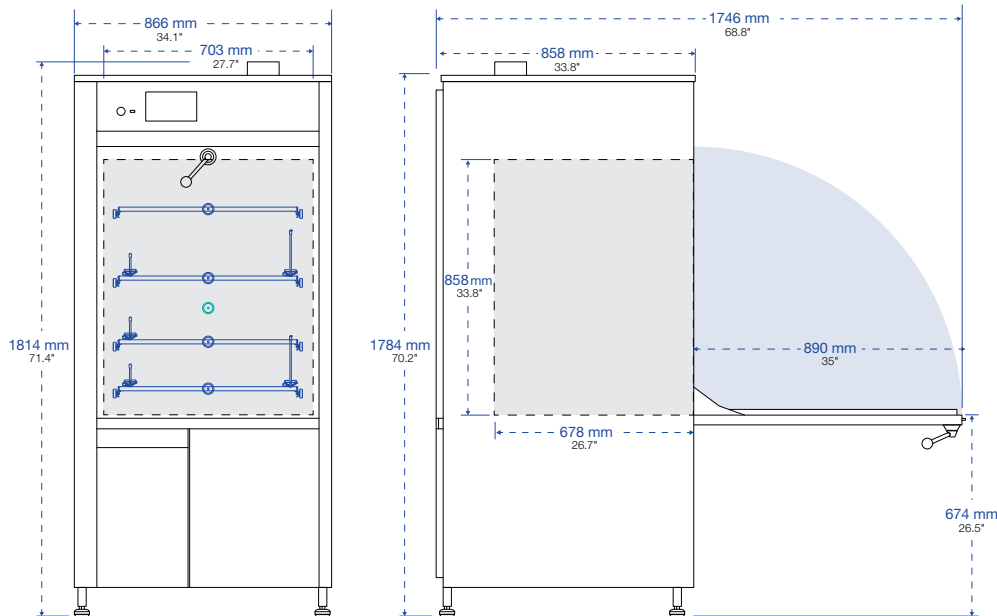


ULTIMA series model 1600 LXP

laboratory washer/dryer

LANCER
GETINGE GROUP

SPECIFICATIONS



Base Model ULTIMA series 1600 LXP

- Door Configuration**
 Fold-down door is made of solid 316L stainless steel. Optional View-In-Process (VIP) window provides a view inside the chamber.
- Water Per Fill**
 30 – 35 L (7.2 – 9.2 gal)
- Standard Interior Dimensions (w x h x d)**
 703 x 858 x 678 mm
 (27.7" x 33.8" x 26.7")
- Standard Exterior Dimensions (w x h x d)**
 866 x 1814 x 858 mm
 (34.1" x 71.4" x 33.8")
- Interior Dimensions with Optional Height Extension (w x h x d)**
 703 x 1108 x 678 mm
 (27.7" x 43.6" x 26.7")
- Exterior Dimensions with Optional Height Extension (w x h x d)**
 866 x 2064 x 858 mm
 (34.1" x 81.3" x 33.8")
- Wash Programs**
 4 Presets, 36 Custom Settings
- Cycle Functions**
 Wash Temp: 95°C / 203°F
 Drying: Forced-air Chamber, Injectors, HEPA Filtered
- Standard Weight**
 215 kg (474 lb.)
- Extended Weight**
 240 kg (529 lb.)
- Effective Chamber Volume**
 408 L (14.4 cu.ft.)
- Extended Effective Chamber Volume**
 528 L (18.7 cu.ft.)
- Load/Machine Foot**
 0.6 kN
- Extended Load/Machine Foot**
 0.7 kN



Lancer model 1600 LXP labware washer; shown with optional View-In-Process (VIP) window.

Drawings display front and side of unit with door swing allowance.

General Specifications

The ULTIMA series model 1600 LXP washer/dryer has been designed to meet and exceed the growing requirements of the laboratory industry for cleaning of glassware. ULTIMA series washers offer the best labware cleaning solutions in the industry, delivering high performance in a compact footprint. Efficient use of water, detergents, and rinsing agents minimizes the environmental impact while energy saving construction lowers total cost of ownership.

Inventory systems are evaluated and designed to solve specific cleaning and drying challenges. The exclusive Prolux Plus programmable microprocessor controller commands a full range of prewash, wash, rinse and drying functions through simple touchscreen menus. The model 1600 LXP labware washer offers the convenience of four preset programs for light to heavy loads, while up to 36 more complex programs can be customized as needed to meet specific operational requirements.

Features and Benefits

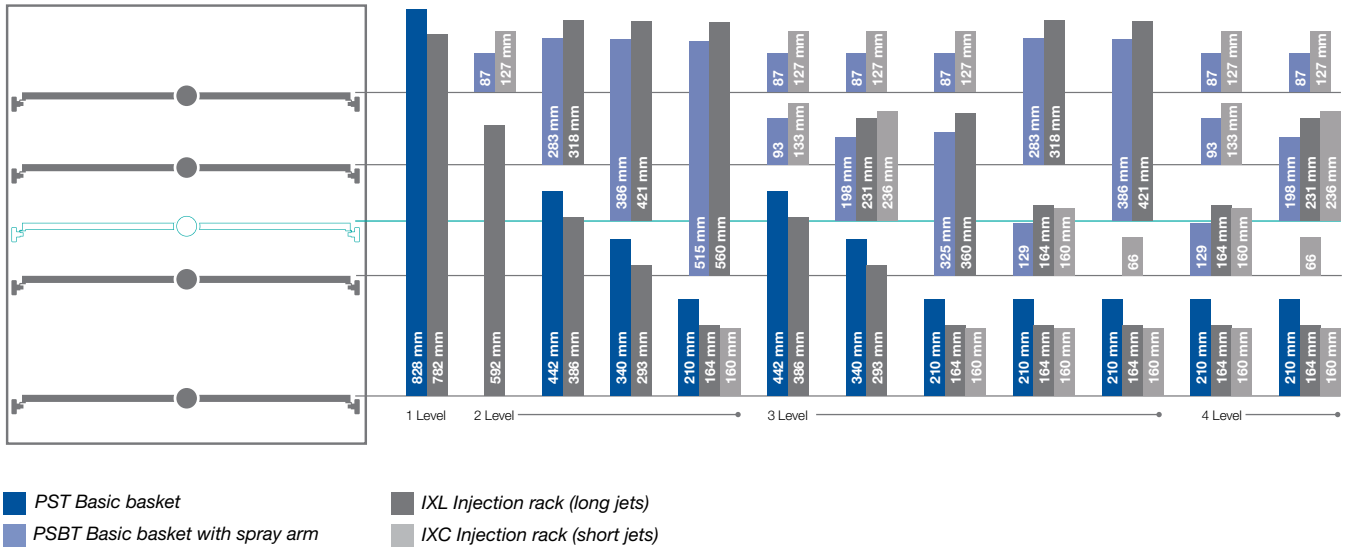
The ULTIMA series model 1600 LXP labware washer/dryer includes a suite of features and benefits designed for performance and operator safety.

- Chamber of high grade, sanitary 316L, stainless steel to withstand the powerful washing process and aggressive chemicals often required for thorough cleaning.
- Insulated, double-wall construction for thermal and sound protection.
- Unique, proven design enables water circulation at full pressure on all levels, delivering the required mechanical effect for highly efficient washing in all areas of the load.
- The large door opens at a convenient height and has gas-dampened support legs for extra-secure loading and unloading.
- User friendly 7" color touchscreen that provides comprehensible help in resolving problems and allows operators to see machine status from a distance.
- 40 microprocessor controlled programs, of which four are factory preset and 36 can be user-customized (PIN code protected) to suit particular applications or loads.
- PLC microprocessor designed for simplicity, one-touch start and real-time status indicators. Provides enhanced connectivity for independent monitoring.
- USB port in front of panel.
- On-board chemical storage drawer takes 2 x 10 L standard bottles and minimizes handling and exposure.
- Low chemical level detectors and alarms, plus additional storage space.
- Filtered, pulsed hot air is delivered through three turbines for effective drying of glassware.
- Fully variable drying temperature.
- Suitable for pharmaceutical processing laboratories where full GMP specification is not required.

Cleaning Performance and Safety

Loading Configurations

Measurements valid for units without the optional height extension.



Ergonomics

Ergonomic Loading Configurations

- Telescoping load-bearing rails permit extension of racks for easy loading.
- All racks are interchangeable between top and bottom wash levels.
- The fold-down door creates a platform for proper rack positioning and more comfortable loading and unloading.

Controller

The Prolux Plus controller is based on a high performance PLC microprocessor designed for simplicity, one-touch start, real-time status indicators and intuitive programming options that permit customization over the range of washer

operations. Prolux Plus integrates a suite of menu screens that support digital functions from cycle selection, process monitoring, warning advisories, audible and visual alarms and system communications and data capture.

Programs

The washer is pre-loaded with wash cycles that are generic from the factory that can be modified and adapted at Performance Qualification. Below are the phases that are applicable in the program group which allow modification of parameters like; water to be used, temperature, phase time, dosing amount etc.

1-Prewash: Select number of prewashes (0 to 3), duration of prewash (up to 30 minutes), temperature of water (up to 95°C / 203°F) and detergent dosing time. User can select cold or DI water.

2-Wash: Select duration of wash (up to 30 minutes), detergent dosing time and temperature of water (up to 95°C / 203°F). User can select cold or DI water.

3-Running Water Rinse A: Select number of rinses (0-9), duration of rinse (up to 30 minutes) and temperature of water (up to 95°C / 203°F). User can select cold or purified water.

4-Acid Rinse: Select duration of rinse (up to 30 minutes), acid dosing time and temperature of water (up to 95°C / 203°F). User can select cold or purified water.

5-Running Water Rinse B: Select number of rinses (0-9), duration of rinse (up to 30 minutes) and temperature of water (up to 95°C / 203°F). User can select cold or purified water.

6-DI Rinse: Up to 4, duration of rinse (up to 30 minutes), temperature of water (up to 95°C / 203°F). User can select cold or purified water.

7-Final Rinse: Duration of rinse (up to 30 minutes), temperature of water (up to 95°C / 203°F). If conductivity monitoring is desired, that procedure is made in this phase.

8-Drying: Programmable in 1°C increments for up to 90 minutes and up to 110°C / 230°F.

9-Cooling: Duration of cooling (up to 30 minutes).

Parameters - Different parameters can be set for each program via control system such as:

- Number of phases for the program (prewash, wash, neutralizing rinse)
- Duration for each phase
- Water inlet selection for each phase
- Temperature for prewash, wash, acid rinse, DI rinse and final rinse
- Selection of additive intake
- Drying time
- Drying temperature

A Prolux Plus microprocessor with adjustable programs ensures the model 1600 LXP washer control. Up to 40 standard washing programs of which four are factory preset (for chemistry glassware, volumetric flasks, bacteriology / virology glassware and stubborn stains) while others (36) are user-customized. The microprocessor controls all system functions and monitors system operations. Both visual and audible alarms inform operator in case of cycle malfunctions and visual information on real-time process can be displayed.