

LABEXIA 810 LX

Glassware Washer

LANCER



Construction and Design

The **810 LX Undercounter Washer** fits in the same space as a standard, domestic dishwasher but has professional features and stainless steel construction for durability.



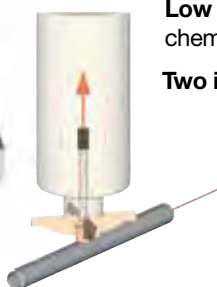
Complete cleaning is obtained with water circulated in the chamber via spray arms as well as through injectors directly inside of glassware.

Chamber and exterior: AISI-304 L stainless steel (ss on all six sides - standalone or undercounter installation ready)

- Double wall insulation: provides thermal and sound protection
- Telescopic rails are load bearing for easy loading and unloading

Detergent delivery system: liquid detergent automatically injected into wash chamber via peristaltic pump according to programmable parameters.

Acid neutralizer delivery system: liquid acid neutralizer automatically injected into wash chamber via peristaltic pump according to programmable parameters.



Low level chemical alarms (visual and audible alerts) indicate when chemical levels are low.

Two independent wash levels:

- Provides automatic connection of loading accessories (basic basket, injector racks)
- Racks interchangeable between levels
- Glassware determines rack placement and position

Microprocessor Control

Easy selection of **20 standard washing programs** for numerous applications including:

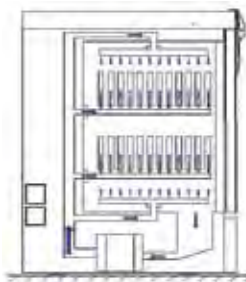
- Chemistry glassware
- Bacteriology/virology (high temperature)
- Stubborn stains (agar)
- Volumetric glassware (low-temp)
- Many others

Easily **adjustable parameters** (password-protected access) including: program phases, temperature and time of each phase and cleaning chemical dosing.

Self-diagnostic program, with visual and audible alarms, alerts the user in the event of a malfunction enabling quick troubleshooting and maintenance.



Mechanical Washing System



Washing system provides uniform wash/rinse solution on all levels.

Superior hydraulic design:

- Racks connect to hydraulic circuit via automatic, low profile valves
- Rear rack connections allow for maximum use of chamber volume
- Door holds racks in place ensuring positive rack connection and efficient flow of wash/rinse solution

Top and bottom spray arms ensure complete washing and rinsing of glassware exterior, interior of large mouthed glassware and wash chamber. Programmable water rinses for **hot, cold** and **hot/cold DI water**.

Cleaning Chemicals


Available exclusively from Lancer, our premixed detergents and acid neutralizers are specifically made for use in all high pressure washers.

LANCERCLEAN Detergent: 3 Formulas (Potassium Hydroxide Based, Sodium Hydroxide Based, pH Neutral)

LANCERACID Rinse: 3 Formulas (Acetic Acid Based, Citric Acid Based, Phosphoric Acid Based)



Technical Data and Utilities

Overall Dimensions	33.25 H x 23.62 W x 27.55 D (in) 845 H x 600 W x 700 D (mm)	Total Electric Power	7 kW
Chamber Dimensions	20 H x 21 W x 20 D (in) 508 H x 535 W x 510 D (mm)	Drainage	Drain pipe diameter 1.5 inches, 20 to 27 inches from floor
Wash Levels	1 to 2	Voltage	208 V-3 Ph, 208 V-1 Ph
Water Consumption	3.1 gal (12 L) per fill	Net Weight	188 lbs
Recirculation Pump (flow rate)	92 gal/min (350 L/min)	Heat Loss	2,380 Btu/hr (600 Kcal/hr)
Heating	6 kW	Noise Level	<63 dBa
		Water Supply (Cold, DI)	
		Connection Flow Pressure	¾ inch hose thread 20 L/min (5 ¼ gal/min) 29-87 psig

Multiple Loading Configurations

Two Independent Wash Levels allow for flexibility of multiple types of glassware, in a single load, to fit your specific application.

Upper level rack can be removed to accommodate for taller glassware on lower level.



Configuration 1

Configuration 2

Features and Options

Steam condenser is a standard feature which:

- Prevents build up of condensation
- Prevents damage to casework
- Extracts residual moisture from glassware reducing drying time

Plinth (stainless steel base cabinet - optional) increases the loading height of the washer by 29.52 inches and allows for chemical storage under the washer chamber.

PS 27/IXLC allows for washing a variety of different types of glassware (such as narrow neck bottles, open-mouth glassware and test tubes) in a single load. The flexibility of this rack reduces the amount of necessary wash cycles.

Other available options include: Drain discharge cool down, low pressure valve, door lock, external printer, pH neutralization and IQ/OQ protocol. Contact Lancer for further details on these and other accessories and options.

Accessories

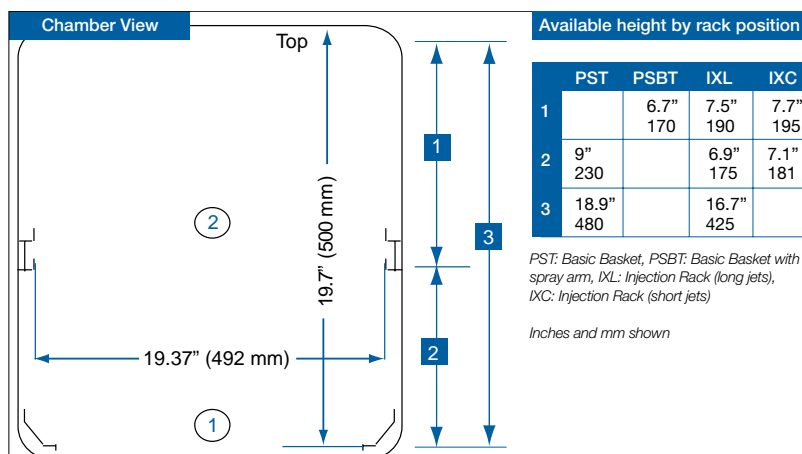
Wide range of accessories: If your lab needs higher throughput, the Labexia 810 LX will easily adapt to your needs, as a myriad of accessories will enable you to wash—on 2 independent levels—pipettes, volumetric flasks, etc. Lancer has the optimal accessory for your application. ([See rack catalog for further accessory options.](#))

Injector Rack with Lid

Multi Function Rack

PSBT with Small Baskets

Half Rack



LANCER

LANCER USA Inc.
3543 State Rd. 419
Winter Springs, FL 32708

Toll Free: (800)332-1855
Phone: (407)327-8488
Fax: (407)327-1229

sales@lancer.com
www.lancer.com

Description:

The 810 LX fully automatic undercounter or freestanding washer has an electronic programmable microprocessor capable of storing up to 20 programs with 50 user definable functions for pre-wash, wash, rinse and purified/DI rinse. These units are capable of injection cleaning on 1 to 2 levels, providing maximum capacity through multiple chamber configurations. Each level has telescopic, load bearing runners to house the racks, eliminating the need to handle loaded racks. Drop down door provides loading platform for lower level.

Contact LANCER:

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Toll Free: (800)332-1855

Phone: (407)327-8488

Fax: (407)327-1229

sales@lancer.com - www.lancer.com

Standards:

Manufactured under ISO 9001 accreditation.

Specifications:

Dimensions:

External:

33.25 H x 23.62 W x 27.55 D (inches)

845 H x 600 W x 700 D (mm)

Chamber:

20 H x 21 W x 20 D (inches)

508 H x 535 W x 510 D

Wash chamber load area: 2 Wash Levels - 360 square inches per level, 720 square inches total 2 levels

Loading Height: 10" (250 mm)

Undercounter Spacing: Fits in standard 24" casework opening

Water Consumption: 3.1 gal per fill (12 L per fill)

Heat Loss: 2,380 Btu/600 Kcal/h

Sound Level: <63 dBA

Cycles: 4 pre-programmed, 20 adjustable

Injection Cleaning: 1 to 2 levels

Dosing: Automatic detergent and acid dosing via peristaltic pump

Steam Condenser: Optional (Standard in US)



Standard Features:

Drop Down Door

- Counterbalanced for ease of operation
- Ensures proper rack placement and connection to manifold
- Manufactured of solid 304L stainless steel
- Fully insulated to reduce heat loss and noise
- Provides loading platform eliminating need for loading cart

Fully Extendable, Load Bearing Arms

- Support jet racks for loading and unloading of glassware
- Eliminate need for loading cart

Spray System

- Includes one rotary spray arm in top of chamber / one rotary spray arm in bottom of chamber
- Spray arms made of # 4 sanitary high-grade 304L stainless steel
- Easily disassembled for cleaning and maintenance

System Wash Levels

- 1 to 2 levels
- Rack actuated via automatic manifold connections when door is closed
- Rack accessories independent and easily removable for use on all levels

Main Recirculation Pump

- 3/4 HP with capacity of 92 gal/min (350 l/min)

Filter System

- Two stainless steel filters protect recirculation and drain pumps from debris
- Filters easily removed for cleaning
- Filters on all incoming water lines

Steam Condenser

- Removes steam vapor when chamber temperature exceeds 50° C
- Directs all condensate to drain

Peristaltic Detergent and Acid Pumps

- Provides precise addition of chemical agents

Wash Solution Heating System

- 6 kW electric heating elements provides heating up to 95° C

Electronic Thermostat

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

Microprocessor Control System

- User programmable with 20 storable programs and 50 user definable functions

Systems Control Panel

- 2-½ inch LCD display window
- 7 Button touch pad is waterproof and glove friendly

System Monitoring

- Audible and visual alarms provide quality control for each wash cycle

Water Level Sensors

- Two independent sensors control chamber water level and prevent overflow

Seismic Tie Down

- Predrilled anchor points for seismic anchoring

Programming and Cycle Operation:

- **Pre-Wash** - Select number of Pre-Washes (0 to 3), length of Pre-Wash (up to 30 minutes), temperature of water (up to 95° C) and detergent. User can select cold or purified water.
- **Wash** - Select length of Wash (up to 30 minutes), detergent dosing time and temperature of water (up to 95° C) User can select cold or purified water.
- **Running Water Rinse 1** - Select number of rinses (0 to 9). Unit fills with water, rinses for 30 seconds and drains. User can select cold or purified water.
- **Acid Rinse** - Select length of Acid Rinse (up to 30 minutes), amount of acid and temperature of water (up to 95° C). User can select cold or purified water.
- **Running Water Rinse 2** - Select number of rinses (0 to 9). Unit fills with water, rinses for 30 seconds and drains. User can select cold or purified water.
- **Pure Water Rinse COLD** - (DI Rinse) Select number of rinses (0 to 4). Select length of Pure Water Rinse (up to 30 minutes). User can select cold or purified water.
- **Pure Water Rinse HOT** - (DI Rinse) - Select length of Hot Pure Water Rinse (Up to 30 minutes) and temperature of water (up to 95° C). User can select cold or purified water.

Safety Features:

Door Interlock

- Prevents interference with wash cycle once it is in operation

Drop Down Door

- Eliminates the safety hazard associated with guillotine type doors
- Counterbalanced for safe operation

Optional Features:

Drain Discharge Cool Down

- Wastewater cooled to <60° C
- Cold water added to effluent during drain phase
- Seismic Tie Down
- Predrilled anchor points for seismic anchoring

Liquid Level Sensors

- Determine when cleaning chemical levels are low

Low Pressure Valve Kit

- Provides proper water pressure for purified water supply

316 L Stainless Steel Chamber

- 316 L stainless steel chamber and door

Stainless Steel Plinth

- Stainless steel base cabinet
- Raises loading height of washer to 29.6"

Third Party Testing

- Field labeling by independent "NRTL" (Nationally Recognized Testing Lab) for product safety certification
- Verify compliance with the UL Standard 61010-1

Construction:

Wash chamber and door

- Constructed of # 4 sanitary AISI 304L stainless steel
- High-grade finish electronically welded under Argon protection

Exterior

- AISI 304L stainless steel with # 4 high-grade finish

Components

- Constructed of stainless steel or other materials impervious to the effects of detergents, additives and general laboratory chemical residues

Insulation

- Synthetic, rubber based closed cell foam
- Guards against heat loss and reduces noise level

Accessories:

Basic Basket Tray and Basket Tray with Spray Arm

- Washes glassware with large necks or openings such as beakers
- Mesh cover available for holding items on the basket during the wash cycle

Injector Racks

- Various combinations of jets (including different quantities, different diameters, short and/or long lengths)
- Allows for washing a wide variety of glassware
- Mesh hold-down screen available to prevent glassware from becoming dislodged during wash cycle

Stainless Steel Mesh Baskets

- For cleaning smaller items
- Lids available

Combination and Specialty Racks

- For washing specific items such as pipettes or for multiple types of items on one rack

Customized Accessories

- Modification of existing standard racks or baskets
- Creation of completely customized accessories

Preventative Maintenance:

- Annual Preventative Maintenance agreements ensure optimum washer performance and extend equipment life

Validation Services

- Installation Qualification and Operational Qualification (IQ/OQ) testing can be executed at the customer site
- Documentation only packages available separately

Cleaning Chemicals:

- LANCERCLEAN Detergent (3 formulas)
- LANCERACID Rinse (3 formulas)
- Specially formulated for use in high pressure washers

Required Utilities:

Cold Water

- Shut off valve with a threaded 3/4 inch male hose thread nozzle
- Flow rate: 5 1/4 gal/min (20 l/min) with a pressure between 29 and 87 psig (200 to 600 kPa)

Purified Water

- Shut off valve with a threaded 3/4 inch male hose thread nozzle
- Flow rate: 5 1/4 gal/min (20 l/min) with a pressure between 29 and 87 psig (200 to 600 kPa)

Drain Connection

- Fixed standpipe and plumbing trap with a minimum inside diameter of 1 1/2 inches (40 mm) needed
- Height above finished floor level between 20 and 27 inches (500 to 700 mm)
- Flow rate: 10.5 gal/min (40 l/min)
- AS AN OPTION unit can be configured for floor draining with optional floor drain kit

Condensate Drain Connection

- Fixed standpipe and plumbing trap with a minimum inside diameter of 1 1/2 inches (40 mm)
- Height above finished floor level between 20 and 27 inches (500 to 700 mm)
- Flow rate: 5 gal/min (20 l/min)
- AS AN OPTION unit can be configured for floor draining with optional floor drain kit

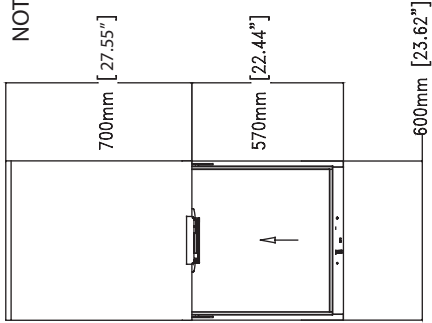
Electricity (electric models)

- 208 V, 60 Hz, 1-Phase, 7 kW, 34 Amps
- 208 V, 60 Hz, 3-Phase, 7 kW, 20 Amps
- 230 V, 60 Hz, 1-Phase, 7 kW, 31 Amps
- 230 V, 60 Hz, 3-Phase, 7 kW, 18 Amps

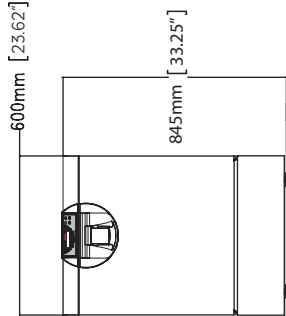
Contact LANCER for Additional info on:

- Customization
- Maintenance Contracts
- Validation Services
- Cleaning Chemicals

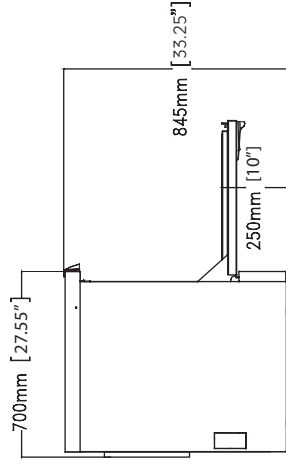
NOTE: DIMENSIONS IN BRACKETS ARE IN INCHES




TOP WITH
DOOR OPEN



FRONT



SIDE WITH
DOOR OPEN

810 LX		
TOLERANCE: ± .20"		
External Dimensions (*)	Chamber Dimensions	
Height: 33.25" Width: 23.62" Depth: 27.55"	Height: 20" Width: 21" Depth: 20"	
<div><div></div><div>(*) Overall dimensions subject to change according to following selected options (plinth)</div></div>		

Required Utilities:

Cold Water/Purified water (each requires) - shut off valve (threaded 3/4 male hose thread) / flow rate of 5 1/4 gal/min (20 l/min, pressure between 29 and 87 psig (200 to 600 kPa)

Drain Connection – fixed standpipe and plumbing trap (min. inside diam. 1 1/2 inches – 40 mm) / height above finished floor 20-27 inches (500 – 700 mm) / flow rate: 10.5 gal/min (40 l/min) / AS AN OPTION can be configured for floor draining with optional floor drain kit

Condenser Drain Connection - fixed standpipe and plumbing trap (min. inside diam. 1 1/2 inches – 40 mm) / height above finished floor 20-27 inches (500 – 700 mm) / flow rate: 5 gal/min (20 l/min) / AS AN OPTION can be configured for floor draining with optional floor drain kit

Electricity (electric models)

- 208 V, 60 Hz, 1-Phase, 7 kW, 34 Amps
- 208 V, 60 Hz, 3-Phase, 7 kW, 20 Amps
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LANCER

04	12/18/09	Add Specifications	
REV.	DATE	MODIFICATIONS - REVISIONS	
Drawing# 810 LX		Title:	
Tag #		- GENERAL DRAWING OF THE WASHER -	
LANCER		- 810 LX -	
Drawn by:	Checked by:	Scale	Sheet: 1/1

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Lancer Washing Accessories: *flexibility* is the key to efficient cleaning

Lancer Washers

With over 35 years of experience, Lancer is the industry leader in washing equipment. Providing glassware washers to the technological marketplace, Lancer offers a solution to suit any cleaning application. Lancer Glassware washers range from undercounters to free-standing units with varying capacities to suit any wash load.

A variety of racks and accessories are available to accommodate all types of glassware and laboratory items. This brochure provides a comprehensive listing of accessories as well as rack placement guides to provide the information you need to choose the right accessory based on your glassware loads and wash cycle needs.

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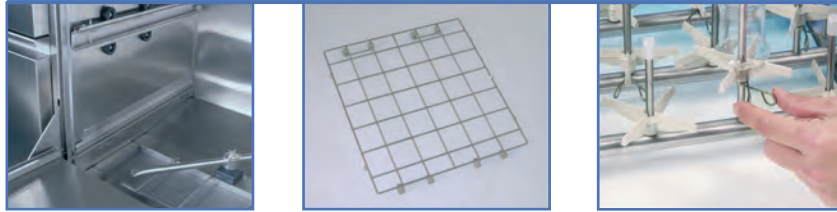
Washing Accessories (810 LX/815 LX/820 LX /910 LX /1300 LX /1800 LXA)	4
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Lancer offers the widest range of washers and accessories. If you have any questions or for further details please contact a Lancer Sales Representative at (800)332-1855 or visit our website at www.lancer.com.

Lancer Washing:

User Friendly Loading Systems

- ▣ **Telescopic Rails:** baskets are mounted on fully load bearing rails in the extended position allowing for ease of loading and unloading of glassware.
- ▣ **Glassware Height Adjustment:** adjustable star feet allow for various heights of glassware to be washed in the same load. Glassware is placed at the right position to obtain the optimum cleaning and drying results.
- ▣ **Customized Grids:** adjustable and fixed support grids are available to optimize load patterns.



Interchangeable Accessories

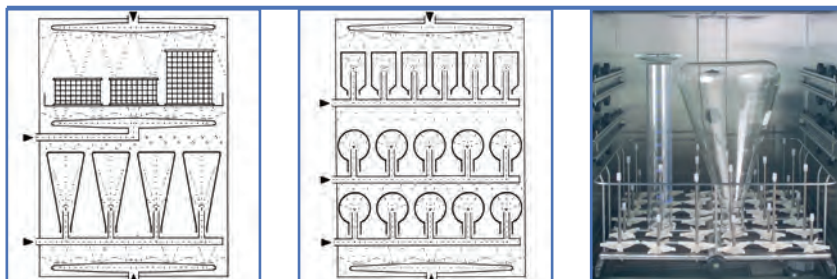
- ▣ Utilizing the independent water connections at each level allows for baskets to be interchanged among levels, reducing the number of required accessories.
- ▣ The 910 LX, 1300 LX, 1400 LXP, 1600 LXP and 1800 LXA washers are equipped with an additional water connection, allowing for placement of accessories at the required height depending on load configuration.

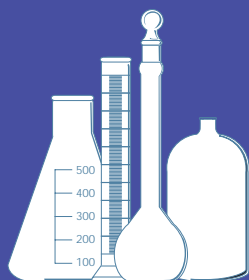


Flexibility: 910 LX chamber shown with two accessories in three different loading configurations.

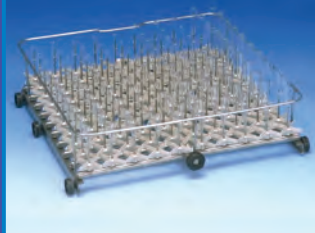
Powerful Glassware Cleaning and Drying

- ▣ Top and bottom spray arms ensure accurate cleaning of the outside surfaces of the glassware.
- ▣ Independent water connections on each level guarantee optimal water pressure for cleaning the internal surfaces of the glassware.
- ▣ Direction Injection Drying: hot air is directed through rack injectors and circulated throughout the washer chamber to ensure rapid drying of the glassware. (On models equipped with injection drying.)





IXA Rack



IXL Rack



Injector Racks:

2 mm diam short jets

Items Washed:

- ☐ small narrow neck glassware

Available Accessories:

- ☐ 48 IXA - 48 jets
- ☐ 64 IXA - 64 jets
- ☐ 100 IXA - 100 jets
- ☐ GCI - Cover for injector racks
- ☐ GCI 1/2 - Half cover

2 & 6 mm diam short jets

Items Washed:

- ☐ small narrow neck glassware
- ☐ bottles
- ☐ cylinders
- ☐ boiling flasks
- ☐ erlenmeyer flasks
- ☐ volumetric flasks

Available Accessories:

- ☐ 64 IXA/2 - 64 jets
- ☐ 100 IXA/2 - 100 jets

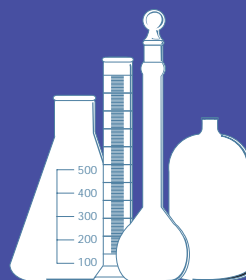
6 mm diam short jets

Items Washed:

- ☐ bottles
- ☐ cylinders
- ☐ boiling flasks
- ☐ erlenmeyer flasks
- ☐ volumetric flasks

Available Accessories:

- ☐ 27 IXC 1/2 - half rack 27 jets
- ☐ 36 IXC - 36 jets
- ☐ 41 IXC - 41 jets
- ☐ 48 IXC - 48 jets
- ☐ 100 IXC - 100 jets



IXLC Rack



GCI Cover



6 mm diam long and short jets

Items Washed:

- ☐ bottles
- ☐ cylinders
- ☐ boiling flasks
- ☐ erlenmeyer flasks
- ☐ volumetric flasks

Available Accessories:

- ☐ 36 IXLC - 36 jets
- ☐ 48 IXLC - 48 jets
- ☐ 64 IXLC - 64 jets
- ☐ 100 IXLC - 100 jets

6 mm diam long jets

Items Washed:

- ☐ bottles
- ☐ cylinders
- ☐ boiling flasks
- ☐ erlenmeyer flasks
- ☐ volumetric flasks

Available Accessories:

- ☐ 20 IXL D6 - 20 jets
- ☐ 36 IXL - 36 jets
- ☐ 48 IXL - 48 jets
- ☐ 64 IXL - 64 jets

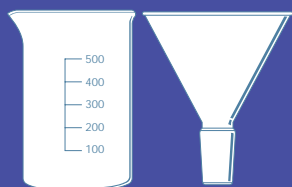
8 mm diam long jets

Items Washed:

- ☐ bottles
- ☐ cylinders
- ☐ boiling flasks
- ☐ erlenmeyer flasks
- ☐ volumetric flasks

Available Accessories:

- ☐ 20 IXL - 20 jets



PST Basket



Basic Baskets:

Items Washed:

- ☐ beakers
- ☐ cones
- ☐ trays
- ☐ dishes
- ☐ dissolution vessels
- ☐ reaction flasks
- ☐ funnels
- ☐ instruments
- ☐ jars

Available Accessories:

- ☐ **PST** - Basic basket
- ☐ **PSBT** - Basic basket with spray arm
- ☐ **GC** - Cover for PST/PSBT
- ☐ **GC 1/2** - Half cover



LTC 1/3 Basket



STC Basket



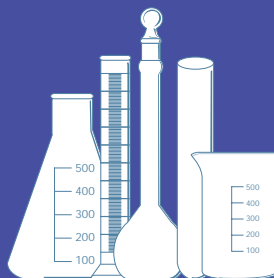
Small Mesh Baskets:

Items Washed:

- ☐ bottle caps
- ☐ ferrules
- ☐ plugs
- ☐ stoppers
- ☐ test tubes

Available Accessories:

- ☐ **STC** | **STC 1/3** - short basket (WITH cover)
- ☐ **LTC** | **LTC 1/3** - tall basket (WITH cover)
- ☐ **PPM** - fine mesh for small items (attached cover) - 122 mm x 134 mm x 93 mm
- ☐ **PPM 80** - fine mesh for small items (attached cover) - 80 mm x 80 mm x 34 mm



PS 27 IXLC Rack



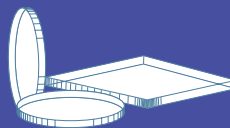
Multipurpose Racks :

Items Washed:

- ☐ bottles
- ☐ cylinders
- ☐ boiling flasks
- ☐ erlenmeyer flasks
- ☐ volumetric flasks
- ☐ beakers
- ☐ cones
- ☐ trays
- ☐ dishes
- ☐ dissolution vessels
- ☐ reaction flasks
- ☐ funnels
- ☐ instruments
- ☐ jars

Available Accessories:

- ☐ **PS/27 IXLC** - 1/2 PST basket | 1/2 27 jets
- ☐ **25 PIP/30 IXLC** - 1/2 pipettes | 30 jets
- ☐ **4 EP/25 IXLC** - 4 vol flasks | 25 jets
- ☐ **50PIP/34 IXLC** - 1/2 pipette rack | 34 jets
- ☐ **PS/21 IXLC/25 PIP** - PST | pipettes | 21 jets



BP Rack



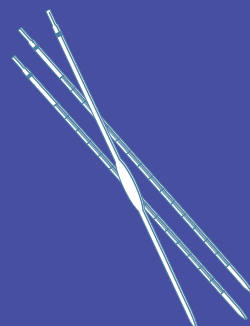
Other Applications :

Items Washed:

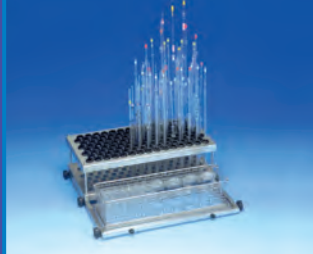
- ☐ thin plates
- ☐ culture dishes
- ☐ watch glasses

Available Accessories:

- ☐ **20 PL** - Basket for thin plates
- ☐ **BP** - Basket for culture dishes
- ☐ **SSC** | **SSL** - Supports
- ☐ **VM 1/3** - 1/2 basket for watch glasses



PIP Rack



Pipette Racks:

Items Washed:

- ☐ pipettes

Available Accessories:

- ☐ **100 PIP** - grommet style
- ☐ **PPI 2B/4B** - canister style

TN Trolley



Storage / Transport:

Storage and transport of Lancer Accessories.

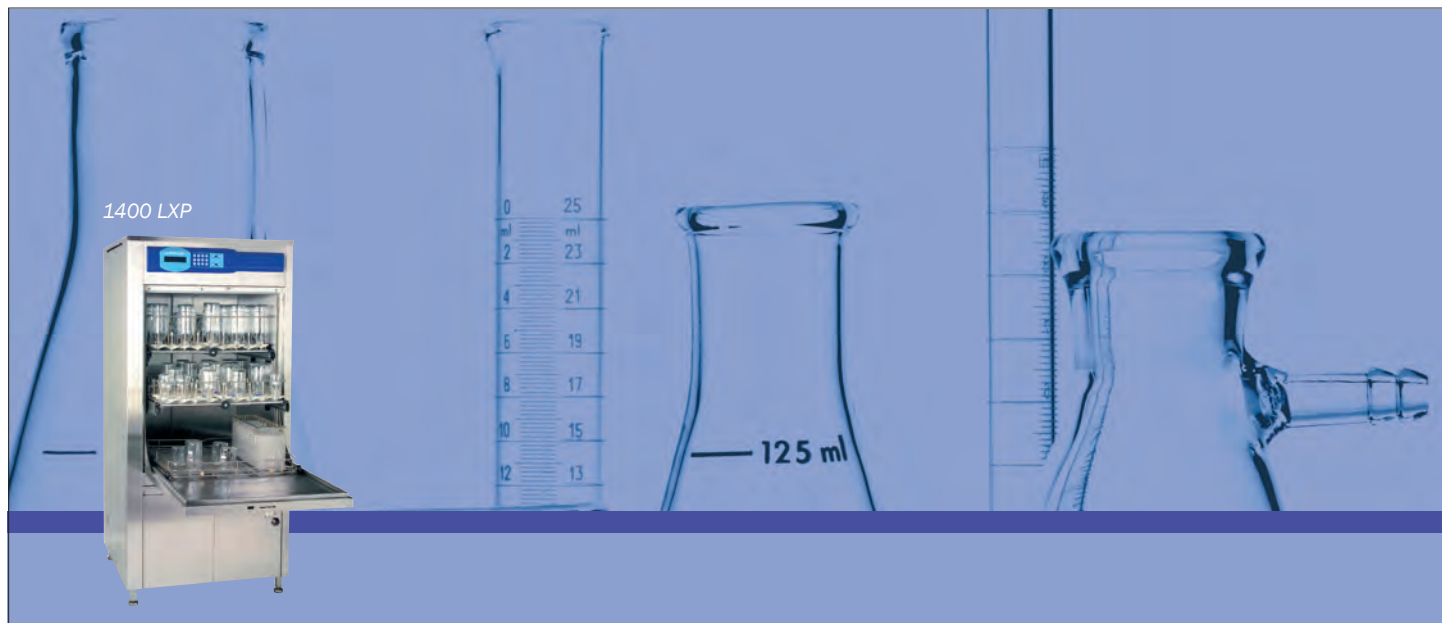
- ☐ **RP** - Stand to hold 5 racks
- ☐ **TN 910 LX** - Door plus upper level trolley
- ☐ **TN 13 LX** - Door plus two upper levels trolley
- ☐ **TN 18 LX** - Door plus three upper levels trolley

Base Cabinets :

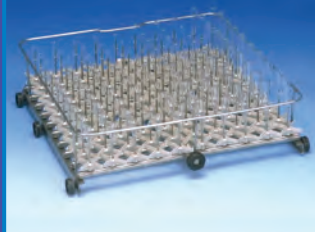
Stainless steel base cabinet for undercounter washers only.

- ☐ **CAPN 81LX** - SS plinth for 810 LX and 815 LX
- ☐ **CAPN 82LX** - SS plinth for 820 LX

1400 LXP



IXA Rack



IXC Rack



Injector Racks:

2 mm diam short jets

Items Washed:

- ☐ small narrow neck glassware

Available Accessories:

- ☐ 81 IXA 14LXP - 81 jets
- ☐ 100 IXA 14LXP - 100 jets
- ☐ GCI 14LXP - Cover for injector racks
- ☐ GCI 1/2 14LXP - 1/2 Cover for injector racks

2 & 6 mm diam short jets

Items Washed:

- ☐ small narrow neck glassware
- ☐ bottles
- ☐ cylinders
- ☐ boiling flasks
- ☐ erlenmeyer flasks
- ☐ volumetric flasks

Available Accessories:

- ☐ 64 IXA/2 14LXP - 64 jets
- ☐ 81 IXA/2 14LXP - 81 jets
- ☐ 100 IXA/2 14LXP - 100 jets

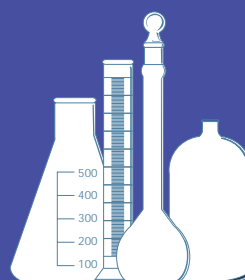
6 mm diam short jets

Items Washed:

- ☐ bottles
- ☐ cylinders
- ☐ boiling flasks
- ☐ erlenmeyer flasks
- ☐ volumetric flasks

Available Accessories:

- ☐ 48 IXC 14LXP - 48 jets
- ☐ 64 IXC 14LXP - 64 jets
- ☐ 81 IXC 14LXP - 81 jets
- ☐ 100 IXC 14LXP - 100 jets



IXL Rack



GCI Cover



6 mm diam long and short jets

Items Washed:

- ☐ bottles
- ☐ cylinders
- ☐ boiling flasks
- ☐ erlenmeyer flasks
- ☐ volumetric flasks

Available Accessories:

- ☐ 32 IXLC 1/2 14LXP - half rack 32 jets
- ☐ 36 IXLC 14LXP - 36 jets
- ☐ 48 IXLC 14LXP - 48 jets
- ☐ 64 IXLC 14LXP - 64 jets
- ☐ 81 IXLC 14LXP - 81 jets

6 mm diam long jets

Items Washed:

- ☐ bottles
- ☐ cylinders
- ☐ boiling flasks
- ☐ erlenmeyer flasks
- ☐ volumetric flasks

Available Accessories:

- ☐ 24 IXL 14LXP - 24 jets
- ☐ 36 IXL 14LXP - 36 jets
- ☐ 48 IXL 14LXP - 48 jets
- ☐ 64 IXL 14LXP - 64 jets

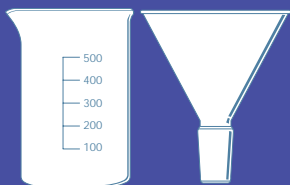
8 mm diam long jets

Items Washed:

- ☐ bottles
- ☐ cylinders
- ☐ boiling flasks
- ☐ erlenmeyer flasks
- ☐ volumetric flasks

Available Accessories:

- ☐ 4 IXL 14LXP - 4 jets
- ☐ 9 IXL 14LXP - 9 jets



PSBT Basket



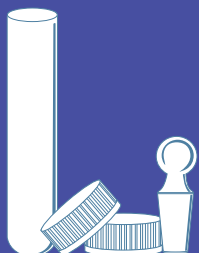
Basic Baskets:

Items Washed:

- ☐ beakers
- ☐ cones
- ☐ trays
- ☐ dishes
- ☐ dissolution vessels
- ☐ reaction flasks
- ☐ funnels
- ☐ instruments
- ☐ jars

Available Accessories:

- ☐ **PST 14LXP** - Basic basket
- ☐ **PSBT 14LXP** - Basic basket with spray arm
- ☐ **GC 14LXP** - Cover for PST/PSBT
- ☐ **GC 1/2** - Half cover



LTC 1/3 Basket



STC Basket

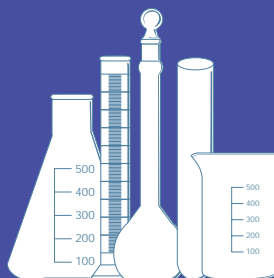
Small Mesh Baskets:

Items Washed:

- ☐ bottle caps
- ☐ ferrules
- ☐ plugs
- ☐ stoppers
- ☐ test tubes

Available Accessories:

- ☐ **STC | STC 1/3** - short basket (WITH cover)
- ☐ **LTC | LTC 1/3** - tall basket (WITH cover)



4 EP/IXLC Rack



Multipurpose Racks :

Items Washed:

- ☐ bottles
- ☐ cylinders
- ☐ boiling flasks
- ☐ erlenmeyer flasks
- ☐ volumetric flasks
- ☐ beakers
- ☐ cones
- ☐ trays
- ☐ dishes
- ☐ dissolution vessels
- ☐ reaction flasks
- ☐ funnels
- ☐ instruments
- ☐ jars

Available Accessories:

- ☐ **31 PIP/25 IXLC 14 LXP** - 1/2 pipette rack | 25 jets
- ☐ **4 EP/24 IXLC 14LXP** - 4 vol flasks | 24 jets
- ☐ **PS/32 IXLC 14LXP** - PST | 32 jets

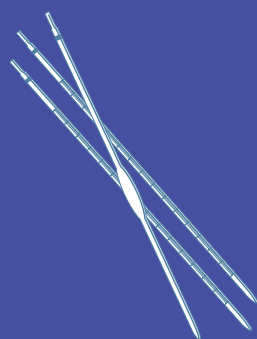
RP Stand



Storage/Transport:

Storage and transport of Lancer Accessories.

- ☐ **RP 14LXP** - Stand to hold 5 racks
- ☐ **TN 14LXP** - Door plus upper level trolley



PIP Rack



Pipette Racks:

Items Washed:

- ☐ pipettes

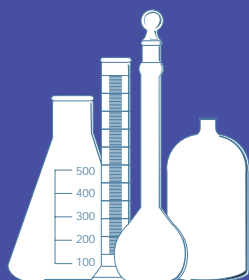
Available Accessories:

- ☐ **124 PIP 14LXP** - grommet style
- ☐ **PPI 4B 14LXP** - canister style

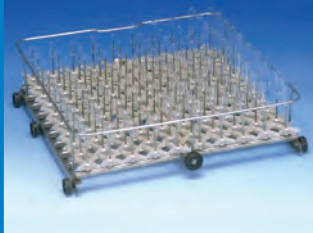


1600 LXP

1600 LXP



IXA Rack



IXL Rack



Injector Racks:

2 mm diam short jets

Items Washed:

- ☐ small narrow neck glassware

Available Accessories:

- ☐ 100 IXA 16 - 100 jets
- ☐ 144 IXA 16 - 144 jets
- ☐ GCI 16 - Cover for injector racks

2 & 6 mm diam short jets

Items Washed:

- ☐ small narrow neck glassware
- ☐ bottles
- ☐ cylinders
- ☐ boiling flasks
- ☐ erlenmeyer flasks
- ☐ volumetric flasks

Available Accessories:

- ☐ 100 IXA/2 16 - 100 jets
- ☐ 144 IXA/2 16 - 144 jets

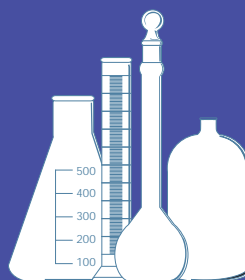
6 mm diam short jets

Items Washed:

- ☐ bottles
- ☐ cylinders
- ☐ boiling flasks
- ☐ erlenmeyer flasks
- ☐ volumetric flasks

Available Accessories:

- ☐ 36 IXC 16 - 36 jets
- ☐ 64 IXC 16 - 64 jets
- ☐ 80 IXC 16 - 80 jets
- ☐ 100 IXC 16 - 100 jets
- ☐ 144 IXC 16 - 144 jets



IXLC Rack



GCI Cover



6 mm diam long and short jets

Items Washed:

- ☐ bottles
- ☐ cylinders
- ☐ boiling flasks
- ☐ erlenmeyer flasks
- ☐ volumetric flasks

Available Accessories:

- ☐ 36 IXLC 16 - 36 jets
- ☐ 64 IXLC 16 - 64 jets
- ☐ 80 IXLC 16 - 80 jets
- ☐ 100 IXLC 16 - 100 jets

6 mm diam long jets

Items Washed:

- ☐ bottles
- ☐ cylinders
- ☐ boiling flasks
- ☐ erlenmeyer flasks
- ☐ volumetric flasks

Available Accessories:

- ☐ 36 IXL 16 D6 - 36 jets
- ☐ 64 IXL 16 - 44 jets
- ☐ 80 IXL 16 - 80 jets
- ☐ 100 IXL 16 - 100 jets

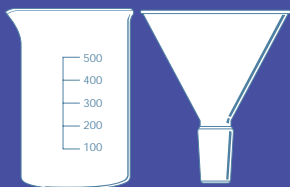
8 mm diam long jets

Items Washed:

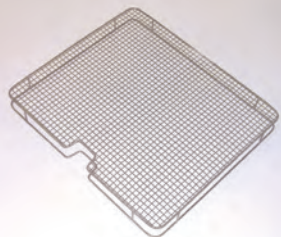
- ☐ bottles
- ☐ cylinders
- ☐ boiling flasks
- ☐ erlenmeyer flasks
- ☐ volumetric flasks

Available Accessories:

- ☐ 36 IXL 16 - 36 jets



GC Cover



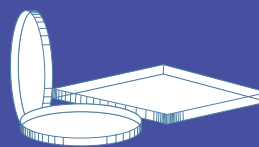
Basic Baskets:

Items Washed:

- ☐ beakers
- ☐ cones
- ☐ trays
- ☐ dishes
- ☐ dissolution vessels
- ☐ reaction flasks
- ☐ funnels
- ☐ instruments
- ☐ jars

Available Accessories:

- ☐ **PST 16** - Basic basket
- ☐ **PSBT 16**- Basic basket with spray arm
- ☐ **GC 16** - Cover for PST/PSBT



BP Rack



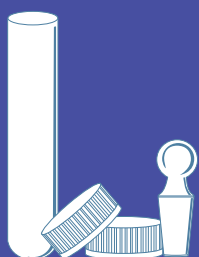
Other Applications:

Items Washed:

- ☐ thin plates
- ☐ culture dishes
- ☐ watch glasses

Available Accessories:

- ☐ **BP 16** - Basket for culture dishes
- ☐ **SSC 16 | SSL 16** - Supports
- ☐ **SSC 1/3 PS 16 | SSL 1/3 PS 16** - Supports
- ☐ **VM 1/3 16** - 1/2 basket for watch glasses



LTC Basket



Small Mesh Baskets:

Items Washed:

- ☐ bottle caps
- ☐ ferrules
- ☐ plugs
- ☐ stoppers
- ☐ test tubes

Available Accessories:

- ☐ **STC | STC 1/3** - short basket (WITH cover)
- ☐ **LTC | LTC 1/3** - tall basket (WITH cover)

TN Trolley



Storage/Transport:

Storage and transport of Lancer Accessories.

- ☐ **RP 16** - Stand to hold 5 racks
- ☐ **TN 16** - Door plus three upper level trolley
- ☐ **NB 16** - Door level trolley

Pipette Racks:

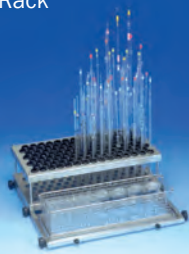
Items Washed:

- ☐ pipettes

Available Accessories:

- ☐ **105/210 PIP 16** - grommet style

PIP Rack



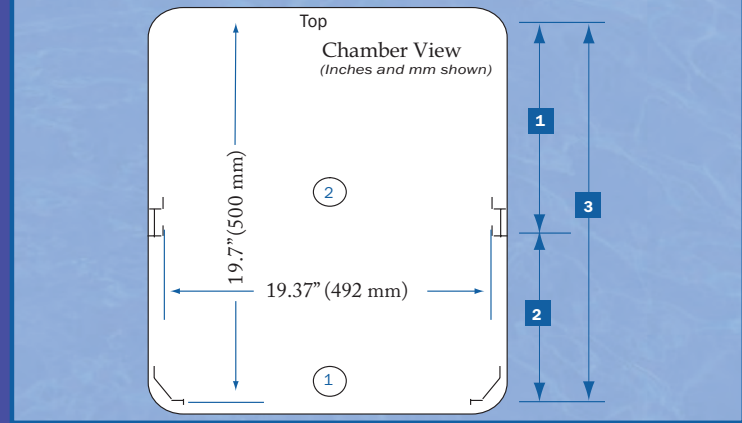
Rack Position Guide



Available Basket Heights

810 LX/815 LX/820 LX

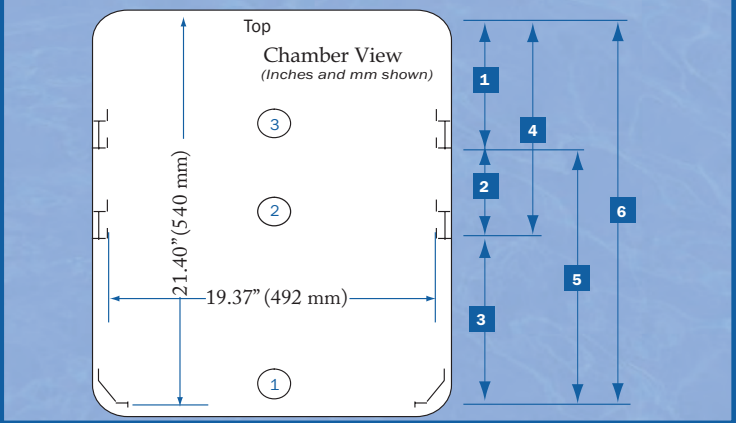
	PST	PSBT	IXL	IXC
1		6.7" 170	7.5" 190	7.7" 195
2	9" 230		6.9" 175	7.1" 181
3	18.9" 480		16.7" 425	



Available Basket Heights

910 LX

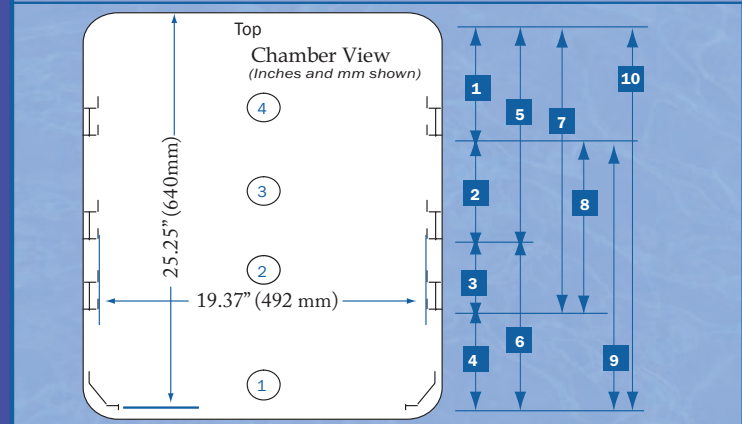
	PST	PSBT	IXL	IXC
1		3" 75		5" 126
2				
3	8.3" 210		5.9" 150	6.5" 166
4		7.7" 195	9" 230	
5	13" 330		10.6" 270	
6	20.5" 520		18.1" 460	



Available Basket Heights

1300 LX

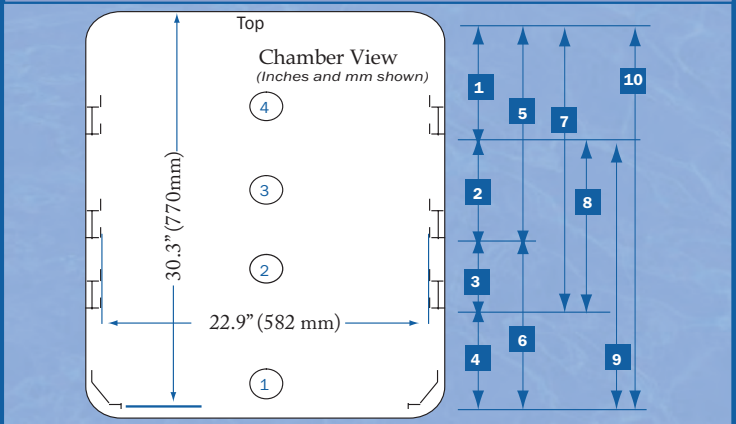
	PST	PSBT	IXL	IXC
1		5.7" 145	7" 180	7.7" 196
2				
3				
4	6.6" 170			4.9" 126
5	10.4" 265	11.8" 300		
6	9.4" 240		7" 180	
7		13.1" 335	14.5" 370	
8		2.9" 75		4.9" 126
9	14.1" 360		11.8" 300	
10	24.4" 620		22" 560	



Available Basket Heights

1400 LXP

	PST	PSBT	IXL	IXC
1		7.09" 180	9.06" 230	9.29" 236
2				3.35" 85
3				
4	9.06" 230			7.09" 180
5	12.99" 330	14.96" 380		
6	11.8" 300		9.84" 250	
7		15.75" 400	17.72" 450	
8		3.94" 100		6.14" 156
9	17.72" 450		15.75" 400	
10	29.5" 750		27.56" 700	



All Models

Injector Racks:

24 | IX | L | 14 LXP | D6

24 = number of injectors

IX = rack type

L = length of injectors

□ **L** = long injectors

□ **C** = short injectors

□ **LC** = mix long & short injectors

□ **A** = 2 mm diam. injectors

□ **C** = short injectors

□ **CM** = mix of short 6 mm & 2 mm diam. injectors

□ **A/2** = mix of short 6 mm & 2 mm diam. injectors

14 LXP = washer model

□ **None** = for models 810 LX, 815 LX, 820 LX, 910 LX, 1300 LX, 1800 LX

□ **14 LXP** = for model 1400 LXP

□ **16** = for model 1600 LXP

D6 = special diameter injectors

□ **D6** = 6 mm (8 mm standard diam.)

□ **D8** = 8 mm (6 mm standard diam.)

Basic Basket:

PST | 16

PST = basket type

□ **PST** = basic basket for bottom level

□ **PSBT** = basic basket with spray arm for upper levels

16 = washer model

□ **None** = for models 810 LX, 815 LX, 820 LX, 910 LX, 1300 LX, 1800 LX

□ **14 LXP** = for model 1400 LXP

□ **16** = for model 1600 LXP

Mesh Baskets:

STC | 1/3

STC = basket height

□ **STC** = 93 mm

□ **LTC** = 163 mm

1/3 = basket length

□ **None** = 134 mm

□ **1/3** = 409 mm

Pipette Racks:

105 | PIP | 16

105 = number of pipette inserts

PIP = pipette basket type

16 = washer model

□ **None** = for models 810 LX, 815 LX, 820 LX, 910 LX, 1300 LX, 1800 LX

□ **14 LXP** = for model 1400 LXP

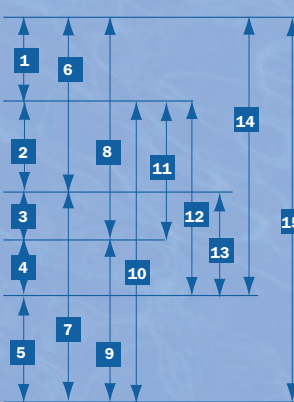
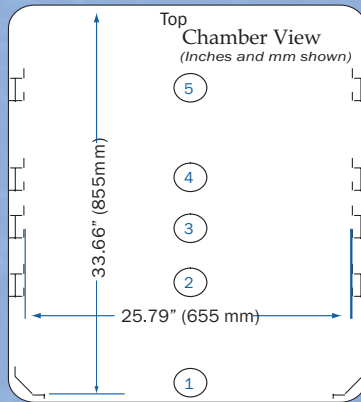
□ **16** = for model 1600 LXP



Available Basket Heights

	PST	PSBT	IXL	IXC											
1		2.95" 75		5.15" 131	6		10.66" 271	12.24" 311		11		7.05" 179	8.62" 219	9.25" 235	
2		2.99" 76		5.2" 132	7	17.24" 438		15.11" 384		12		12.12" 308	13.70" 348		
3					8		15.31" 389	16.88" 429		13		4.40" 112	5.98" 152	6.61" 168	
4				2.55" 65	9	13.18" 335		11.06" 281		14		19.80" 503	21.37" 543		
5	8.11" 206		5.98" 152	6.61" 168	10			22.83" 580		15	32.63" 829		30.51" 775		

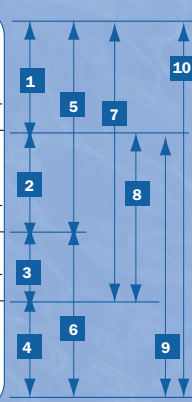
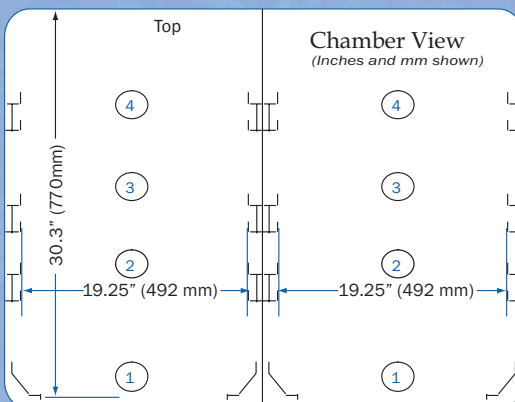
1600 LXP



Available Basket Heights

	PST	PSBT	IXL	IXC		PST	PSBT	IXL	IXC
1		7.09" 180	9.06" 230	9.29" 236	6	11.8" 300		9.84" 250	
2				3.35" 85	7		15.75" 400	17.72" 450	
3					8		3.94" 100		6.14" 156
4	9.06" 230			7.09" 180	9	17.72" 450		15.75" 400	
5		12.99" 330	14.96" 380		10	29.5" 750		27.56" 700	

1800 LXA



LANCER

Lancer USA Inc

3543 State Rd 419
Winter Springs, FL 32708

Toll Free: (800)332-1855

Phone: (407)327-8488

Fax: (407)327-1229

sales@lancer.com

www.lancer.com