

LANCER

LAB GLASSWARE WASHER-DRYERS THE COMPLETE RANGE





WHATEVER YOU NEED FOR HIGH QUALITY CLEANING

Lancer is the world's only real specialist in automated cleaning of laboratory glassware and equipment. We offer a comprehensive range of effective and ergonomical washer-dryers, as well as racks and accessories, to meet every need. We also provide everything from initial advice to after-sales support.

Lancer's market-leading range comprises everything from compact underbench models to large units that can clean glassware on up to six levels. This brochure gives you a general overview of our range, but we are also able to customize solutions to meet just about every special need. Briefly put, we can supply what you need for almost any application or laboratory space. So if you don't find it here, just ask.

Lancer has been appreciated by the scientific community for providing effective solutions to washing problems for over four decades. The list of users – universities, government testing and research organizations, hospitals, QA and research laboratories in all the leading pharmaceutical, food and chemical companies – is a testament to the quality of Lancer products and equipment.

Lancer is part of the Getinge Group, which provides the world's most comprehensive range of disinfection equipment. Both Lancer and Getinge are known for technical excellence and long-term customer value. Our robust, user-friendly machines and accessories provide the high standard of performance and results demanded by professionals.

Lancer equipment are CE-marked and manufactured under ISO9001 accreditation.

*For more information please visit our website:
www.lancer.fr*



QUALITY & FUNCTIONALITY

THE LANCER APPROACH

Lancer products are designed exclusively for professional users with high demands on quality, validation, hygiene, user-friendliness and reliability. The added benefit of this approach is low lifetime costs.

Meeting different demands

Most laboratories require frequent washing of all glassware, which includes different types and sizes of glassware and different degrees of soiling. This in turn requires different processes and detergent dosing systems to achieve the maximum cleaning effect in combination with minimal water and energy consumption.

Lancer therefore offers a wide range of washer-dryers to suit almost every possible application, volume, space and budget.

Lancer equipment is constructed in high-grade stainless steel and resistant components, to withstand intensive use and aggressive materials. Our powerful, efficient washer-dryers have exterior panels of high-grade AISI-304L stainless steel. Most of our wash chambers, doors and spray arms are made of sanitary AISI-316L, and also have insulated double-wall constructions for excellent thermal and sound protection.

For your safety and convenience, all Lancer drop-down doors are load-bearing and counter-balanced for ergonomical loading of glassware and support racks. Racks and accessories are designed for easy handling and cleanability.

Let's look at our design principles ...

Washing for outstanding results

Lancer's superior hydraulic design maximizes flow and pressure with a single, direct fluid path and no intermediate accessories. This design ensures an efficient, yet gentle mechanical effect whatever the load. Additionally, racks are held in place by the door (drop down) to ensure

positive connection without the loss of pressure and flow that is common with other designs.

This unique and proven design ensures that washing action is maintained with the same efficacy throughout the load.

Every rack is interchangeable on any level and directly connected to the water manifold located at the back of the chamber. Therefore, the total surface of the basket and total volume of the chamber are available for the load, optimizing productivity whatever the load configuration.

Because we know that the wash load can be very different from a day to the other, all our vertical washers are provided with at least one adjustable wash level in order to better fit your various applications. Lancer really helps you here by reducing the number of racks required.

For the most complex applications, Lancer allows you to customize the positions of the different wash levels (option available from 910 LX).

Top and bottom spray arms provide thorough coverage for the interior and exterior of the glassware. Lancer jet racks enable efficient cleaning inside narrow-neck glassware. We also offer special racks and inserts to wash inside difficult items, e.g. pipettes.

Telescopic load-bearing runners support the racks and allow ergonomic and safe loading.

Water rinses are programmable for hot, cold, hot/cold DI water. After every wash and rinse phase, the system is completely drained. A water cooled condenser (option) ensures rapid reduction of temperature and humidity. The water can be heated either electrically or by steam supply (option).

Drying for fast throughput

Lancer integral drying systems provide real advantages for the user. Most models have rapid injector drying as standard. The high-performance blower and effective routing of the hot air through the chamber and injectors ensures complete drying of glassware both inside and outside, making the machine and the glassware quickly available for re-use. A HEPA class-S airborne particle filter ensures clean (99.99%) dry air.

Easy and versatile operation

All Lancer laboratory washers have an easy touchpad control system and display that offers a variety of washing programs, control, service and programming functions. Access to the service and programming functions is PIN-code protected. A self-diagnostic microprocessor constantly monitors the processes and gives alarms automatically in the event of an operational problem.

Effective cleaning is dependant on the cycle length, cycle phases, temperature and correct dosing of detergent and additives. Lancer washer-dryers offer an unrivalled choice of easy-to-use program options to ensure high quality results every time.

Advanced Validation

For the most demanding applications such as in the pharmaceutical applications, our premium LXP and LXA washers can be equipped with a full stainless steel hydraulic circuit (option). When combined with our sanitary final rinse kit (option), our premium washers provide the highest hygienic levels offered by non GMP washers.

In addition, these units can be equipped with a validation monitor (MONVAL option) providing an independent real time monitoring of all critical parameters (pump pressure, temperature, detergent delivery...). A conductivity measurement (option) can be automatically performed during the final rinse to validate the quality of the washing process.

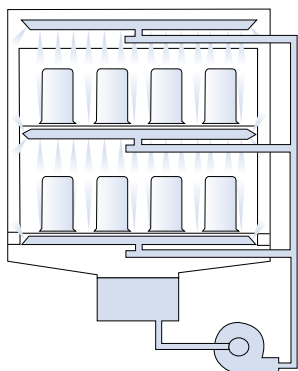
All washers can also be provided with a full IQ-OQ validation protocol and a printer to document and trace the data related to cycle performed.

Lancer green initiatives

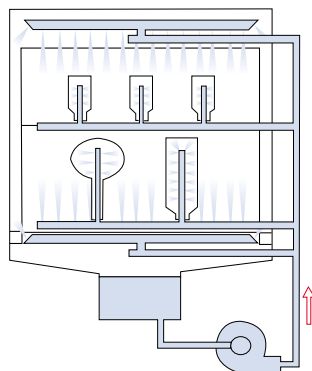
Our washers are designed and manufactured in an environmental friendly facility certified 14001 since 2003.

By constantly reducing the energy and water consumption levels of our products, each new washer we manufacture is a step forward to a cleaner environment. They will provide you with amongst the best ratio water consumption/ washing efficacy available in our industry.

WASHING PRINCIPLES



Lancer's concept of Direct Connection of the racks to the main water column is a "must have" for professional cleaning results. Spray arms allow an adequate spray coverage for an efficient cleaning inside and out of open mouth glassware



Injectors racks will be used to clean narrow neck glassware (measuring cylinders, flasks...) with the same efficacy whatever the position of the glassware in the chamber. Drying hot air will follow the same path to dry the glassware from inside.



VERSATILE RACKS & ACCESSORIES TO MEET EVERY NEED

Good glassware washing results require racks and baskets specially designed for each purpose and item. Lancer's decades of technical experience and customer feedback have driven the development of accessories that assure ergonomic handling and effective cleaning of flasks, bottles, beakers, bulbs, tubes, pipettes etc.

Our rack systems are common across six different washers - the 810 to 1300 LX and 1800 LX models – enabling economical upgrade when expanding the capacity of your laboratory. Only the 1400 and 1600 models have their own range of racks. In other words, starting with Lancer means growing with Lancer as you can keep your racks when acquiring new bigger units. Lancer racks fit on any level without the need for adjustment, which allows great flexibility, especially with mixed loads. All our racks are constructed in stainless steel, assembled with care, individually finished and polished to ensure a long life of intensive usage. We can also supply tailor-made racks for your specific requirements.



PST rack



ST, LT basket for tubes and small items



PSBT rack



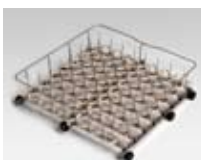
BP rack for petri dishes



IXL rack for 36, 64, 80 or 100 injectors (6 & 8 mm)



IXC rack for 36, 64, 80, 100 or 144 short injectors (6 mm)



IXA rack for 100 or 144 short injectors (2 mm)



IXLC rack for 36, 64, 80 or 100 injectors (6 or 8 mm)



PIP racks for 25 pipettes. (Also available for 105 and 210 pipettes)



Mixed rack: according to your loading need (short-, long injectors / pipettes / basic basket ...)

For further detail please refer to our dedicated specific accessories catalogue

LANCER 800 LX UNDERBENCH SERIES

THE ULTIMATE SPACE-SAVERS

No need to compromise on the quality of results if your laboratory has limited space or budget. Three popular Lancer 800 LX-series models give you the same high performance cleaning principles as on all Lancer washers.

All three models are designed to fit under standard laboratory benches. They wash on 2 independent levels and have the same wash chamber dimensions, as well as knock-out sections in the stainless steel panels at the rear and both sides to allow utility connections where it suits you best.

Easy operation

- Unique chamber design allows automatic connection of the interchangeable baskets and racks.
- Lancer also offers a versatile rack (PS/27 IXLC) for these small chambered models, with a mix of injectors and mesh trays so you can wash many different sizes and types (from narrow-necked flasks to wide beakers) in the same load.
- The parameters of the program phases, temperature, time, chemical intake, etc can be easily modified by the user (PIN-code protected).

Robust construction

- High-grade 304L stainless steel externally.
- Full high grade 304L stainless steel construction / chamber in 316L (optional)
- Electronic door lock to prevent interference with the wash cycle.
- Two peristaltic pumps for accurate and automatic detergent and acid delivery.
- Unique, proven design enables water circulation at full pressure on all levels, giving the required mechanical effect for highly efficient washing in all areas of the load.



Lancer 810 LX

With its small footprint, this washer is the economical choice of many small labs, especially if built-in drying is not required. Easy selection of 4 standard washing programs for typical applications such as chemistry glassware, bacteriology/virology (high temperature), or heavily soiled items (e.g. agar) and volumetric flasks.

Lancer 815 LX

This washer-dryer is the same as the Lancer 810 LX, but with the addition of forced hot air chamber drying after the final rinse. As any Lancer labware washer, the 815 LX, is also fitted with an electrical door lock ensuring the highest safety levels and makes this washer compliant with international regulations.

Lancer 820 LX

In addition to the 4 preset wash programs, the 820 LX is fitted with 38 user programmable cycles for enhanced flexibility. This washer has the same chamber size as the others in this series, but it is 300 mm wider externally to accommodate a built-in drawer for the safe placement and storage of chemicals. More importantly, it has a powerful, HEPA filtered, forced hot air drying through the injectors and chamber to ensure complete, hygienic and rapid drying of glassware both inside and out – making it ready to use immediately!



810/815 LX with 1 wash-level (upper level removed for tall glassware)



810/815 LX with 2 wash-level



820 LX

LANCER 910 LX WASHER-DRYER FOR COMPACT VERSATILITY

With its door at a height that allows convenient, ergonomical loading to avoid back strain, the all-round Lancer 910 LX washer-dryer has a small footprint but a surprisingly large capacity.

This free-standing model is designed for racks on 2 levels, with a choice of positions on the upper level. It also has, as standard, a HEPA-filtered injector drying system that blows clean hot air through injectors as well as the chamber to ensure rapid and complete drying of glassware, inside and outside. As a result, glassware is ready to use as soon as the cycle is finished.

Easy operation

- One-touch start and simple controls and display.
- 42 microprocessor-controlled programs to suit particular applications or loads. Of these, 4 are factory preset and 38 can be user-customized (PIN-code protected), to give you great flexibility.
- Control panel with 2-line, backlit LCD and up to 16-character program-naming capability.
- Self-diagnostic software to monitor all parameters of the operation and alarms. You can easily adjust up to 53 different parameters, e.g. program phases, temperatures and times of each phase, cleaning chemical dosing, drying temperature and time.
- Ergonomic loading height (800mm).
- Telescopic load-bearing runners to minimize back strain when loading and unloading.
- On-board chemical storage takes 2 x 10L standard chemical bottles for safe, easy handling.
- Two peristaltic pumps for automatic and accurate chemicals delivery.

Robust construction

- High-grade 304L stainless steel externally.
- Sanitary AISI-316L stainless steel wash arms as well as inside the chamber and door to ensure that the washing process resists all effects of detergents, additives and general laboratory residues.
- Electronic door lock to prevent interference with the wash cycle.
- Electric door closing system that automatically closes the door at the start of cycle and helps to prevent glassware damage.
- Unique, proven design enables water circulation at full pressure on all levels, giving the required mechanical effect for highly efficient washing in all areas of the load.



LANCER 1300 LX WASHER-DRYER

HIGH-VOLUME VERSATILITY

This free-standing washer-dryer easily handles glassware on 3 levels, yet has a small footprint. A truly cost-effective choice for handling high-volume throughput or mixed loads.

The middle level features a choice of positions to accommodate loads of different types and sizes – or lots of similar items. It has a powerful HEPA-filtered injector drying system, as standard, to ensure rapid and complete drying of glassware inside and out. Glassware is ready to use as soon as the cycle is finished.

Easy operation

- Programming, display and controls are convenient and simple to use with touch-pad start and easy-to-read backlit LCD display.
- 42 microprocessor-controlled programs, 4 of which are factory-preset and 38 can be user-customized (PIN-code protected) for particular applications or loads.
- Easy adjustment of up to 53 different parameters, e.g. program phases, temperature and time of each phase, cleaning chemical dosing, as well as the drying temperature and time.
- Self-diagnostic software to monitor all operational parameters and give visual and audible alarms as needed.

Robust construction

- Insulated, double-wall construction for thermal and sound protection, and to maximize working environment comfort.
- Load-bearing door at a safe and convenient height for loading and unloading glassware at the machine rather than having to carry or transport heavy loaded racks from a workbench to the washer.

- On-board drawer for safe storage of 2 x 10L standard chemical bottles to minimize handling and exposure.
- Electronic door lock to prevent disruption during the wash cycle and assure operator safety.
- Chamber and door in sanitary grade finish AISI-316L stainless steel.
- All components that come in contact with the washing process are of materials impervious to the effects of detergents, additives and general laboratory residues.
- Unique, proven design enables water circulation at full pressure on all levels, giving the required mechanical effect for highly efficient washing in all areas of the load.



LANCER 1400 LX/LXP WASHER-DRYERS

WIDE CHAMBER, THREE LEVELS

These two models – both with wide chambers and three independent washing levels – handle high volumes of glassware and give you high efficiency and throughput.

Both washer-dryers have identical internal and external dimensions, as well as basically the same high performance features and benefits.

The wide chamber (620 mm) has 3 levels, with a choice of positions on the upper level. This enables you to wash and dry high volumes of glassware – whether lots of similar items or mixed loads of various types and sizes. Suitable for either high throughput labs or centralized washing/sterilizing facilities serving many labs where often several Lancer 1400 units side by side provide continuous bulk cleaning.

Easy operation

LANCER 1400 LX and 1400 LXP both offer easy, user-friendly operation, including the following features:

- Programming, display and touch-pad controls are simple to use and easy to read.
- 42/40 microprocessor-controlled programs, of which 4 are factory preset and 38/36 can be user-customized (PIN-code protected) to suit particular applications or loads.
- 53 easily adjustable wash cycle parameters.
- Self-diagnostic software to monitor all parameters of the operation, with visible and audible alarms as needed.
- Powerful HEPA-filtered injector drying system as standard to ensure rapid and complete drying of glassware inside and out. Glassware is ready to use as soon as the cycle is finished.

Robust construction

- Chamber and door in sanitary grade AISI-316L stainless steel withstand the powerful washing process and aggressive chemicals often required for thorough cleaning, thus helping to prevent cross-contamination while prolonging machine life.
- Insulated, double-wall construction provides thermal and sound protection to minimize working environment discomfort.

- Load-bearing door at a safe and convenient height for loading and unloading glassware at the machine rather than having to carry or transport heavy loaded racks from a workbench to the washer.
- On-board storage drawer that takes 2 x 10L standard chemical bottles to minimize handling and exposure.
- Unique, proven design enables water circulation at full pressure on all levels, giving the required mechanical effect for highly efficient washing in all areas of the load.

LANCER 1400 LXP extras

The LANCER 1400 LXP model offers higher specifications than those provided by the LANCER 1400 LX in several areas:

- Fully variable drying temperature (the LANCER 1400 LX has only 2 settings and a lower maximum temperature).
- Printer
- More robust material in the control panel.
- A more powerful PCB control card, enabling additional options, e.g. validation monitor, flow meter, 2 extra dosing pumps, conductivity meter.
- Suitability for pharmaceutical processing laboratories where full GMP spec is not required.



LANCER 1600 LXP WASHER-DRYER

LARGE ITEMS, HIGH VOLUMES

Thousands of glassware items per day present no problem for the large chamber that can wash and dry on 4 levels simultaneously. It is also ideal for very large (20-100 liter) vessels.

With its huge capacity, this washer-dryer is typically found in large centralized facilities or in laboratories that work with large bulky items that require thorough cleaning. Lancer racks and baskets are individually connected at each level for flexible use of accessories. The racks are interchangeable between any of the 4 levels, allowing many loading options.

Easy operation

- Filtered, pulsed hot air is delivered through twin turbines for effective drying of glassware.
- Programming, display and touch-pad controls are simple to use and easy to read.
- 40 microprocessor-controlled programs, of which 4 are factory preset and 36 can be user-customized (PIN code protected) to suit particular applications or loads.
- Push-button start of wash cycle for normal daily use.
- Self-diagnostic program, with visual and audible alarms to alert the user in the event of malfunction, enabling quick trouble-shooting.

Robust construction

- 855 mm deep chamber of high-grade, sanitary 316 L, 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.
- The large door opens at convenient height and has gas-dampened support legs for extra-secure loading and unloading.

- On-board chemical storage drawer takes 2 x 10L standard bottles and minimizes handling and exposure.
- Low chemical level detectors and alarms, plus additional storage space.
- Unique, proven design enables water circulation at full pressure on all levels, giving the required mechanical effect for highly efficient washing in all areas of the load.
- Fully variable drying temperature
- PCB control card, enabling additional options, e.g. validation monitor, flow meter, three extra dosing pumps, conductivity meter.
- Suitability for pharmaceutical processing laboratories where full GMP spec is not required.
- Printer



LANCER 1800 LXA WASHER-DRYER

TWIN CHAMBERS FOR DOUBLE VOLUME

This machine is capable of cleaning a huge volume of glassware in twin chambers that take double sets of racks loaded side by side. Yet the space requirements are minimized thanks to a vertical sliding glass door and a footprint with much the same depth as standard lab benches.

Easy operation

- Vertical sliding glass door is ideal in tight spaces and allows visual checks on the progress of the wash cycle.
- Easy handling of heavy loads with TC1800 loading table.
- 6 washing levels on 8 positions with telescopic runners for ergonomical load handling.
- Glassware ready to use on completion of cycle thanks to powerful injector drying system.
- Clean HEPA-filtered hot (up to 110°C) air blown through injectors and chamber by twin turbines.
- Simple to use and easy to read programming, display and touch-pad controls.
- 40 microprocessor-controlled programs, of which 4 are factory preset and 36 can be user-customized (PIN code protected) for suit particular applications or loads.
- Push-button start of wash cycle for normal daily use.
- Easy to adjust up to 53 different parameters.
- Self-diagnostic program, with visual and audible alarms alert the user in the event of malfunction, enabling quick trouble-shooting.
- standard bottles to minimize handling and exposure.
- Hydraulic circuit designed to assure mechanical washing power on all levels.
- Unique, proven design to enable water circulation at full pressure and highly efficient washing on all levels and in all areas of the load.
- Water management design to achieve low water consumption without compromising washing quality.
- Fully variable drying temperature
- PCB control card, enabling additional options, e.g. validation monitor, flow meter, three extra dosing pumps, conductivity meter.
- Suitability for pharmaceutical processing laboratories where full GMP spec is not required.
- Printer

Robust construction

- Chamber of sanitary-grade AISI-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.
- On-board chemical storage drawer that takes 2 x 10L



LANCER TI-RANGE WASHER-DRYERS

EXTRA VOLUME, EXTRA PERFORMANCE

These heavy duty, full stainless steel washers not only handle any size of glassware and other vessels, but can even clean your equipment. Choose from 8 single-door and 8 double-door pass-through models.

This prestigious range of washers has, year after year, become a standard in a number of our industrial customers dealing with the most demanding cleaning applications. The TI washers are designed and manufactured to meet the growing demands of the biotech, cosmetics, petrochemical, agri-food industries, as well as certain pharmaceutical applications and QA/QC laboratories.

Easy operation

- 40 easy-to-select microprocessor-controlled programs, of which 4 are factory preset and 36 can be user-customized (PIN code protected).
- Self-diagnostic program, with visual and audible alarms to alert the user in the event of malfunction, enabling quick trouble-shooting.
- Final rinsing usually with purified/RO water.
- Gravity drop-drain for fast and complete draining of the hydraulic circuit.




Robust construction

- Powerful hydraulic circuit with tri-clamp connections and 316L stainless steel piston valves.
- All stainless steel construction (including recycling pump and spray arms) to withstand aggressive chemicals.
- The chamber, valves and door in sanitary-grade AISI-316L stainless steel.
- Insulated, double wall construction to provide thermal and sound protection.
- Stainless steel recycling pump with multiple filter system to prevent obstruction.
- For 1400 and 1600 TI washers, on-board chemical storage drawer that takes 2 x 10L standard chemical bottles to minimize handling and exposure.
- Fully variable drying temperature
- PCB control card, enabling additional options, e.g. validation monitor, flow meter, two extra dosing pumps, conductivity meter.
- Suitability for pharmaceutical processing laboratories where full GMP spec is not required.
- Printer

16 models

- 8 single-door models:
 - Four sizes: Lancer 1400TI and 1600TI (with chamber drying as standard), as well as Lancer 4500TI and 4800TI (with no drying).
 - Each size has a version with super drying through injectors and chamber (suffix SS).
- 8 double-door pass-through (suffix DP) versions of all 8 single-door models.

A WIDE RANGE OF PROFESSIONAL WASHER-DRYERS

WASHER-DRYER MODEL 	LANCER 810 LX	LANCER 815 LX	LANCER 820 LX	LANCER 910 LX	LANCER 1300 LX	LANCER 1400 LX	LANCER 1400 LXP	
FEATURES								
Underbench	●	●	●	–	–	–	–	
Free-standing	–	–	–	●	●	●	●	
Available in pass-through version	–	–	–	–	–	–	–	
Machine width, mm	600	600	900	604	604	790	790	
Machine depth, mm	700	700	700	736	736	811	831	
Machine height, mm	845	845	845	1466	1628	1728	1728	
Chamber width, mm*	491	491	491	491	491	581	581	
Chamber depth, mm*	520	520	520	520	520	629	629	
Chamber height, mm*	496	496	496	540	640	770	770	
Chamber volume, L**	138	138	138	148	175	295	295	
Chamber Air forced drying	–	●	●	●	●	●	●	
High-speed injector drying	–	–	●	●	●	●	●	
HEPA filter	–	–	●	●	●	●	●	
Vertical sliding door	–	–	–	–	–	–	–	
Drop-down door	●	●	●	●	●	●	●	
Door lock – to prevent door being opened during operation	Std.	Std.	Std.	Std.	Std.	Std.	Std.	
Number of wash levels	2	2	2	2	3	3	3	
Built-in chemical storage	–	–	●	●	●	●	●	
Water consumption, L/fill	12	12	12	11-15	14-16	20-25	20-25	
Self-diagnostic program	●	●	●	●	●	●	●	
Interchangeable accessories between upper and lower level	●	●	●	●	●	●	●	
Interchangeable accessories between washer units	●	●	●	●	●	▲	▲	
Number of factory preset wash programs	4	4	4	4	4	4	4	
Number of user-programmable programs	4	4	38	38	38	38	36	
OPTIONS								
Steam heating instead of electrical	–	–	–	●	●	●	●	
Condenser – to help prevent condensation in enclosed space	●	●	●	●	●	●	●	
Drain cool-down – to cool down waste water before emptying	●	●	●	●	●	●	●	
Water softener	–	–	●	●	●	●	●	
Plinth – to raise loading level to 750 mm and provide extra storage space for chemicals	●	●	●	–	–	–	–	
Chamber elevation, +250 mm	–	–	–	–	–	–	●	
Low pressure valve & pump – to ensure correct pressure for purified water input	●	●	●	●	●	●	●	
Emergency stop button	–	–	●	●	●	●	●	
Printer + RS232	●	●	●	●	●	●	●	
Pre-IQ/OQ protocol – additional factory testing and documentation for on-site IQ/OQ	●	●	●	●	●	●	●	
Validation monitor (Monval)	–	–	–	–	–	–	●	
Gravity drain / Drop drain	–	–	–	●	●	●	●	
Sampling valve	–	–	–	●	●	●	●	
Final rinse conductivity meter	–	–	–	–	–	–	●	
Final rinse kit (chemical stop valves + pump case drain + gravity drain)	–	–	–	–	–	–	●	

* Chamber width, depth and height are net dimensions

** Total chamber volume (gross data)

This table gives you an overview of the features and benefits – as well as the options – available for our various washer-dryers. Should you have any questions or special requests, please contact your Lancer representative.

	LANCER 1600 LXP	LANCER 1800 LXA	LANCER 1400 TI	LANCER 1600 TI	LANCER 4500 TI	LANCER 4800 TI	WASHER-DRYER MODEL FEATURES
	–	–	–	–	–	–	Underbench
	●	●	●	●	●	●	Free-standing
	–	–	DP-version	DP-version	DP-version	DP-version	Available in pass-through version
	882	1397	1130***	1250***	2150***	2600***	Machine width, mm
	866	840	850***	1025***	1220***	1220***	Machine depth, mm
	1815	1985	1530***	1815***	2000***	1820***	Machine height, mm
	654	982	582	655	850	1300	Chamber width, mm*
	678	526	500	660	850	850	Chamber depth, mm*
	855	770	640	855	1025	850	Chamber height, mm*
	370	420	185	370	740	940	Chamber volume, L**
	●	●	●	●	–	–	Chamber Air forced drying
	●	●	TISS / TIDPSS	TISS / TIDPSS	TISS / TIDPSS	TISS / TIDPSS	High-speed injector drying
	●	●	Option	Option	Option	Option	HEPA filter
	–	●	–	–	–	–	Vertical sliding door
	●	–	●	●	●	●	Drop-down door
	Std.	Std.	Std.	Std.	Std.	Std.	Door lock – to prevent door being opened during operation
	4	6	2	3	1	1	Number of wash levels
	●	●	●	●	–	–	Built-in chemical storage
	30-35	35-47	20-25	35-40	100	125	Water consumption, L/fill
	●	●	●	●	●	●	Self-diagnostic program
	●	●	●	●	–	–	Interchangeable accessories between upper and lower level
	–	●	–	–	–	–	Interchangeable accessories between washer units
	4	4	4	4	4	4	Number of factory preset wash programs
	36	36	36	36	36	36	Number of user-programmable programs
							OPTIONS
	●	●	●	●	●	●	Steam heating instead of electrical
	●	●	–	–	–	–	Condenser – to help prevent condensation in enclosed space
	●	●	●	●	●	●	Drain cool-down – to cool down waste water before emptying
	●	●	–	–	–	–	Water softener
	–	–	–	–	–	–	Plinth – to raise loading level to 750 mm and provide extra storage space for chemicals
	●	–	●	●	●	●	Chamber elevation, +250 mm
	●	●	–	–	–	–	Low pressure valve & pump – to ensure correct pressure for purified water input
	●	●	Std.	Std.	Std.	Std.	Emergency stop button
	●	●	●	●	●	●	Printer + RS232
	●	●	●	●	●	●	Pre-IQ/OQ protocol – additional factory testing and documentation for on-site IQ/OQ
	●	●	●	●	●	●	Validation monitor (Monval)
	●	●	Std.	Std.	Std.	Std.	Gravity drain / Drop drain
	●	●	●	●	●	●	Sampling valve
	●	●	●	●	●	●	Final rinse conductivity meter
	●	●	●	●	●	●	Final rinse kit (chemical stop valves + pump case drain + gravity drain)

*** Dimensions not applicable to 1400 TI DP/1400 TI SS/1400 TI DPSS, 1600 TI DP/1600 TI SS/1600 TI DPSS, 4500 TI DP/4500 TI SS/4500 TI DPSS, 4800 TI DP / 4800 TI SS / 4800 TI DPSS

CLEANING CHEMICALS FOR EFFECTIVE RESULTS

Available exclusively from Lancer, our cleaning chemicals are made specifically for use in all washers. Lancer cleaning chemicals are premixed for direct use from the bottle to your washer, and dosing is automatic by peristaltic pump. Quality control is very important when it comes to Lancer Cleaning Chemicals. Lancer LLL and Lancer NLL are manufactured with dedicated production lines and extensively tested and validated for use on our line of washers.

Lancer LLL detergent is specially formulated and validated to provide analytically clean wash results. This detergent is phosphate free and delivered in 10 L bottles.

Lancer NLL rinse is our neutralising agent used during the final rinse step. It is acetic acid base and help providing the analytical cleanliness result expected from a professional laboratory washer.

LLL is available in 10 L bottles.

Lancer LLL detergent and Lancer NLL rinse are phosphate-free and non-foaming.



TECHNICAL SUPPORT DEDICATED AND EXPERIENCED

Lancer has a comprehensive service organization of trained professionals dedicated to meeting your service needs.

If you need assistance or have a question, Lancer's Technical Support Help Line will connect you with someone who can give you timely, professional answers. Recommending the right course of action and diagnosing and troubleshooting service issues is their top priority. You can also order parts and get knowledgeable preventive maintenance. And if you need on-site service at your facility, we will put you in touch with a field service representative.

Validation and consultative services

We provide a complete range of validation services on our entire range of machines to meet the increasing demands of regulatory agencies and your internal company standards.

Installation services

Our qualified staff of service representatives provides installation services for new equipment start-up as well as operation operation. A complete equipment commissioning test is performed before equipment operation is turned over to your facility. In addition, our service team can execute installation and operation performance tests. We also offer pre-IQ/OQ protocols, i.e. additional factory testing and documentation for on-site IQ/OQ.



LANCER

GETINGE GROUP

Geringe Lancer SAS
30 Boulevard de l'Industrie
F-31170 Tournefeuille, France
Tél: +33 5 61 15 11 11
Fax: +33 5 61 15 16 16
lancersite@getinge.com www.lancer.fr

GETINGE

GETINGE GROUP is a leading global provider of equipment and systems that contribute to quality enhancement and cost efficiency within healthcare and life sciences. Equipment, service and technologies are supplied under the brands **ArjoHuntleigh** for patient handling and hygiene, disinfection, DVT prevention, medical beds, therapeutic surfaces and diagnostics, **GETINGE/LANCER** for infection control and prevention within healthcare and life science and **MAQUET** for surgical work places, cardiopulmonary and critical care.