The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at ***wvOASIS.gov***. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at ***WVPurchasing.gov*** with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

Header 1

List View

General Information | Contact | Default Values | Discount | Document Information | Clarification Request

Procurement Folder: 1841869

Procurement Type: Central Purchase Order

Vendor ID: VS0000014820

Legal Name: DATASCOPE CORP

Alias/DBA:

Total Bid: $292,204.00

Response Date: 02/03/2026

Response Time: 11:40

Responded By User ID: CharlotteK

First Name: Charlotte

Last Name: Kalaghan

Email: charlotte.kalaghan@getinge

Phone: 585-272-5016

SO Doc Code: CRFQ

SO Dept: 1400

SO Doc ID: AGR2600000024

Published Date: 1/23/26

Close Date: 2/3/26

Close Time: 13:30

Status: Closed

Solicitation Description: READ - Laboratory Steam Sterilizers

Total of Header Attachments: 1

Total of All Attachments: 1

Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Solicitation Response

Proc Folder:	1841869
Solicitation Description:	READ - Laboratory Steam Sterilizers
Proc Type:	Central Purchase Order

Solicitation Closes	Solicitation Response	Version
2026-02-03 13:30	SR 1400 ESR02032600000004469	1

VENDOR

VS0000014820
DATASCOPE CORP

Solicitation Number: CRFQ 1400 AGR2600000024

Total Bid: 292204 **Response Date:** 2026-02-03 **Response Time:** 11:40:42

Comments: Getinge is not offering any discounts at this time.

FOR INFORMATION CONTACT THE BUYER
Larry D McDonnell
304-558-2063
larry.d.mcdonnell@wv.gov

Vendor
Signature X **FEIN#** **DATE**

All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Discard Autoclave Laboratory Steam Sterilizer section 3.1.1	2.00000	EA	50609.000000	101218.00

Comm Code	Manufacturer	Specification	Model #
42281508			

Commodity Line Comments: LSS 275 Sterilizers & Inland Freight

Extended Description:

Discard Autoclave Laboratory Steam Sterilizer specification section 3.1.1
See attached specification and associated documentation for further details.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
2	Media Autoclave Laboratory Steam Sterilizer section 3.1.2	1.00000	EA	48692.000000	48692.00

Comm Code	Manufacturer	Specification	Model #
42281508			

Commodity Line Comments: LSS 130 Sterilizer & Inland Freight

Extended Description:

Media Autoclave Laboratory Steam Sterilizer specification section 3.1.2
See attached specification and associated documentation for further details.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
3	Warranty/Preventative Maintenance Service section 3.1.3	1.00000	EA	1300.000000	1300.00

Comm Code	Manufacturer	Specification	Model #
42281508			

Commodity Line Comments: Single PM visit during factory warranty period

Extended Description:

Warranty/Preventative Maintenance Service specification section 3.1.3
See attached specification and associated documentation for further details.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
4	Installation sections 3.1.1.13 and 3.1.2.13	1.00000	EA	140994.000000	140994.00

Comm Code	Manufacturer	Specification	Model #
42281508			

Commodity Line Comments: Includes Installation, Final Utility Connections, IQOQ Protocol & Execution, Thermal Chamber Mapping

Extended Description:

Installation specification sections 3.1.1.13 and 3.1.2.13
See attached specification and associated documentation for further details.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
5	Onsite Training sections 3.1.1.13 and 3.1.2.13	1.00000	EA	0.000000	0.00

Comm Code	Manufacturer	Specification	Model #
42281508			

Commodity Line Comments: Included with Installation

Extended Description:

Onsite Training specifications sections 3.1.1.13 and 3.1.2.13
See attached specification and associated documentation for further details.

West Virginia Department of Agriculture

Larry McDonnell

2/3/2026

Quote number: **GETQ5593**

Project: **LSS 130 & LSS 275**

Prepared by:

Brian Orrison

Regional Account Manager

brian.orrison@getinge.com

QUOTATION

GETINGE

Proposal For:

West Virginia Department of Agriculture
Larry McDonnell
2019 Washington St. E
Charleston, WV 25305
United States

Phone: (304) 558-2063
Email: larry.d.mcdonnell@wv.gov

Prepared By:

Brian Orrison
Regional Account Manager
Phone: (443) 988-1034
Email: brian.orrison@getinge.com
Date: Feb 2, 2026
Quote Number: GETQ5593
Opportunity #: O-160509

The Getinge quotation is inclusive of relevant technical review referenced by Document "O-160509 WVDA Tech Review V0 - FM 1.30.26" and constitutes our complete offer and defines the full Getinge scope of supply.

Line	Qty	Description	Unit Price	Ext. Price
		Media Autoclave - LSS 130		
001	1	LSS 130 (Single Door, Rack & 2 Shelves)	$46,414.00	$46,414.00
		Getinge Lancer LSS 130 is a microcomputer controlled steam sterilizer that offers the option of either prevacuum or gravity displacement cycles for sterilization of laboratory, research and animal care supplies. All models feature the advanced 8.4-inch Avanti touch-panel control interface with 19 selectable pre-programmed cycles. Custom name cycles for quick and accurate identification. Select from four cycle-process output data screens: Bar Graph; Circle Graph; Detail Display; or Plot Graph. The PACS control system features – NetCOM enabled Ethernet connection for remote process monitoring; a thermal printer that documents cycle performance; and a user accessible connection for downloading cycle records to a USB flash drive. Program settings are password protected. Standard with interior rack and two extendable load shelves. •17.5'' x 17.5 x 26'' Chamber •Single Manual Door •With Interior Rack & 2 Shelves •NetCOM enabled Ethernet for T-DOC or Getinge Online •Exports cycle records to USB storage device Catalog# 4SSVUMQRA_AA **Catalog number subject to change based on final equipment order	Included	Included
		Carbon Steel Electric Steam Boiler in lieu of House Steam 30kW Carbon Steel Steam Boiler with automatic feed water pump Specify steam boiler voltage for customer order – _ 208V,3PH [1] _ 240V,3PH [2] _ 380V,3PH [3] _ 480V,3PH [4] _ 600V,3PH [5]	Included	Included
		Automatic Blowdown for Carbon Steel Boiler	Included	Included
		LSS 130 Single Door Cabinet Package Catalog #: 61301608472	Included	Included

Line	Qty	Description	Unit Price	Ext. Price
002	1	Getinge Professional Installation - LSS 130 Services Provided: Single mobilization, relating to: • Equipment assembly • Identify final utility connection points • Perform equipment startup • Getinge will provide one (1) operator & supervisor training session at no charge during equipment startup. Training will cover equipment operation, HMI navigation, and common equipment questions. • Getinge personnel will be onsite during normal working hours • Customer's responsibility to move equipment to loading dock Services Not Provided (unless purchased): • Union Labor, Certified Payroll, receiving and unloading of equipment on site, transporting equipment, rigging equipment, ingress pathway evaluation, protection of facility along ingress, building structural analysis, return trips, final utility connections, equipment removal & disposal, tooling, core drilling, piping insulation, and additional training/video-taped training sessions • Permits, licensing, inspection fees, site specific safety training/orientation, and fees for site specific background checks (drug screening, inoculations, etc.) • All vents (safety relief valves, blowdown tank exhaust, etc.) should be in accordance with local code requirements and accomplished by others. • Embedded anchors, installation and through slab anchoring, mounting/leveling pads. Notes: • It is Getinge's expectation that rigging and contractor crews will be staffed appropriately. In the event of an under staffed or non-professional rigging crew being utilized, Getinge will determine the length and time on site and it may result in additional charges • No overtime or understaffed supervision unless specifically noted • Class room training with literature is available at an additional cost. Customer specified training program is available at additional cost. • Note concerning steam generators/boilers: State and local codes are based on various versions or updates of the ASME CSD-1 standard. Customer/Contractor is responsible to check local codes concerning boilers installed in their facility. Customer's regulatory obligations ancillary to our equipment is outside Getinge scope of work and remain with the customer. • Please refer to our "Terms & Conditions" for additional information relating to Getinge Installation Services PLEASE NOTE Installation/Drawings: Customer is responsible for confirming proper fit and finish with approved drawings. If the proposed equipment does not fit in the allocated area, any modifications required to the equipment will be at additional cost to the customer. Customer is responsible to evaluate site conditions and review the Getinge installation inclusions and exclusions. Specifically, clear ingress from the loading dock to the installation area is expected: doorways, elevators, hallways, sprinkler heads, wall bumpers and floor protection must be reviewed and approved by the customer. Further, customer confirms adequate utilities, (steam, air, water, electric and drain) are readily available, properly terminated, and do not interfere with equipment placement. Catalog #: ZSUSMISCINSTALL-LS	$5,136.00	$5,136.00

Line	Qty	Description	Unit Price	Ext. Price
003	1	Final Utility Connections LSS 130 Services Provided: • Final utility connections to un-energized utility termination points within five (5) linear feet of equipment connections points Notes: • Final utility connections through any penetrations not included • Isolation valves and utility gauges are recommended and shall be provided by the customer • Refer to Getinge Professional Installation description Catalog #: ZSUSMISCINSTALL-LS	$2,569.00	$2,569.00
004	1	Installation Qualification Protocol Creation Getinge will create an Installation Qualification protocol, following cGxP and current industry standards using Getinge format and specific to the piece of equipment quoted. The protocol will include hardware verification, control system verification, electrical system testing, piping system verification, utility connection verification, installation verification, drawing verification, bill of material verification and software verification. All procedures are detailed as to scope, acceptance criteria, anticipated response/information, actual response/information and pass/fail recording. The protocol includes all required/existing vendor support documentation, if applicable to a Getinge unit, as well as pertinent draft Standard Operating Procedures, change control procedures/forms and non-conformance procedures/forms. Notes: • Pricing includes labor to generate the equipment specific protocol. • Protocol creation will be started after receiving the final turn-over-package for unit and when available resources are available. • Execution must be purchased with protocol. Catalog #: ZSUSIQDOCIC	$3,377.00	$3,377.00
005	1	Operational Qualification Protocol Creation Getinge will create an Operational Qualification protocol, following cGxP and current industry standards using Getinge format and specific to the piece of equipment quoted. The protocol will include functional testing of programmed cycles, safety interlocks testing, input/output testing, alarms testing, password protection verification, CPU clock speed testing, chamber integrity testing and system messaging. All procedures are detailed as to scope, acceptance criteria, anticipated response/information, actual response/information and pass/fail recording. The protocol includes all required/existing vendor support documentation, if applicable to a Getinge unit, as well as pertinent draft Standard Operating Procedures, change control procedures/forms and non-conformance procedures/forms. Notes: • Pricing includes labor to generate the equipment specific protocol. • Protocol creation will be started after receiving the final turn-over-package for unit and when available resources are available. • Execution must be purchased with protocol. Catalog #: ZSUSOQDOCIC	$5,520.00	$5,520.00

Line	Qty	Description	Unit Price	Ext. Price
006	1	Installation Qualification Protocol Execution Getinge will provide on-site personnel to execute the Installation Qualification protocol according to cGxP procedures. Completed protocols will include all pertinent draft SOP's, Non-conformance reports, change control reports, collected raw data and final summary reports. Execution of the Installation Qualification typically requires two days on-site. Notes: • It may be necessary to compile any documentation collected and finalize the executed paperwork at a location off site after the execution of the protocol is completed. • Pricing includes labor and/or travel time and expenses (airfare, rental car, food, lodging), Monday-Friday, 8-hour days, to execute the protocol and finalize any documentation. Weekend travel and/or labor and overtime is not included. Any additional time required due to customer on-site delays may incur addition costs. • Execution will be scheduled 2-6 weeks upon successful start-up of equipment, receipt of approved protocol from the customer, and is dependent on current workload. Catalog #: ZSUSIQEXECIC	$10,106.00	$10,106.00
007	1	Operational Qualification Protocol Execution Getinge will provide on-site personnel to execute the Operational Qualification protocol according to cGxP procedures. Completed protocols will include all pertinent draft SOP's, Non-conformance reports, change control reports, collected raw data and final summary reports. Execution of the Operational Qualification typically requires three days on-site. Notes: • It may be necessary to compile any documentation collected and finalize the executed paperwork at a location off site after the execution of the protocol is completed. • Pricing includes labor and/or travel time and expenses (airfare, rental car, food, lodging), Monday-Friday, 8-hour days, to execute the protocol and finalize any documentation. Weekend travel and/or labor and overtime is not included. Any additional time required due to customer on-site delays may incur addition costs. • Execution will be scheduled 2-6 weeks upon successful start-up of equipment, receipt of approved protocol from the customer, and is dependent on current workload. Catalog #: ZSUSOQEXECIC *NOTE: Any red-lined documentation (drawings, manuals, BOM, etc.) that captures deviations, during the IQOQ execution, will be treated as the final documentation submitted with the executed protocols. Factory provided documentation will not be updated.*	$12,611.00	$12,611.00

Line	Qty	Description	Unit Price	Ext. Price
008	1	Thermal profile (Chamber Mapping) Study (In conjunction with the validation execution) Getinge will conduct thermal profiling (chamber mapping) utilizing a minimum of ten (10) thermocouples distributed evenly throughout the autoclave's empty chamber. Each thermal profile study will consist of three (3) successive successful runs at two temperatures spanning the anticipated range of use and will utilize one (1) cycle combination. Completed studies will include all pertinent collected raw data, calibration reports and overall data review report. Execution of the Thermal Profile Studies typically requires one day on-site per cycle type for empty chambers. Notes: •It may be necessary to compile any documentation collected and finalize the executed paperwork at a location off site after the execution of the protocol is completed. •Pricing includes labor and/or travel time and expenses (airfare, rental car, food, lodging), Monday-Friday, 8-hour days, to execute the protocol and finalize any documentation. Weekend travel and/or labor and overtime is not included. Any additional time required due to customer on-site delays may incur addition costs. •Calibration is recommended and should be performed on unit before temperature mapping is performed. Catalog #: ZSUSTHMAPIC	$9,768.00	$9,768.00
009	1	LSS 130 Inland Freight to Jobsite	$2,278.00	$2,278.00
		LSS 130 SubTotal:		**$97,779.00**

Line	Qty	Description	Unit Price	Ext. Price
		Discard Autoclaves - LSS 275		
010	2	LSS 275 (Single Door, Rack & 2 Shelves)	$49,189.00	$98,378.00
		Getinge Lancer LSS 275 is a microcomputer controlled steam sterilizer that offers the option of either prevacuum or gravity displacement cycles for sterilization of laboratory, research and animal care supplies. All models feature the advanced 8.4-inch Avanti touch-panel control interface with 19 selectable pre-programmed cycles. Custom name cycles for quick and accurate identification. Select from four cycle-process output data screens: Bar Graph; Circle Graph; Detail Display; or Plot Graph. The PACS control system features – NetCOM enabled Ethernet connection for remote process monitoring; a thermal printer that documents cycle performance; and a user accessible connection for downloading cycle records to a USB flash drive. Program settings are password protected. •21''x21''x38'' Chamber •Single Manual Door •With Interior Rack & 2 Shelves •NetCOM enabled Ethernet for T-DOC or Getinge Online •Exports cycle records to USB storage device Catalog# 5SSVUMQRA_AA **Catalog number subject to change based on final equipment order	Included	Included
		Carbon Steel Electric Steam Boiler in lieu of House Steam 30kW Carbon Steel Steam Boiler with automatic feed water pump Specify steam boiler voltage for customer order – _ 208V,3PH [1] _ 240V,3PH [2] _ 380V,3PH [3] _ 480V,3PH [4] _ 600V,3PH [5]	Included	Included
		Automatic Blowdown for Carbon Steel Boiler	Included	Included
		LSS 275 Single Door Cabinet Package Catalog #: 61301608482	Included	Included

Line	Qty	Description	Unit Price	Ext. Price
011	2	Getinge Professional Installation - LSS 275 Services Provided: Single mobilization, relating to: • Equipment assembly • Identify final utility connection points • Perform equipment startup • Getinge will provide one (1) operator & supervisor training session at no charge during equipment startup. Training will cover equipment operation, HMI navigation, and common equipment questions. • Getinge personnel will be onsite during normal working hours • Customer's responsibility to move equipment to loading dock Services Not Provided (unless purchased): • Union Labor, Certified Payroll, receiving and unloading of equipment on site, transporting equipment, rigging equipment, ingress pathway evaluation, protection of facility along ingress, building structural analysis, return trips, final utility connections, equipment removal & disposal, tooling, core drilling, piping insulation, and additional training/video-taped training sessions • Permits, licensing, inspection fees, site specific safety training/orientation, and fees for site specific background checks (drug screening, inoculations, etc.) • All vents (safety relief valves, blowdown tank exhaust, etc.) should be in accordance with local code requirements and accomplished by others. • Embedded anchors, installation and through slab anchoring, mounting/leveling pads. Notes: • It is Getinge's expectation that rigging and contractor crews will be staffed appropriately. In the event of an under staffed or non-professional rigging crew being utilized, Getinge will determine the length and time on site and it may result in additional charges • No overtime or understaffed supervision unless specifically noted • Class room training with literature is available at an additional cost. Customer specified training program is available at additional cost. • Note concerning steam generators/boilers: State and local codes are based on various versions or updates of the ASME CSD-1 standard. Customer/Contractor is responsible to check local codes concerning boilers installed in their facility. Customer's regulatory obligations ancillary to our equipment is outside Getinge scope of work and remain with the customer. • Please refer to our "Terms & Conditions" for additional information relating to Getinge Installation Services PLEASE NOTE Installation/Drawings: Customer is responsible for confirming proper fit and finish with approved drawings. If the proposed equipment does not fit in the allocated area, any modifications required to the equipment will be at additional cost to the customer. Customer is responsible to evaluate site conditions and review the Getinge installation inclusions and exclusions. Specifically, clear ingress from the loading dock to the installation area is expected: doorways, elevators, hallways, sprinkler heads, wall bumpers and floor protection must be reviewed and approved by the customer. Further, customer confirms adequate utilities, (steam, air, water, electric and drain) are readily available, properly terminated, and do not interfere with equipment placement. Catalog #: ZSUSMISCINSTALL-LS	$5,136.00	$10,272.00

Line	Qty	Description	Unit Price	Ext. Price
012	2	Final Utility Connections LSS 275: Services Provided: • Final utility connections to un-energized utility termination points within five (5) linear feet of equipment connections points Notes: • Final utility connections through any penetrations not included • Isolation valves and utility gauges are recommended and shall be provided by the customer • Refer to Getinge Professional Installation description Catalog #: ZSUSMISCINSTALL-LS	$2,569.00	$5,138.00
013	1	Installation Qualification Protocol Creation Getinge will create an Installation Qualification protocol, following cGxP and current industry standards using Getinge format and specific to the piece of equipment quoted. The protocol will include hardware verification, control system verification, electrical system testing, piping system verification, utility connection verification, installation verification, drawing verification, bill of material verification and software verification. All procedures are detailed as to scope, acceptance criteria, anticipated response/information, actual response/information and pass/fail recording. The protocol includes all required/existing vendor support documentation, if applicable to a Getinge unit, as well as pertinent draft Standard Operating Procedures, change control procedures/forms and non-conformance procedures/forms. Notes: • Pricing includes labor to generate the equipment specific protocol. • Protocol creation will be started after receiving the final turn-over-package for unit and when available resources are available. • Execution must be purchased with protocol. Catalog #: ZSUSIQDOCIC	$3,377.00	$3,377.00
014	1	Installation Qualification Protocol Creation - DUPLICATE PROTOCOL Catalog #: ZSUSIQDOCIC	$1,315.00	$1,315.00
015	1	Operational Qualification Protocol Creation Getinge will create an Operational Qualification protocol, following cGxP and current industry standards using Getinge format and specific to the piece of equipment quoted. The protocol will include functional testing of programmed cycles, safety interlocks testing, input/output testing, alarms testing, password protection verification, CPU clock speed testing, chamber integrity testing and system messaging. All procedures are detailed as to scope, acceptance criteria, anticipated response/information, actual response/information and pass/fail recording. The protocol includes all required/existing vendor support documentation, if applicable to a Getinge unit, as well as pertinent draft Standard Operating Procedures, change control procedures/forms and non-conformance procedures/forms. Notes: • Pricing includes labor to generate the equipment specific protocol. • Protocol creation will be started after receiving the final turn-over-package for unit and when available resources are available. • Execution must be purchased with protocol. Catalog #: ZSUSOQDOCIC	$5,520.00	$5,520.00
016	1	Operational Qualification Protocol Creation - DUPLICATE PROTOCOL Catalog #: ZSUSOQDOCIC	$1,315.00	$1,315.00

Line	Qty	Description	Unit Price	Ext. Price
017	2	Installation Qualification Protocol Execution Getinge will provide on-site personnel to execute the Installation Qualification protocol according to cGxP procedures. Completed protocols will include all pertinent draft SOP's, Non-conformance reports, change control reports, collected raw data and final summary reports. Execution of the Installation Qualification typically requires two days on-site. Notes: • It may be necessary to compile any documentation collected and finalize the executed paperwork at a location off site after the execution of the protocol is completed. • Pricing includes labor and/or travel time and expenses (airfare, rental car, food, lodging), Monday-Friday, 8-hour days, to execute the protocol and finalize any documentation. Weekend travel and/or labor and overtime is not included. Any additional time required due to customer on-site delays may incur addition costs. • Execution will be scheduled 2-6 weeks upon successful start-up of equipment, receipt of approved protocol from the customer, and is dependent on current workload. Catalog #: ZSUSIQEXECIC	$10,106.00	$20,212.00
018	2	Operational Qualification Protocol Execution Getinge will provide on-site personnel to execute the Operational Qualification protocol according to cGxP procedures. Completed protocols will include all pertinent draft SOP's, Non-conformance reports, change control reports, collected raw data and final summary reports. Execution of the Operational Qualification typically requires three days on-site. Notes: • It may be necessary to compile any documentation collected and finalize the executed paperwork at a location off site after the execution of the protocol is completed. • Pricing includes labor and/or travel time and expenses (airfare, rental car, food, lodging), Monday-Friday, 8-hour days, to execute the protocol and finalize any documentation. Weekend travel and/or labor and overtime is not included. Any additional time required due to customer on-site delays may incur addition costs. • Execution will be scheduled 2-6 weeks upon successful start-up of equipment, receipt of approved protocol from the customer, and is dependent on current workload. Catalog #: ZSUSOQEXECIC *NOTE: Any red-lined documentation (drawings, manuals, BOM, etc.) that captures deviations, during the IQOQ execution, will be treated as the final documentation submitted with the executed protocols. Factory provided documentation will not be updated.*	$12,611.00	$25,222.00

Line	Qty	Description	Unit Price	Ext. Price
019	2	Thermal profile (Chamber Mapping) Study (In conjunction with the validation execution) Getinge will conduct thermal profiling (chamber mapping) utilizing a minimum of ten (10) thermocouples distributed evenly throughout the autoclave's empty chamber. Each thermal profile study will consist of three (3) successive successful runs at two temperatures spanning the anticipated range of use and will utilize one (1) cycle combination. Completed studies will include all pertinent collected raw data, calibration reports and overall data review report. Execution of the Thermal Profile Studies typically requires one day on-site per cycle type for empty chambers. Notes: •It may be necessary to compile any documentation collected and finalize the executed paperwork at a location off site after the execution of the protocol is completed. •Pricing includes labor and/or travel time and expenses (airfare, rental car, food, lodging), Monday-Friday, 8-hour days, to execute the protocol and finalize any documentation. Weekend travel and/or labor and overtime is not included. Any additional time required due to customer on-site delays may incur addition costs. •Calibration is recommended and should be performed on unit before temperature mapping is performed. Catalog #: ZSUSTHMAPIC	$9,768.00	$19,536.00
020	1	LSS 275 Inland Freight to Jobsite for two (2) units	$2,840.00	$2,840.00
		LSS 275 SubTotal:		**$193,125.00**
		Service PM Visit		
021	1	Single PM Visit (no PM parts) within the factory warranty period for three (3) lab sterilizers	$1,300.00	$1,300.00
		Single PM Visit SubTotal:		**$1,300.00**
		QUOTE TOTAL:		**$292,204.00**

Local and/or State Tax not included.

Please contact me if I can be of further assistance.

Customer Acceptance (please initial) _____

ORDERING INSTRUCTIONS	
To ensure timely order processing, please remit the following information with your order:	
PURCHASE ORDER	**DELIVERY**
Mail [Getinge USA Sales, LLC 45 Barbour Pond Rd Wayne, NJ 07470] or for Electronic Orders send to orders-americas.ls@getinge.com • **Purchase Order Number** • **Date Product is Required By** • **Ship to/Bill to Address & Final Destination of Equipment** • **Purchasing Department Contact Name/Number** • **Tax exemption status** • **Reference Payment Terms** • **Signed copy of this quote**	**Specify all special delivery instructions:** • Pre-delivery notification required: YES___ NO___ • Hydraulic lift gate required: YES___ NO___ • Other: _____ • Customer Signature: _____
FAILURE TO PROVIDE REQUIRED INFORMATION MAY DELAY PRODUCT DELIVERY	

For answers to specific questions contact the Getinge USA Sales, LLC Customer Service Center at 1-800-950-9912.

THIS QUOTATION WILL BE GOVERNED BY GETINGE'S STANDARD CONDITIONS FOR SALE, INSTALLATION, WARRANTY AND RETURNED GOODS FOUND AT: https://www.getinge.com/LSsalesterms

Any prior or collateral agreements, representations, promises or conditions, whether written or oral, in connection herewith, are superseded hereby. No modifications, waivers or termination of any provisions contained in this Agreement or any future agreements, representations, promises or conditions in connection with the subject matter hereof shall be binding upon Getinge unless made in writing and signed by an authorized officer thereof. Acceptance of any Customer's purchase order does not operate as acceptance of any diffe,ent or additional terms. None of Getinge's terms may be rejected or revoked by Customer without the consent of Getinge's Legal Team. If you have any questions about this Agreement, please contact your local Getinge Sales Representative.

QUOTE VALIDITY

The Proposal to which these General Terms and Conditions are attached may be considered firm for the period defined in the Proposal, and if not defined therein, for a period of sixty (60) days from the date the Proposal is received by Customer.

TERMS OF PAYMENT

Progress Payments are applicable; refer to quotation for progress payment terms. Standard payment terms are 45% with order, 45% with shipment and 10% due after install, NET 30 (Unless mutually agreed otherwise). Each event is due following the date of invoice. A service charge at the rate of one and one-half percent (1½%) per month will be imposed on all invoices not paid within thirty (30) days.

ACCEPTANCE OF GETINGE GENERAL TERMS AND CONDITIONS

ANY ORDER FOR PRODUCTS OR GETINGE'S DELIVERY OF PRODUCTS LISTED ON THIS QUOTE SHALL CONSTITUTE ASSENT TO THE ABOVE TERMS AND CONDITIONS AND THE GETINGE USA SALESS LLC GENERAL TERMS AND CONDITIONS FOUND AT THE LINK ABOVE.

To the extent Getinge executes an agreement with Customer for services, including installation services, in connection with the Products, these General Terms and Conditions shall govern the sale of Products unless Getinge and Customer agree explicitly that such agreement terms supersede these General Terms and Conditions for the sale of Products.

Getinge Financial Services are Available

Through Getinge Financial Services, we offer alternatives outside of a cash purchase. Our acquisition solutions can be tailored to meet the specific financial and strategic needs of your organization. If you would like to learn more, please reach out to your sales representative.

GETINGE

Bid Package Review:

Customer: State of West Virginia

Project: CRFQ 1400 AGR2600000024 / 1841869

Technical Review: LIST OF EXCEPTIONS AND CLARIFICATIONS

V0 01/30/2026: INITIAL RELEASE

Note: Responses apply to duplicate requirements

Item No.	*Document Number*	*Paragraph or Line No.*	*Exception / Clarification*	*Description of Exception or Clarification*	*Resolution / Comments*
1	***WV-PRC-CRFQ-002 2020 05 Dated Jan 9, 2026***				
2	**WV-PRC-CRFQ-002 2020 05**	3.1.1.2	Clarification	Exterior dimensions of the Getinge LSS275 are 74"H x 30"W x 48.125"D	
3	**WV-PRC-CRFQ-002 2020 05**	3.1.1.10	Exception	Due to conflict on interest PQ is by others.	
4	**WV-PRC-CRFQ-002 2020 05**	3.1.1.13	Exception	Due to conflict on interest PQ is by others.	
5	**WV-PRC-CRFQ-002 2020 05**	3.1.2.2	Clarification	Exterior dimensions of the Getinge LSS130 are 74"H x 26.5"W x 36.125"D, chamber dimensions are 17.5"W x 17.5"H x 26"D.	
6	**WV-PRC-CRFQ-002 2020 05**	3.1.2.10	Exception	Due to conflict on interest PQ is by others.	
7	**WV-PRC-CRFQ-002 2020 05**	3.1.2.13	Exception	Due to conflict on interest PQ is by others.	

End of Technical Review:

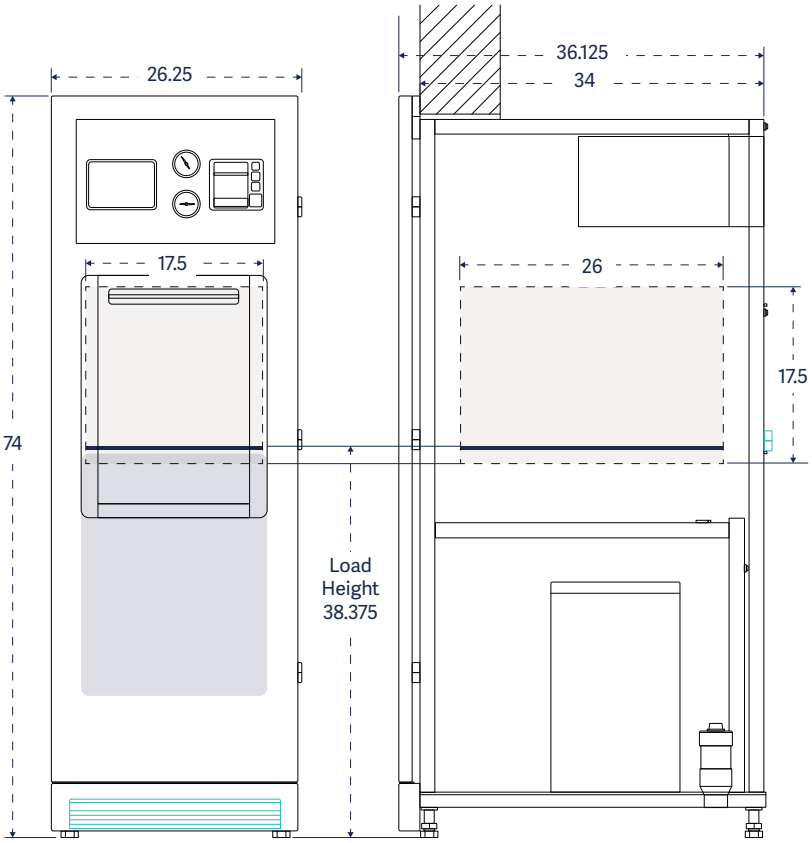
Please Note: Review is inclusive of documents listed above only. Getinge cannot guarantee compliance to documents not listed above.

Getinge Lancer LSS 130

Laboratory Steam Sterilizer Specifications

GETINGE

Basic specifications



- **Internal Volume**
  4.6 cu. ft. (130 L)
- **Door Configurations**
  Single Door
- **Design Operating Temperature**
  Gravity/Vacuum Cycles: 230°–275°F (110°–135°C)
  Liquid Cycles: 219°–275°F (104°–135°C)
  Optional Low Temp Cycle: 169°–212°F (76–100°C)
- **Interior Dimensions (w × h × d)**
  17.5" × 17.5" × 26" (445 × 445 × 660 mm)
- **Exterior Dimensions (w × h × d)**
  Single Door: 26.25" × 74" × 36.125" (667 × 1880 × 918 mm)

Part 1:
Selection Guide

Door Configuration

- single door

Door Operation

- manual (standard)
- powered

Steam Source

- facility/house steam (standard)
- steam generator(s)

  - 208V, AC; 50/60Hz, 3-phase
  - 240V, AC, 50/60Hz, 3-phase
  - 380V, AC, 50Hz, 3-phase
  - 480V, AC, 60Hz, 3-phase
  - 600V, AC, 60Hz, 3-phase
  - carbon steel (standard)
  - stainless steel
  - manual blowdown (standard)
  - automatic blowdown
  - located integral to the sterilizer
  - remotely located

Air Removal

- ejector (standard)
- vacuum pump, liquid ring

  - 208V, AC, 60Hz, 3-phase
  - 380V, AC, 50Hz, 3-phase
  - 480V, AC, 60Hz, 3-phase

Additional Programs

- Sealed liquids and low temp cycles
  (vacuum pump and load probe required)

Recesses and Barriers

- recessed, one-wall
- freestanding (cabinet enclosure panels required)

Part 2:
General Specifications

The Getinge Lancer LSS 130 Steam Sterilizer is designed for high-performance sterilization of labware, media and laboratory byproducts used in research, analytical, environmental and industrial laboratories.

This steam sterilizer employs gravity downward displacement with positive pulse conditioning as well as pressure and vacuum pulsing to manage solid and liquid loads.

Up to 20 preprogrammed cycles are initiated by the microprocessor controller through the Avanti touchscreen user interface. All cycle phases are automatically sequenced, monitored and documented by the control system. Audible and visual cycle deviation warnings are included.

Specifications Index

Features and Benefits

The Getinge Lancer LSS 130 Steam Sterilizer includes a suite of features and benefits designed for performance and operator safety.

- A safety interlock prevents steam from entering the chamber if the door is not sealed.
- Steam safety valves protect the sterilizer chamber and jacket from over pressurization.
- If the optional powered door encounters an obstruction while closing a safety clutch stops door movement. If the obstruction remains the powered door motor shuts off.
- Real-time pressure in the chamber and jacket is displayed on two analog pressure gauges mounted on the cabinet front. These gauges operate independent of the microprocessor control or electrical power.
- The control system can be configured to automatically check any user-programmed cycle parameters to assure safe and effective cycle performance. If an authorized user attempts to program a cycle beyond recommended parameters a warning will appear.
- Modification of cycle parameters or name requires a supervisor password.
- An aborted cycle will generate a warning message and the sterilizer will require operator intervention before the chamber door can be opened.
- If emergency access to the chamber interior is required the gasket may be retracted manually to protect the door and gasket when opened.
- In the unlikely event of a door failure the gasket is designed to relieve pressure. Baffles at the chamber opening direct steam away from the operator.
- The cabinet design includes insulation and heat guards to protect the operator by minimizing temperature on surfaces around the chamber opening and door.
- If a high water level in the drain is not corrected automatically, an audible and visual warning will notify the operator.
- An Automatic Utilities Control (AUC) provides a seven-day timer for programmed start-up and shutdown of all systems. When activated, the AUC shuts off water and steam valves to the sterilizer, including the optional electric steam generator, to save energy. Cycles running during these shutoff times will proceed until completed.
- The discharge water controller conserves water by cooling drain effluent only when needed.
- The Getinge Lancer sterilizers are 90% recyclable by weight and produce no harmful byproducts.
- Optional cycles for lab applications such as sealed liquids and low temperature sterilization.

Door

☐ Single Door *(standard)*

The vertical door is manually operated and is counterbalanced for easy operation. When opened, the door lowers into the cabinet and requires no horizontal or vertical clearance in the laboratory. Opening and closing the door requires minimal up or down effort.

The door gasket is retracted until the cycle is started. When the cycle is initiated steam pressure behind the gasket automatically seals the gasket against the door.

A safety switch prohibits steam from entering the chamber if the door is not sealed. Once the chamber is pressurized the door cannot be opened. When the cycle is completed and steam pressure is relieved the gasket retracts and door automatically unseals. Gasket retraction assures a positive, continuous peripheral seal and protection against undue wear.

A manual gasket retract valve is provided for emergency chamber access.

The door is constructed of stainless steel and fully insulated with fiberglass insulation.

Door Operation

☐ Manual *(standard)*

○ Powered *(optional)*

Powered Door Option. An optional powered door(s) is available. The powered door is operated by a foot switch at the base of the cabinet or via the control panel. If an obstruction occurs the door stops automatically. Pressing the foot switch also reverses direction. The powered door may also be operated manually. Specify when ordering.

Steam Source

☐ Facility/House Steam *(standard)*

○ Electric Steam Generator, Carbon Steel

○ Electric Steam Generator, Stainless Steel

Blowdown

☐ Manual *(standard)*

○ Automatic *(optional)*

Steam pressure requirement is 40-50 psig, (2.76-3.45 bar). Flow requirements are 120 lb/hr.

The LSS 130 Steam Sterilizer is designed for connection to a facility (house) steam supply.

Electric Steam Generator Option. The optional electric steam generator will be located at the base of the sterilizer cabinet interior if space is available. In case the steam generator option is to be combined with a vacuum pump the steam generator will be placed next to the sterilizer, externally. The steam generator has a 30 kW capacity at standard three-phase voltages. Steam output is automatically controlled to maintain a minimum pressure of 40 psig (2.76-bar). An automatic feed water pump is standard. An automatic fill valve assures correct water level at all times.

An ASME CSD-1 low-water cut-off safety device is standard.

The sterilizer On/Off switch also deactivates control power to the generator.

Carbon Steel. The steam generator is fabricated from carbon steel and is designed for use with standard tap water. Filtered water may be used to minimize the accumulation of minerals and deposits.

Stainless Steel. If higher purity water is supplied, an optional stainless steel steam generator is recommended. Contact your sales representative for details on material selection.

Automatic Blowdown Option. Motorized shutoff (ball valve) automatically uses steam pressure to minimize mineral accumulation in the steam generator. Seven-day timer permits the user to select time of day to schedule blowdown function.

Air Removal and Vacuum

☑ Ejector *(standard)*

- ○ Water saver for ejector
- ○ Chilled water recirculation coil for ejector water saver

○ Liquid ring vacuum pump

Air is removed from the sterilizer chamber using the water-ejector method as standard. The system can optionally be complemented with a water saver system where the ejector water is recirculated by a pump throughout the process.

As an additional option the system can be connected to a building chilled water recirculating system through coils in the water saver drain tank.

Liquid Ring, Vacuum Pump Option. An optional liquid ring vacuum pump removes air from the chamber and load by a series of vacuum pulses with frequency and duration determined by the cycle selected.
The vacuum pump is mounted on vibration isolators to assure quiet operation.

If the vacuum pump option is selected, internal installation of an electric steam generator may not be available due to space limitations within the base cabinet. Contact your sales representative for details.

Installation

☐ Recessed, One-wall *(standard)*

○ Freestanding *(cabinet enclosure panels required)*

The Getinge Lancer LSS 130 sterilizer is designed for standard one-wall or recessed installation.

Cabinet Enclosure Panels. Cabinet enclosure panels are required for freestanding installation to meet safety, code compliance and aesthetic requirements.

Chamber Inventory Loading Configuration

- Stainless Steel, Open Wire Shelves *(supplied, standard)*

☐ Additional Shelves

Stainless steel open wire shelves are supplied, standard.

Shelves are extendable on interior channels and easily removable for cleaning and are adjustable on 2.5" vertical centers (63 mm).

Optional Extra Shelves. Extra shelves are available; specify when ordering or following installation.

Controller

- PACS 3500 Programmable Logic Controller (PLC)

The control panel is located above the door for easy access. An internal deflection barrier routes vapor and moisture away from the door and electronic controls to protect components.

Sterilizer operation is supervised by a microprocessor, PACS 3500 programmable logic control (PLC). A color 8.4" SVGA display communicates all functions on a touchscreen user interface with password protection and administrative override. An integrated screen saver automatically dims the display to conserve power and extend the life of the display. The display will restore when the screen is touched. Audible and visual alarms are communicated through the user interface.

When installed and connected to specified utility services the sterilizer provides accurate and repeatable performance. During the timed exposure phase temperature is controlled by the chamber sensor at 1.44°F (0.8°C) above the setpoint. Temperature setpoints can be configured in 0.1°F (0.1°C) increments. Timing functions are selectable in one-second increments and accurate to within 0.04%. An internal battery with a 10-year life holds all preprogrammed cycles and user-programmed cycles in memory. In the event of a power interruption current cycle status is stored for up to one minute.

Graphic User Interface

- Touchscreen Interface
- 8.4" SVGA Color Display

A built-in menu is included. Temperature can be set, controlled and displayed in either °C or °F. Pressure is preset to display in psi (lb/sq. in). English is the default language. Spanish/French languages are available.

The Status Field appears across the top of each screen.

The status array displays the selected cycle number, cycle name, current cycle phase, cycle status and door status.

Text alarm messages and noncritical system messages are displayed in the status field.

The Button Field appears at the bottom of every screen and is used to give commands to the controller. These include:

- **Cycle Select** This field displays the listing of all preprogrammed cycles.
- **Login** The login field accesses password-protected features and overrides.
- **Menu** The menu field navigates among all operating screen options.
- **Door Controls** This door control field accesses door open, close and seal command.
- **Cycle Start** The cycle start appears green when all systems are ready to start the cycle. To start, tap the screen.

Process Display Screens arrange information in four unique formats to satisfy user preferences. These include bar, circle and plot graphs, plus a detail display of cycle selection with real-time monitoring, cycle status and alarm notifications.

- **Bar Graph** The bar graph displays chamber temperature and pressure in a bar graph with a large, easy-to-read digital format of time remaining. Cycle time is an average of the three cycles in each cycle type.
- **Circle Graph** The circle graph displays remaining time as a large circular icon on a digital display. Adjacent displays include exposure time, exposure temperature and drying time.
- **Plot Graph** The start screen displays a plot graph of various process parameters, with each parameter appearing in different colors. Additional parameters are displayed in the status field, with time remaining in an adjacent field.
- **Details Display** The details display screen displays real-time process data and time remaining in text form.

User Access is managed by an easy-to-use menu which restricts access to specific functions. Factory system defaults include cycle selection, door control and cycle start.

Submenus include System Menu, Process Screen, Documentation and Alarm History.

Additional functions and submenus may be made available by supervisor password access.

Supervisor Access requires a first-time password provided with the sterilizer documentation. Supervisor functions include all menus available through the main control system.

- **About** This menu permits the supervisor to apply a unique identification to the sterilizer.
- **User Management** Users can be added, edited or deleted through this screen.
- **Panel Setup** Allows configuration of default screen, volume level, screen saver, brightness and screen calibration.
- **Local Settings** Allows selection of Language, Date Format, Temperature and Pressure Measurement.
- **Reorder or Rename Cycles** Adjustable according to supervisor preference.
- **Edit Cycle Parameters** Supervisor override permits changes to all programmed cycles.
- **Alarm Clock** When activated this function sets On/Off timers for the Automatic Utilities Control to activate or deactivate the steam generator and water valves to save energy.
- **Print Last Cycle** Sends a print command to the thermal printer documenting the last cycle initiated.

Analog supplement controls and indicators include:

- Pressure Gauge, jacket
- Pressure Gauge, chamber

Built-in battery backup for onboard memory is included. Service routines and diagnostics are standard.

Cycle Documentation

- Thermal Printer
- Flash Drive
- Remote Printer

The printer is located on the main control panel. It documents cycle performance using 100-year warranted thermal paper. Printing is 200 dpi on 2.37" (60 mm) wide paper strip. Data collected includes:

- Process start time and date, sterilizer name and number, daily cycle number and total cycle count.
- Cycle selected with identification of time, temperature and any adjustable parameters.
- Cycle phase transition points, temperature, pressure and total cycle time.
- Process fault information messages with time of occurrence.
- Parameter check with a calculated, numeric process lethality.
- Summary verification of time at selected temperature with minimum and maximum exposure values.
- Cycle verification signature line.

The paper roll is replaced by a drop-in, quick feed motion with paper feed switch.

Printer strips can be accumulated on an automatic take-up reel or torn off for individual cycle storage. The printer permits a duplicate printout of the last cycle recorded.

A USB flash drive port with cover is provided for backup. Cycle performance data is automatically sent to the USB flash drive port for transfer to a USB memory device supplied with each sterilizer. The flash drive holds data for up to 10,000 cycles. Data from the USB port can be sent directly to a USB compatible printer in lieu of the flash drive.

Communications

A NetCOM communications card is standard and provides all cycle performance data to the USB port. NetCOM also supports a separate Ethernet connection between the sterilizer and selected external data management systems such as T-DOC or an approved facility network.

Depending on the communications required all cabling and intranet connections are the responsibility of the customer.

An RS-232 port is provided for serial communications for service diagnostics or program updates.

Preprogrammed Cycles

The Getinge Lancer LSS 130 sterilizer is factory programmed with standard sterilizing cycles. Each cycle is adjustable to meet specific reprocessing requirements. All user-accessible control functions can be changed by authorized users via a password-protected touchscreen data entry interface.

Parameter adjustments available through supervisor override include the following:

- Purge time
- Number of conditioning pulses
- Height of positive pressure conditioning pulses
- Depth of negative pressure (vacuum) conditioning pulses
- Exposure time and temperature
- Liquid cycle dwell time
- Liquid cycle exhaust rate
- Drying time
- Drying steam/air pulses (option)
- Sealed liquid settings (option)

Gravity.
Pressure pulse conditioning.

Default Temperature, Programmable: 250°F (121°C), 30 minutes exposure, 30 minutes dry time.

Purge Steam flows through the chamber for a programmed period, displacing air and preheating the load.

Conditioning A number of preprogrammed pulses are used to remove trapped air from the load through pressurization and depressurization pulses.

Heat Steam enters the chamber, heating the chamber and load to the exposure setpoint.

Exposure Steam is maintained in the chamber at the exposure temperature during the programmed exposure time.

Exhaust Steam is exhausted from the chamber allowing the chamber to return to atmospheric pressure.

Dry (Gravity) Filtered air is drawn through the chamber during the programmed dry time.

Air In Filtered air enters the chamber allowing atmospheric pressure to be restored

Cycle Complete Audible and visual notification of cycle finish with cycle documentation.

Vacuum.

Vacuum and pressure-pulse conditioning.

Default Temperature, Programmable: 250°F (121°C), 30 minutes exposure, 30 minutes dry time.

Purge Steam flows through the chamber for a programmed period, displacing air and preheating the load. Vacuum pump unit starts with deep vacuum and optional pulsing.

Conditioning A number of preprogrammed pulses are used to remove trapped air from the chamber and load through positive pressure and negative pressure-pulses.

Heat Steam enters the chamber, heating the chamber and load to the exposure setpoint.

Exposure Steam is maintained in the chamber at the exposure temperature during the programmed exposure time.

Exhaust Steam is exhausted from the chamber until chamber pressure is well below atmospheric pressure.

Dry (Vacuum) Vacuum is maintained in the chamber during the programmed dry time. For vacuum pump units there is steam/air pulsing during the dry time.

Air In Filtered air enters the chamber allowing atmospheric pressure to be restored.

Cycle Complete Audible and visual notification of cycle finish with cycle documentation.

Liquids Linear exhaust.

Default Temperature, Programmable: 250°F (121°C), 30 minutes exposure, dry time not applicable.

Purge Steam flows through the chamber for a programmed period, displacing air and preheating the load.

Liquid Heat Steam enters the chamber, heating the chamber and load to the exposure setpoint.

Liquid Dwell Chamber temperature is maintained to allow additional heat to be applied to the load before exposure begins.

Liquid Exposure Steam is maintained in the chamber at the exposure temperature during the programmed exposure time.

Liquid Exhaust Chamber pressure is slowly reduced until it is slightly below atmospheric pressure to prevent liquid boilover and allowing the load to cool.

Air In Filtered air enters the chamber allowing atmospheric pressure to be restored.

Cycle Complete Audible and visual notification of cycle finish with cycle documentation.

Vacuum Leak Test.

Tests total systems vacuum integrity.

Temperature: 268°F (131°C), 3 minutes exposure, 15 minutes dry time, 15 minutes test.

Preprogram Cycle Override.

Default factory cycles may be changed by a Supervisor with required password.

Additional/Optional Cycles.

☐ Sealed liquids and low temperature cycles (requires vacuum pump and load probe).*

Sealed Liquid Cycle The cycle is intended for sterilization of liquids in rigid sealed bottles. It uses a combination of air overpressure and jacket cooling to prevent deformation of a sealed liquid during cooldown.

Low Temperature Cycle The low temperature cycle is intended for laboratory processes such as Pasteurization and moist-heat conditioning within a temperature range of 169°F (76°C) to 212°F (100°C).

*Note this is a single option. Both cycles are selected as the option.

Chamber and Cabinet Construction

The chamber, jacket and door are constructed of 316L stainless steel. Interior chamber surfaces are polished to a high luster. The pressure vessel meets ASME code requirements for working pressures up to 45 psig (3.12 bar).

Front paneling is constructed of 0.05" (1.27 mm) #3 brushed finish stainless steel and is hinged for easy access to components including the gasket retract valve and steam generator if installed.

The gasket ring holds a continuous, one-piece silicone gasket 0.63" (16 mm) in diameter.

The sterilizer cabinet is thermally insulated with 1.5" (38 mm) fiberglass insulation, and double insulated between the jacket and "U" channel which reinforce the inner chamber.

The interior chamber includes a steam baffle to prevent condensation from wetting the load. An additional threaded opening permits insertion of thermocouple leads to independently monitor internal load temperatures.

Seismic brackets, standard.

Chamber Piping

☐ Process Piping *(standard)*

○ Stainless Steel Piping Components

Process Piping. The steam connection to the chamber and jacket is of standard bronze, brass and copper.

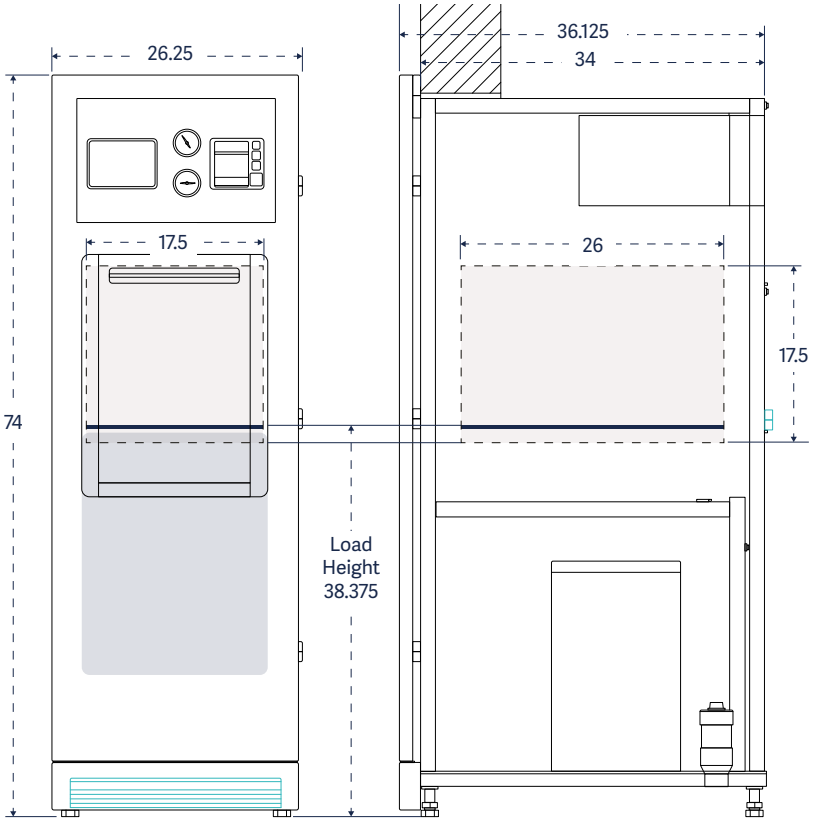
Stainless Steel Piping Option. Optional 304 stainless steel piping to the jacket and chamber connection components are recommended for installations where high purity water is used. Contact your sales representative for more information.

Options and Accessories

Option	Description
☐ Controller Load Probe	Monitors liquid load temperature during the sterilization cycle and allows for reduction of cycle time through the F0 function. Load probe is automatically detected without the need to setup separate load probe cycles. (Required for sealed liquids and low temperature cycles).
☐ Thermocouple Sealing Gland	Threaded port designed to permit insertion of independent thermocouples into chamber.
☐ Steam Generator, Integral	Electric steam generator, mounted within sterilizer chassis. Option dependent on available space if equipped with ither options.
○ Steam Generator, Adjacent/Remote	Electric steam generator for installation adjacent to sterilizer.
☐ ASME Blowdown Separator *(for use with steam generator)*	ASME-certified, safely reduces steam generator water to atmospheric pressure before transfer to drain.
☑ Validation	Testing and certification documenting compliance with IQ/OQ protocols.
☐ Water-saver System	Closed-loop system designed to save vacuum ejector water by tempering and recirculating the water throughout the process.
☐ Chilled water recirculation	Chilled water recirculation coil for ejector water saver drain tank.

Accessories	Description
☐ Supplemental Shelf, Extendable	Additional shelf; ordered separately.

Utilities and Site Preparation



Front

Side, Recessed

Side view illustrates facility wall cross section. Cabinet depth permits one-wall recess only. Requires wall opening cut-out size of 25"W × 72.25"H (635 × 1836 mm) prior to installation.

LSS 130 Configuration	Interior Volume cu. ft. (L)	Interior Dimensions W × H × D	Exterior Dimensions W × H × D	Ship Weight lb. (kg.)
Single Door	4.6 (130)	17.5" × 17.5" × 26" 445 × 445 × 660 mm	26.25" × 74" × 63.9" 667 × 1880 × 918 mm	965 (438)

Component	Selection Requirements	Connection
Sterilizer Controls	☐ 115V, AC, 60Hz, 1-phase ○ 230V, AC, 50Hz, 1-phase	–
Cold Water Supply	Pressure (dynamic): 40 – 70 psig Peak Flow Rate: 5 gpm	¾" FPT
Drain	Floor sink/drain required.	–
Steam *(House Supply)*	Pressure (dynamic): 40 – 50 psig Flow Rate: 120 lb/hr Quality: Condensate free, between 97% and 100% saturated vapor	¾" FPT
Vacuum Pump *(Optional)*	☐ 208V, AC, 60Hz, 3-phase ○ 380V, AC, 50Hz, 3-phase ○ 480V, AC, 60Hz, 3-phase	–
Electric Steam Generator *(Optional)*	☐ 208V, AC, 50/60Hz, 3-phase ○ 240V, AC, 50/60Hz, 3-phase ○ 380V, AC, 50Hz, 3-phase ○ 480V, AC, 60Hz, 3-phase ○ 600V, AC, 60Hz, 3-phase	–
Hot Water Supply *(Steam Generator Option Only)*	Pressure (dynamic): 20 – 50 psig Flow Rate: 0.4 gpm	⅜" FPT
Compressed Air for Sealed Liquid Cycles	Pressure (dynamic): 70 – 100 psig Peak Flow Rate: 1 SCFM	¼" FPT

For more detail see arrangement drawing for Getinge Lancer LSS 130

Standards, Codes, Certifications and Compliance

UL/IEC 61010-1; UL/IEC 61010-2

CSA C22 No's 61010-1; 61010-2-45

ASME Code, Section VIII, Division 1, Code for Pressure Vessels

Canadian Registration Number (CRN) Pressure Vessel Design

Uniform Plumbing Code

Seismic Anchoring, per CBC 2013

Wastewater cooling is automatically cooled to below 140°F (60°C). Cooling water is used only when needed.

Warranty Information

Getinge Lancer products are supported by a standard industry warranty which starts on the date of shipment from our factory. This warranty is the result of thousands of successful applications in demanding laboratory and industrial applications.

Under the protection period this warranty covers defects in materials and workmanship. Our liability is, at our option, to repair or replace any defective parts of this equipment during the warranty period.

GETINGE

Getinge is a global provider of innovative solutions for operating rooms, intensive careunits, sterilization departments and for life science companies and institutions.

Based on our first-hand experience and close partnerships with clinical experts, healthcare professionals and medtech specialists, we are improving the everyday life for people – today and tomorrow.

Manufacturer
Getinge IC Production Poland · Szkolna 30 · 62-064 Plewiska · Poland

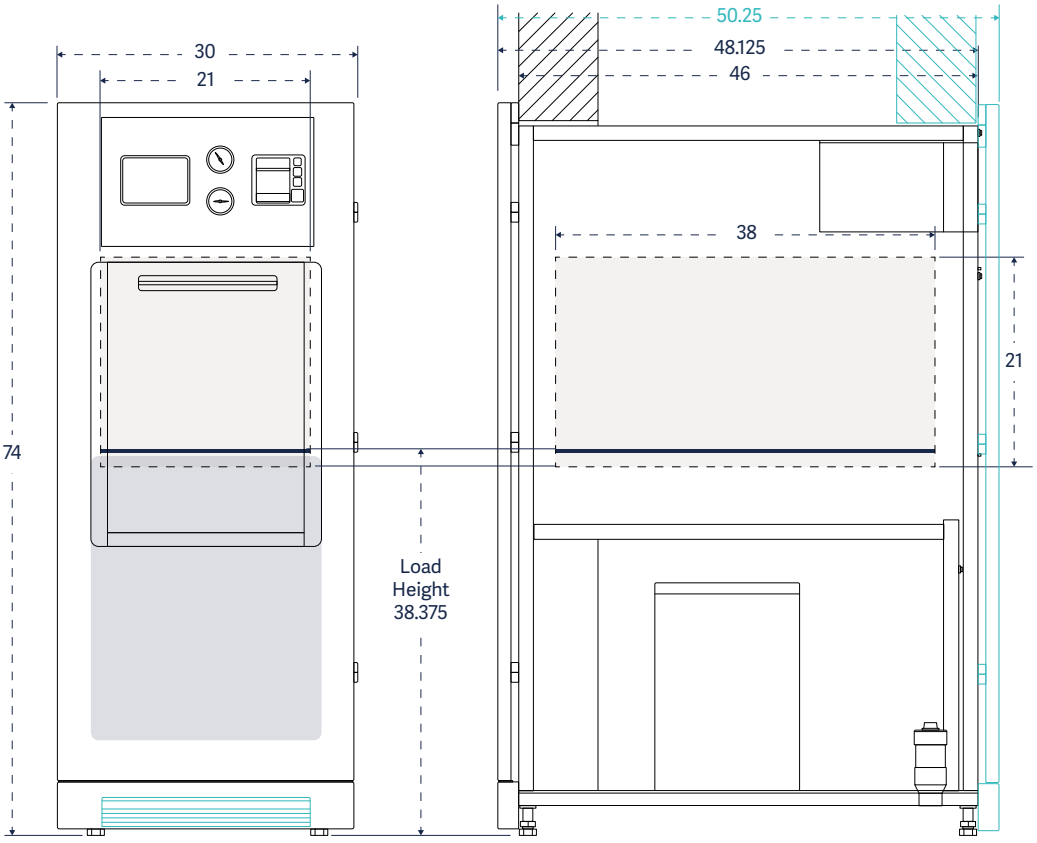
www.getinge.com

Getinge Lancer LSS 275

Laboratory Steam Sterilizer Specifications

GETINGE

Basic specifications



- **Internal Volume**
  9.7 cu. ft. (275 L)
- **Door Configurations**
  Single Door or Double Door, Pass-through
- **Design Operating Temperature**
  Gravity/Vacuum Cycles: 230°–275°F (110°–135°C)
  Liquid Cycles: 219°–275°F (104°–135°C)
  Optional Low Temp Cycle: 169°–212°F (76°–100°C)
- **Interior Dimensions (w × h × d)**
  21" × 21" × 38" (532 × 532 × 965 mm)
- **Exterior Dimensions (w × h × d)**
  Single Door: 30" × 74" × 48.125" (762 × 1880 × 1222 mm)
  Double Door: 30" × 74" × 50.25" (762 × 1880 × 1276 mm)

Part 1:
Selection Guide

Door Configuration

- single door
- double door, pass-through *(double door with integral boiler is not possible in combination with vacuum pump.)*

Door Operation

- manual (standard)
- powered

Steam Source

- facility/house steam (standard)
- steam generator(s)

  - 208V, AC, 60Hz, 3-phase
  - 240V, AC, 60Hz, 3-phase
  - 380V, AC, 50Hz, 3-phase
  - 480V, AC, 60Hz, 3-phase
  - 600V, AC, 60Hz, 3-phase
  - carbon steel (standard)
  - stainless steel
  - manual blowdown (standard)
  - automatic blowdown
  - located integral to the sterilizer
  - remotely located

Air Removal

- ejector (standard)
- vacuum pump, liquid ring

  - 208V, AC, 60Hz, 3-phase
  - 380V, AC, 50Hz, 3-phase
  - 480V, AC, 60Hz, 3-phase

Additional Programs

- Sealed liquids and low temp cycles (vacuum pump and load probe required)

Recesses and Barriers

- recessed, one-wall
- recessed, two-wall
- freestanding (cabinet enclosure panels required)
- with cross contamination barrier flange

Part 2:
General Specifications

The Getinge Lancer LSS 275 Steam Sterilizer is designed for high-performance sterilization of labware, media and laboratory byproducts used in research, analytical, environmental and industrial laboratories.

This steam sterilizer employs gravity downward displacement with positive pulse conditioning as well as pressure and vacuum pulsing to manage solid and liquid loads.

Up to 20 preprogrammed cycles are initiated by the microprocessor controller through the Avanti touchscreen user interface. All cycle phases are automatically sequenced, monitored and documented by the control system. Audible and visual cycle deviation warnings are included.

Specifications Index

Features and Benefits

The Getinge Lancer LSS 275 Steam Sterilizer includes a suite of features and benefits designed for performance and operator safety.

- A safety interlock prevents steam from entering the chamber if the door is not sealed.
- Steam safety valves protect the sterilizer chamber and jacket from over pressurization.
- If the optional powered door encounters an obstruction while closing a safety clutch stops door movement. If the obstruction remains the powered door motor shuts off.
- Real-time pressure in the chamber and jacket is displayed on two analog pressure gauges mounted on the cabinet front. These gauges operate independent of the microprocessor control or electrical power.
- The control system can be configured to automatically check any user-programmed cycle parameters to assure safe and effective cycle performance. If an authorized user attempts to program a cycle beyond recommended parameters a warning will appear.
- Modification of cycle parameters or name requires a supervisor password.
- An aborted cycle will generate a warning message and the sterilizer will require operator intervention before the chamber door can be opened.
- If emergency access to the chamber interior is required the gasket may be retracted manually to protect the door and gasket when opened.
- In the unlikely event of a door failure the gasket is designed to relieve pressure. Baffles at the chamber opening direct steam away from the operator.
- The cabinet design includes insulation and heat guards to protect the operator by minimizing temperature on surfaces around the chamber opening and door.
- If a high water level in the drain is not corrected automatically, an audible and visual warning will notify the operator.
- An Automatic Utilities Control (AUC) provides a seven-day timer for programmed start-up and shutdown of all systems. When activated, the AUC shuts off water and steam valves to the sterilizer, including the optional electric steam generator, to save energy. Cycles running during these shutoff times will proceed until completed.
- The discharge water controller conserves water by cooling drain effluent only when needed.
- Getinge Lancer sterilizers are 90% recyclable by weight and produce no harmful byproducts.
- Optional cycles for lab applications such as sealed liquids and low temperature sterilization.

Door

○ Single Door *(standard)*

○ Double Door, Pass-through

Door Operation

○ Manual *(standard)*

○ Powered *(optional)*

The vertical door is manually operated and is counterbalanced for easy operation. When opened, the door lowers into the cabinet and requires no horizontal or vertical clearance in the laboratory. Opening and closing the door requires minimal up or down effort.

The door gasket is retracted until the cycle is started. When the cycle is initiated steam pressure behind the gasket automatically seals the gasket against the door.

A safety switch prohibits steam from entering the chamber if the door is not sealed. Once the chamber is pressurized the door cannot be opened. When the cycle is completed and steam pressure is relieved the gasket retracts and door automatically unseals. Gasket retraction assures a positive, continuous peripheral seal and protection against undue wear.

A manual gasket retract valve is provided for emergency chamber access.

The door is constructed of stainless steel and fully insulated with fiberglass insulation.

Powered Door Option An optional powered door(s) is available. The powered door is operated by a foot switch at the base of the cabinet or via the control panel. If an obstruction occurs the door stops automatically. Pressing the foot switch also reverses direction. The powered door may also be operated manually. Specify when ordering.

Steam Source

○ Facility/House Steam *(standard)*

○ Electric Steam Generator, Carbon Steel

○ Electric Steam Generator, Stainless Steel

Blowdown

○ Manual *(standard)*

○ Automatic *(optional)*

Steam pressure requirement is 40-50 psig, (2.76-3.45 bar). Flow requirements are 120 lb/hr.

The LSS 275 Steam Sterilizer is designed for connection to a facility (house) steam supply.

Electric Steam Generator Option The optional electric steam generator is located at the base of the sterilizer cabinet interior. The steam generator has a 30 kW capacity at standard three-phase voltages. Steam output is automatically controlled to maintain a minimum pressure of 40 psig (2.76-bar). An automatic feed water pump is standard.

An automatic fill valve assures correct water level at all times.

An ASME CSD-1 low-water cut-off safety device is standard.

The sterilizer On/Off switch also deactivates control power to the generator.

Carbon Steel The steam generator is fabricated from carbon steel and is designed for use with standard tap water. Filtered water may be used to minimize the accumulation of minerals and deposits.

Stainless Steel If higher purity water is supplied, an optional stainless steel steam generator is recommended. Contact your sales representative for details on material selection.

Automatic Blowdown Option Motorized shutoff (ball valve) automatically uses steam pressure to minimize mineral accumulation in the steam generator. Seven-day timer permits the user to select time of day to schedule blowdown function. The automatic blowdown option includes a system to quench the blowdown steam with cooling water.

Air Removal and Vacuum

- ○ Ejector *(standard)*
  - ○ Water saver for ejector
  - ○ Chilled water recirculation coil for ejector water saver
- ○ Liquid ring vacuum pump

Air is removed from the sterilizer chamber using the water-ejector method as standard. The system can optionally be complemented with a water saver system where the ejector water is recirculated by a pump throughout the process.

As an additional option the system can be connected to a building chilled water recirculating system through coils in the water saver drain tank.

Liquid Ring Vacuum Pump Option An optional liquid ring vacuum pump removes air from the chamber and load by a series of vacuum pulses with frequency and duration determined by the cycle selected. The vacuum pump is mounted on vibration isolators to assure quiet operation. If the vacuum pump option is selected, internal installation of an electric steam generator will extend the installation dimensions for single door units and is not available within the base cabinet for double door units. Contact your sales representative for details.

Installation

- ○ Recessed, One-wall *(standard)*
- ○ Recessed, Two-wall *(optional)*
  - ☐ Cross Contamination Barrier
- ○ Freestanding *(cabinet enclosure panels required)*

The Getinge Lancer LSS 275 sterilizer is designed for standard one-wall or optional two-wall recessed installation.

Cabinet Enclosure Panels Cabinet enclosure panels are required for freestanding installation to meet safety, code compliance and aesthetic requirements.

Cross Contamination Barrier Option The optional cross contamination barrier is used for a vermin barrier or when an additional mechanical barrier is required to manage air differential between rooms. The barrier includes a 0.25" (6.3 mm) flange plate seam welded around the peripheral front of the sterilizer. Sheet metal paneling is sized to span the distance from the flange plate to the wall opening. This paneling is then sealed with caulking compound to create the desired barrier. Compression fittings will be used for any electrical or plumbing connections required to pass through the barrier.

Chamber Inventory Loading Configuration

○ *Stainless Steel, Open Wire Shelves (supplied, standard)*
☐ Additional Shelves

⊡ Load Car *(optional)*
☐ Additional Load Car Shelves *(optional)*

○ Loading Trolley *(optional)*

The sterilizer can be configured for use with standard open wire shelves, extendable, or with a load car transported by loading trolley.

Shelves Stainless steel open wire shelves are supplied, standard.

Shelves are extendable on interior channels and easily removable for cleaning. Channels are adjustable on 2.5" vertical centers (63 mm). Extra shelves are available; specify when ordering or following installation.

Load Car An optional load car is available for use with a transport trolley. The load car is sized to fit the sterilizer interior dimensions. Stainless steel construction.

Loading Trolley Fixed height trolley for use with accessory load car. Trolley releases load car when locked to the interior chamber rail. Reinforced stainless steel construction.

Controller

- PACS 3500 Programmable Logic Controller (PLC)

The control panel is located above the door for easy access. An internal deflection barrier routes vapor and moisture away from the door and electronic controls to protect components.

Double door, pass-through models feature separate control interfaces at each door opening for access from either side of the wall.

Sterilizer operation is supervised by a microprocessor, PACS 3500 programmable logic control (PLC). A color 8.4" SVGA display communicates all functions on a touch-screen user interface with password protection and administrative override. An integrated screen saver automatically dims the display to conserve power and extend the life of the display. The display will restore when the screen is touched. Audible and visual alarms are communicated through the user interface.

When installed and connected to specified utility services the sterilizer provides accurate and repeatable performance. During the timed exposure phase temperature is controlled by the chamber sensor at 1.44°F (0.8°C) above the setpoint. Temperature setpoints can be configured in 0.1°F (0.1°C) increments. Timing functions are selectable in one-second increments and accurate to within 0.04%. An internal battery with a 10-year life holds all preprogrammed cycles and user-programmed cycles in memory. In the event of a power interruption current cycle status is stored for up to one minute.

Graphic User Interface

- Touchscreen Interface
- 8.4" SVGA

A built-in menu is included. Temperature can be set, controlled and displayed in either °C or °F. Pressure is preset to display in psi (lb/sq. in). English is the default language. Spanish/French languages are available.

The Status Field appears across the top of each screen.

The status array displays the selected cycle number, cycle name, current cycle phase, cycle status and door status.

Text alarm messages and noncritical system messages are displayed in the status field.

The Button Field appears at the bottom of every screen and is used to give commands to the controller. These include:

- **Cycle Select** This field displays the listing of all preprogrammed cycles.
- **Login** The login field accesses password-protected features and overrides.
- **Menu** The menu field navigates among all operating screen options.
- **Door Controls** This door control field accesses door open, close and seal command.
- **Cycle Start** The cycle start appears green when all systems are ready to start the cycle. To start, tap the screen.

Process Display Screens arrange information in four unique formats to satisfy user preferences. These include bar, circle and plot graphs, plus a detail display of cycle selection with real-time monitoring, cycle status and alarm notifications.

- **Bar Graph** The bar graph displays chamber temperature and pressure in a bar graph with a large, easy-to-read digital format of time remaining. Cycle time is an average of the three cycles in each cycle type.
- **Circle Graph** The circle graph displays remaining time as a large circular icon on a digital display. Adjacent displays include exposure time, exposure temperature and drying time.
- **Plot Graph** The start screen displays a plot graph of various process parameters, with each parameter appearing in different colors. Additional parameters are displayed in the status field, with time remaining in an adjacent field.
- **Details Display** The details display screen displays real-time process data and time remaining in text form.

User Access is managed by an easy-to-use menu which restricts access to specific functions. Factory system defaults include cycle selection, door control and cycle start.

Submenus include System Menu, Process Screen, Documentation and Alarm History.

Additional functions and submenus may be made available by supervisor password access.

Supervisor Access requires a first-time password provided with the sterilizer documentation. Supervisor functions include all menus available through the main control system.

- **About** This menu permits the supervisor to apply a unique identification to the sterilizer.
- **User Management** Users can be added, edited or deleted through this screen.
- **Panel Setup** Allows configuration of default screen, volume level, screen saver, brightness and screen calibration.
- **Local Settings** Allows selection of Language, Date Format, Temperature and Pressure Measurement.
- **Reorder or Rename Cycles** Adjustable according to supervisor preference.
- **Edit Cycle Parameters** Supervisor override permits changes to all programmed cycles.
- **Alarm Clock** When activated this function sets On/Off timers for the Automatic Utilities Control to activate or deactivate the steam generator and water valves to save energy.
- **Print Last Cycle** Sends a print command to the thermal printer documenting the last cycle initiated.

Analog supplement controls and indicators include:

- Pressure Gauge, jacket
- Pressure Gauge, chamber

Built-in battery backup for onboard memory is included. Service routines and diagnostics are standard.

Cycle Documentation

- Thermal Printer
- Flash Drive
- Remote Printer

The printer is located on the main control panel. It documents cycle performance using 100-year warranted thermal paper. Printing is 200 dpi dot matrix on 2.37" (60 mm) wide paper strip. Data collected includes:

- Process start time and date, sterilizer name and number, daily cycle number and total cycle count.
- Cycle selected with identification of time, temperature and any adjustable parameters.
- Cycle phase transition points, temperature, pressure and total cycle time.
- Process fault information messages with time of occurrence.
- Parameter check with a calculated, numeric process lethality.
- Summary verification of time at selected temperature with minimum and maximum exposure values.
- Cycle verification signature line.

The paper roll is replaced by a drop-in, quick feed motion with paper feed switch.

Printer strips can be accumulated on an automatic take-up reel or torn off for individual cycle storage. The printer permits a duplicate printout of the last cycle recorded.

A USB flash drive port with cover is provided for backup. Cycle performance data is automatically sent to the USB flash drive port for transfer to a USB memory device supplied with each sterilizer. The flash drive holds data for up to 10,000 cycles. Data from the USB port can be sent directly to a USB compatible printer in lieu of the flash drive.

Communications

A NetCOM communications card is standard and provides all cycle performance data to the USB port. NetCOM also supports a separate Ethernet connection between the sterilizer and selected external data management systems such as T-DOC or an approved facility network. Depending on the communications required all cabling and intranet connections are the responsibility of the customer.

An RS-232 port is provided for serial communications for service diagnostics or program updates.

Preprogrammed Cycles

The Getinge Lancer LSS 275 sterilizer is factory programmed with standard sterilizing cycles. Each cycle is adjustable to meet specific reprocessing requirements. All user-accessible control functions can be changed by authorized users via a password-protected touchscreen data entry interface.

Parameter adjustments available through supervisor override include the following:

- Purge time
- Number of conditioning pulses
- Height of positive pressure conditioning pulses
- Depth of negative pressure (vacuum) conditioning pulses
- Exposure time and temperature
- Liquid cycle dwell time
- Liquid cycle exhaust rate
- Drying time
- Drying steam/air pulses (option)
- Sealed liquid settings (option)

Gravity.
Pressure pulse conditioning.

Default Temperature, Programmable: 250°F (121°C), 30 minutes exposure, 30 minutes dry time.

Purge Steam flows through the chamber for a programmed period, displacing air and preheating the load.

Conditioning A number of preprogrammed pulses are used to remove trapped air from the load through pressurization and depressurization pulses.

Heat Steam enters the chamber, heating the chamber and load to the exposure setpoint.

Exposure Steam is maintained in the chamber at the exposure temperature during the programmed exposure time.

Exhaust Steam is exhausted from the chamber allowing the chamber to return to atmospheric pressure.

Dry (Gravity) Filtered air is drawn through the chamber during the programmed dry time.

Air In Filtered air enters the chamber allowing atmospheric pressure to be restored

Cycle Complete Audible and visual notification of cycle finish with cycle documentation.

Vacuum.

Vacuum and pressure-pulse conditioning.

Default Temperature, Programmable: 250°F (121°C), 30 minutes exposure, 30 minutes dry time.

Purge Steam flows through the chamber for a programmed period, displacing air and preheating the load. Vacuum pump unit starts with deep vacuum and optional pulsing.

Conditioning A number of preprogrammed pulses are used to remove trapped air from the chamber and load through positive pressure and negative pressure-pulses.

Heat Steam enters the chamber, heating the chamber and load to the exposure setpoint.

Exposure Steam is maintained in the chamber at the exposure temperature during the programmed exposure time.

Exhaust Steam is exhausted from the chamber until chamber pressure is well below atmospheric pressure.

Dry (Vacuum) Vacuum is maintained in the chamber during the programmed dry time. For vacuum pump units there is steam/air pulsing during the dry time.

Air In Filtered air enters the chamber allowing atmospheric pressure to be restored.

Cycle Complete Audible and visual notification of cycle finish with cycle documentation.

Liquids Linear exhaust.

Default Temperature, Programmable: 250°F (121°C), 30 minutes exposure, dry time not applicable.

Purge Steam flows through the chamber for a programmed period, displacing air and preheating the load.

Liquid Heat Steam enters the chamber, heating the chamber and load to the exposure setpoint.

Liquid Dwell Chamber temperature is maintained to allow additional heat to be applied to the load before exposure begins.

Liquid Exposure Steam is maintained in the chamber at the exposure temperature during the programmed exposure time.

Liquid Exhaust Chamber pressure is slowly reduced until it is slightly below atmospheric pressure to prevent liquid boilover and allowing the load to cool.

Air In Filtered air enters the chamber allowing atmospheric pressure to be restored.

Cycle Complete Audible and visual notification of cycle finish with cycle documentation.

Vacuum Leak Test.

Tests total systems vacuum integrity.

Temperature: 268°F (131°C), 3 minutes exposure, 15 minutes dry time, 15 minutes test.

Preprogram Cycle Override.

Default factory cycles may be changed by a Supervisor with required password.

Additional/Optional Cycles.

☐ Sealed liquids and low temperature cycles (requires vacuum pump and load probe).*

Sealed Liquid Cycle The cycle is intended for sterilization of liquids in rigid sealed bottles. It uses a combination of air overpressure and jacket cooling to prevent deformation of a sealed liquid during cooldown.

Low Temperature Cycle The low temperature cycle is intended for laboratory processes such as Pasteurization and moist-heat conditioning within a temperature range of 169°F (76°C) to 212°F (100°C).

*Note this is a single option. Both cycles are selected as the option.

Chamber and Cabinet Construction

The chamber, jacket and door are constructed of 316L stainless steel. Interior chamber surfaces are polished to a high luster. The pressure vessel meets ASME code requirements for working pressures up to 45 psig (3.12 bar).

Front paneling is constructed of 0.05" (1.27 mm) #3 brushed finish stainless steel and is hinged for easy access to components including the gasket retract valve and steam generator if installed.

The gasket ring holds a continuous, one-piece silicone gasket 0.63" (16 mm) in diameter.

The sterilizer cabinet is thermally insulated with 1.5" (38 mm) fiberglass insulation, and double insulated between the jacket and "U" channel which reinforce the inner chamber.

The interior chamber includes a steam baffle to prevent condensation from wetting the load. An additional threaded opening permits insertion of thermocouple leads to independently monitor internal load temperatures.

Seismic brackets are standard.

Chamber Piping

- ○ Process Piping *(standard)*
- ○ Stainless Steel Piping Components

Process Piping The steam connection to the chamber and jacket is of standard bronze, brass and copper.

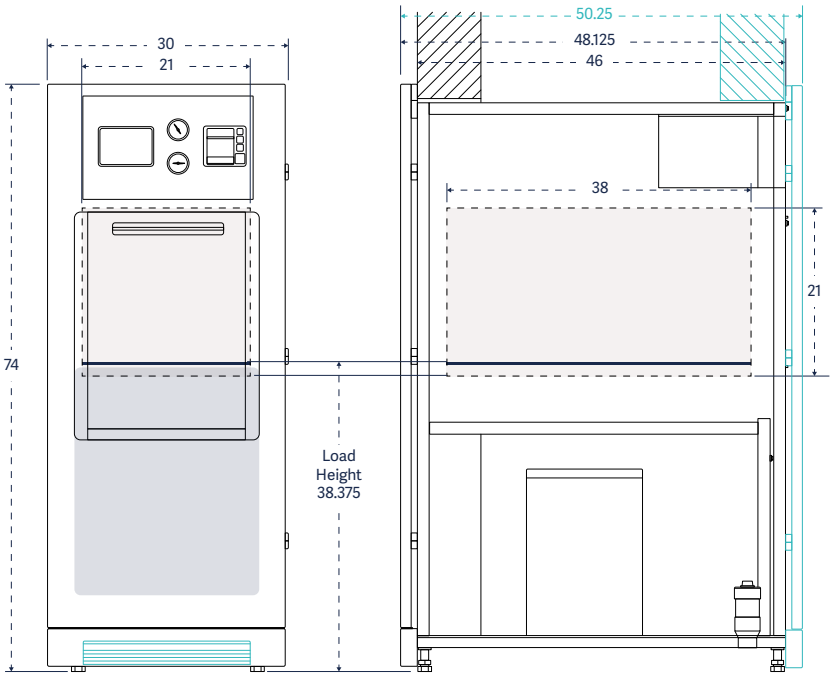
Stainless Steel Piping Option Optional 304 stainless steel piping to the jacket and chamber connection components are recommended for installations where high purity water is used. Contact your sales representative for more information.

Options and Accessories

Option	Description
☐ Controller Load Probe	Monitors liquid load temperature during the sterilization cycle and allows for reduction of cycle time through the F0 function. Load probe is automatically detected without the need to setup separate load probe cycles. (Required for sealed liquids and low temperature cycles).
☐ Thermocouple Sealing Gland	Threaded port designed to permit insertion of independent thermocouples into chamber.
○ Steam Generator, Integral	Electric steam generator, mounted within sterilizer chassis. Option dependent on available space if equipped with other options.
○ Steam Generator, Adjacent/Remote	Electric steam generator for installation adjacent to sterilizer.
☐ ASME Blowdown Separator *(for use with standalone steam generator)*	ASME-certified, safely reduces steam generator water to atmospheric pressure before transfer to drain.
☐ Cross Contamination Barrier *(available on pass-through model only)*	Adds an extra measure of protection between the contained and non-contained areas.
☐ Validation	Testing and certification documenting compliance with IQ/OQ protocols.
☐ Water-saver System	Closed-loop system designed to save vacuum ejector water by tempering and recirculating the water during long drying phases following sterilization.
☐ Chilled water recirculation	Chilled water recirculation coil for ejector water saver drain tank.

Accessories	Description
☐ Load Car	For use with accessory loading trolley. Sized to fit sterilizer interior dimensions. Stainless steel construction.
☐ Supplemental Load Car Shelf	Additional load car shelf; ordered separately.
☐ Loading Trolley	Fixed height trolley for use with accessory load car. Trolley releases load car when locked to the interior chamber rail. Reinforced stainless steel construction.

Utilities and Site Preparation



Front Side, Recessed

Side view illustrates facility wall cross section. Cabinet depth permits one-wall or two-wall recess. Requires wall opening cut-out size of 29"W × 72.25"H (737 × 1836 mm) prior to installation.

LSS 590 Configuration	Interior Volume cu. ft. (L)	Interior Dimensions W × H × D	Exterior Dimensions W × H × D	Ship Weight lb. (kg.)
Single Door	9.7 (275)	21" × 21" × 38" 532 × 532 × 965 mm	30" × 74" × 48.125" 762 × 1880 × 1222 mm	1223 (554)
Double Door, Pass-through	9.7 (275)	21" × 21" × 38" 532 × 532 × 965 mm	30" × 74" × 50.25" 762 × 1880 × 1276 mm	1298 (589)

Component	Selection Requirements	Connection
Sterilizer Controls	○ 115V, AC, 60Hz, 1-phase ○ 230V, AC, 50Hz, 1-phase	–
Cold Water Supply	Pressure (dynamic): 40 – 70 psig Flow Rate: 5 gpm	¾" FPT
Drain	Floor sink/drain required.	–
Steam *(House Supply)*	Pressure (dynamic): 40 – 50 psig Flow Rate: 120 lb/hr Quality: Condensate free, between 97% and 100% saturated vapor	¾" FPT
Vacuum Pump *(Optional)*	○ 208V, AC, 60Hz, 3-phase ○ 380V, AC, 50Hz, 3-phase ○ 480V, AC, 60Hz, 3-phase	–
Electric Steam Generator *(Optional)*	○ 208V, AC, 60Hz, 3-phase ○ 240V, AC, 60Hz, 3-phase ○ 380V, AC, 50Hz, 3-phase ○ 480V, AC, 60Hz, 3-phase ○ 600V, AC, 60Hz, 3-phase	–
Hot Water Supply *(Steam Generator Option Only)*	Pressure (dynamic): 20 – 50 psig Peak Flow Rate: 0.4 gpm	⅜" FPT
Compressed Air *(Cross Contamination Barrier Flange and/or Sealed Liquid Cycles Options Only)*	Pressure (dynamic): 70 – 100 psig Peak Flow Rate: 1 SCFM	¼" FPT

For more detail see arrangement drawing for Getinge Lancer LSS 275

Standards, Codes, Certifications and Compliance

UL/IEC 61010-1; UL/IEC 61010-2

CSA C22 No's 61010-1; 61010-2-45

ASME Code, Section VIII, Division 1, Code for Pressure Vessels

Canadian Registration Number (CRN) Pressure Vessel Design

Uniform Plumbing Code

Seismic Anchoring, per CBC 2013

Wastewater cooling is automatically cooled to below 140°F (60°C). Cooling water is used only when needed.

Warranty Information

Getinge Lancer products are supported by a standard industry warranty which starts on the date of shipment from our factory. This warranty is the result of thousands of successful applications in demanding laboratory and industrial applications.

Under the protection period this warranty covers defects in materials and workmanship. Our liability is, at our option, to repair or replace any defective parts of this equipment during the warranty period.

GETINGE

Getinge is a global provider of innovative solutions for operating rooms, intensive careunits, sterilization departments and for life science companies and institutions.

Based on our first-hand experience and close partnerships with clinical experts, healthcare professionals and medtech specialists, we are improving the everyday life for people – today and tomorrow.

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