

Agilent CrossLab Start Up Services

Agilent ELx405 Deep Well Washer Site Preparation Checklist

Thank you for purchasing an ELx405 Deep Well Washer instrument from **Agilent Technologies**. CrossLab Start Up is focused on helping customers shorten the time it takes to start realizing the full value of their instrument investment.

Correct site preparation is the key first step in ensuring that your instruments and software systems operate reliably over an extended lifetime. This document is an **information guide and checklist** prepared for you that outlines the supplies, space, and utility requirements for the system set up in your lab.

Introduction

Customer Information

- If you have questions or problems in providing anything described as part of *Customer Responsibilities* below, please contact your local Agilent or partner support / service organization for assistance prior to delivery. In addition, Agilent and/or its partners reserve the right to reschedule the installation dependent upon the readiness of your laboratory.
- Should your site not be ready for whatever reasons, please contact Agilent as soon as possible to re-schedule any services that have been purchased.
- Other optional services such as additional training, operational qualification (OQ) and consultation for user-specific applications may also be provided at the time of installation when ordered with the system but should be contracted separately.
- Please refer to the other peripheral products (i.e., sampling products, etc.) for site preparation requirements.
- Technical Support e-mail is bio.tac@agilent.com.

Customer Responsibilities

Ensure that your site meets the following specifications before the installation date. For details, see specific sections within this checklist, including:

- The necessary laboratory or bench space is available.
- The required **environmental conditions for the lab** as well as laboratory gases, tubing.
- The **power requirements** related to the product (e.g., **number and location** of electrical outlets).
- The **required operating supplies** necessary for the product and installation.
- The **liquid disposal requirements** related to the product (e.g., drain for direct drain module and access for liquid disposal).
- While Agilent is delivering **Installation and Introduction** services, users of the ELx405 Deep Well Washer should be present throughout these services; otherwise, they will miss important operational, maintenance and safety information.
- Please consult the **Special Requirements and Other Considerations** section below for other product-specific information.

Important Customer Web Links

- To access Agilent training and education, visit <http://www.agilent.com/chem/training> to learn about training options, which include online, classroom and onsite delivery. A training specialist can work directly with you to help determine your best options.
- To access the **Agilent Resource Center** web page, visit <https://www.agilent.com/en-us/agilentresources>. The following information topics are available:
 - Sample Prep and Containment
 - Chemical Standards
 - Analysis
 - Service and Support
 - Application Workflows
- The **Agilent Community** is an excellent place to get answers, collaborate with others about applications and Agilent products, and find in-depth documents and videos relevant to Agilent technologies. Visit <https://community.agilent.com/welcome>
- Videos about specific preparation requirements for your instrument can be found by searching the **Agilent YouTube** channel at <https://www.youtube.com/user/agilent>
- **Need to place a service call?** [Flexible Repair Options | Agilent](#)
- For product information, please visit [BioTek Microplate Washers: ELx405 Select Deep Well Microplate Washer - Overview](#)

Site Preparation

Dimensions and Weight

Identify the laboratory bench space before your system arrives based on the table below. Pay special attention to the total height and total weight requirements for all system components you have ordered and avoid bench space with overhanging shelves. Also pay special attention to the total weight of the modules you have ordered to ensure your laboratory bench can support this weight.

Special notes

- Dimensions have been given that account for tubing clearances, where possible.

The following table provides dimensions and weight requirements.

Instrument Description	Weight		Height		Depth		Width	
	Kg	lbs.	cm	in	cm	in	cm	in
ELx405 Deep Well Instrument	17.7	39.0	44	17	49	19	36	14
Supply Bottle, each, 4 Liters	0.5	1.0	31	12	18	7	18	7
Waste Bottle, each, 4 Liters	0.9	1.8	40	15	18	7	18	7
Supply & Waste Bottle Rack, each	0.7	1.4	18	7	18	7	44	17
Standard Vacuum Pump	7.4	16.2	28	11	28	11	26	10
Hi-Flow Vacuum Pump	15.0	32	28	11	25	10	41	16
Direct Drain Vacuum Module	3.6	8.0	16	6	18	7	28	11
Bottom Filtration Module	2.3	5.0	21	8	18	7	36	14
Buffer Switching Module	2.8	6.0	16	6	18	7	28	11

Equipment Positioning on the Bench

- The ELx405D dispense bottles, buffer switching module, and bottom filtration module should be positioned on the benchtop with the instrument. The waste bottles and vacuum pump should be located on the floor below.

Environmental Conditions

Operating your instrument within the recommended temperature ranges ensures optimum instrument performance and lifetime.

Special notes

- Performance can be affected by sources of heat and cold, e.g., direct sunlight, heating/cooling from air conditioning outlets, drafts and/or vibrations.
- The bench or supporting surface must be vibration free. The vacuum pump and waste system should always be installed on the floor, as recommended.

The following table may help you calculate the additional BTUs of heat dissipation from this new equipment. Maximums represent the heat given off when heated zones are set for maximum temperatures.

Instrument Description	Operating Temperature Range °C (F)	Operating Humidity Range %
ELx405D	15 – 30 (50 – 104)	The instrument should be operated in a non-condensing humid environment having a maximum relative humidity of 80% at temperatures up to 31 degrees Celsius decreasing linearly to 50% relative humidity at 40 degrees Celsius.
Standard Vacuum Pump	10 – 40 (50 – 104)	The pump should meet all safety, functional, and performance requirements while operating in a non-condensing humid environment having a maximum relative humidity of 80% at temperatures up to 31° C decreasing linearly to 50% relative humidity at 40° C.
Hi-Flow Vacuum Pump	10 – 40 (50 - 104)	30-85

Power Consumption

Special notes

- If a computer system is supplied with your instrument, be sure to account for those electrical outlets.

Instrument Description	Line Voltage and Frequency V, Hz	Maximum Power Consumption VA	Maximum Power Consumption W
ELx405D and Vacuum Pump. The vacuum pump is plugged directly into the washer, so the VA rating reflects the total power consumption through the single power cord.	100 to 240V, 50 to 60 Hz	900VA	900W
Direct Drain Module (Optional)	100-240 V, 50-60	40VA	40W

- One (1) outlet is required per ELx405D instrument. This accommodates both the instrument and the vacuum pump, which is plugged directly into the instrument. An additional outlet is needed if the Direct Drain system is being used.
- Use the correct power cord.
- It is important that the outlets and power strips used are provided uninterrupted power. Contact your institution's facilities team if you are concerned about whether your chosen outlets are sufficient.

Special Requirements and Other Considerations

Waste liquid and gas management

- Customer will determine how to manage the liquid waste from the instrument.

Tools

Your Agilent instrument comes with a few basic tools and consumables which are relative to the specific configuration of your system.

Tools (provided)

- Fuse 5 Amp
- 5/32 hex wrench
- 5/16 wrench
- 3/8 wrench
- 9/64" hex wrench
- Styli for cleaning out manifold tubes

Tools (recommended)

- None

Service Engineer Review (Optional)

Service Engineer Comments

If the Service Engineer completed a review of the Site Preparation requirements with the customer, the Service Engineer should complete the following Comments section.

If there are any specific points that should be noted as part of performing the service review or other items of interest for the customer, please write in this box.

Site Preparation Verification

Service Request Number:

Date of Review:

Service Engineer Name:

Customer Name:

Service Engineer Signature:

Total number of pages in this document: