

Installation Qualification

Purpose: To guide the distributor to ensure the proper installation of MVE ,USA cryogenic freezers. Correct installation ensures proper performance and validates factory warranty policies.

Procedure: The attached certificates of quality should be followed step by step. Discrepancies found during installation must be resolved to ensure proper operation and performance. The customer must be notified of any discrepancies and steps taken to provide resolution.

Frequency: This qualification should be performed during the first fill installation and anytime a freezer is reintroduced into service after maintenance, repair and transport.

Responsibility: The following procedure should only be carried out by authorized MVE distributor or qualified MVE trained technicians.

Completion: The aforementioned MVE cryogenic freezer has successfully passed Installation Qualification.

Rhea B Zacharias
SIGNATURE

22.08.2022

DATE

Rhea B Zacharias
NAME

Sales Manager
TITLE/POSITION



Installation Qualification Checklist

Description	Acceptance Specification Criteria	Observed Result	
1.Receiving	Following uncrating, the unit is visibly free from damage.	YES	NO
	Confirm freezer model and serial number match documentation	YES	NO
2.Verify documents are present	Touch Screen Quick Start Guide	YES	NO
	Certificate of Quality	YES	NO
	Liquid Nitrogen Handling Instructions	YES	NO
3.Verify equipment is present	Touch screen controller, bracket, post, and screws	YES	NO
	Power supply, outlet cord, bracket, and screws	YES	NO
	LN2 measuring dip stick	YES	NO
	LN2 transfer hose	YES	NO
	Desiccant packs removed	YES	NO
4.Installation	Unit is placed on flat, level ground	YES	NO
	Unit has 2inch (5cm) clearance in all sides	YES	NO
	Touch Screen controller is installed and power supply connected	YES	NO
	Power supply connected to Touch screen power	YES	NO
	Touch screen controller has power and display is lit	YES	NO
	Level Sensing vinyl tube is securely connected to Touch screen level input	YES	NO
	12-Pin Wire harness connection is connected to Touch screen controller	YES	NO



5.LN2 Supply (Fill details only if Supply tank is purchased by customer) <i>S/N 32207784</i>	LN2 supply pressure is 22-35 PSIG (1.5 bar)	<input checked="" type="checkbox"/>	NO
	LN2 supply liquid valve securely connected and isolated to freezer fill wire transfer hose	<input checked="" type="checkbox"/>	NO
	Relief valve present between LN2 supply and freezer fill valve	<input checked="" type="checkbox"/>	NO
	Level indicator working	<input checked="" type="checkbox"/>	NO
	LN2 supply is sufficient for first fill	<input checked="" type="checkbox"/>	NO
6. LN2 Supply connections (Fill details only if Supply tank is purchased by customer) <i>S/N 32207784</i>	Transfer nose inspected	<input checked="" type="checkbox"/>	NO
	Outer casing intact	<input checked="" type="checkbox"/>	NO
	Connections leak tested	<input checked="" type="checkbox"/>	NO
	Broken welds present	<input checked="" type="checkbox"/>	NO
	Freezer plumbing inspected	<input checked="" type="checkbox"/>	NO
	Initiate fill, Freezer plumbing is leak free	<input checked="" type="checkbox"/>	NO
	LN2 is entering freezer	<input checked="" type="checkbox"/>	NO
	End fill, freezer stopped filling	<input checked="" type="checkbox"/>	NO
7. Level sensing tube	Vinyl tube inspected	<input checked="" type="checkbox"/>	NO
	Vinyl tube free from cracks and stills	<input checked="" type="checkbox"/>	NO
	Vinyl tube free from discoloration	<input checked="" type="checkbox"/>	NO
	Vinyl tube routed away from freezer plumbing	<input checked="" type="checkbox"/>	NO
	Vinyl tube securely attached to freezer plumbing hose	<input checked="" type="checkbox"/>	NO
	Vinyl tube connections are leak free	<input checked="" type="checkbox"/>	NO



8. Power Supply	Required: 230-240V : 50HZ: Single Phase:	- 230 v 50 Hz Single Phase
9. Controller	After power is connected, controller displays start sequence: "Starting please wait, version #.##"	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	Touch screen firmware version:	Version: <u>1.30</u>
	Touch screen has most recent firmware:	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	Verify Date and Time	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	Verify Liquid Level is correct NOTE: Level must be > 3 inches	Displayed Level: <u>10.3 inch</u>
	If no, calibrate Liquid Level	Actual Level: _____
	Displayed level after calibration	Displayed Level: _____
	Incorrect Level corrected	<input type="checkbox"/> YES <input type="checkbox"/> NO
	Verify Temp A is correct	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	If no calibrate Temp A	
	Temp A corrected	<input type="checkbox"/> YES <input type="checkbox"/> NO
	Verify Temp B is correct	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	If no calibrate Temp B	



	Temp B corrected	YES	NO
	Perform high temp. A alarm test	YES	NO
	We don't perform high temp. B alarm test as temp. probe is submerged in LN2.		
10. Optional Features	Gas bypass circuit installed in plumbing assembly	<input checked="" type="checkbox"/> YES	NO
	Gas bypass muffle connected	<input checked="" type="checkbox"/> YES	NO

