MS Table
Site Preparation Guide

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Customer Responsibilities

To ensure a successful and timely installation of your Peak generator, please refer to this set of requirements.

Correct site preparation is the first key step in ensuring that your generator and systems operate reliably over an extended lifetime.

This document is an information guide and checklist that outlines the requirements for your site.

It is essential your site meets the following

specification prior to the installation date.

For details, see specific sections within this document

- ☐ The necessary spatial requirements are met.
- ☐ The correct environment is provided for the generator.
- ☐ Electrical outlet locations and quantities are planned.
- ☐ Adequate exhaust ventilation is provided.
- ☐ The correct tubing lengths and diameters are used in relation to the distance from the instrument.

Failure to meet the Site requirements of your Peak generator as stated above and detailed in this document could result in the unit underperforming and **possible loss of warranty.**

Please sign below to confirm your compliance with the aforementioned requirements.

Once complete please return to Peak Scientific, or whomever the unit was purchased from.

Return addresses can be found on the back page of this document.

Name:_____ Company: _____

Signed:_____ Date:_____

Model: _____ Cust. Sales Order No.: _____

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Change History

Rev.	Comment	Name	Date
1	Power Supply Change	Liam Couttie	09/11/12
2	Change to Technical Specification Layout	Liam Couttie	13/03/13
3	Power Cable Amendment	Liam Couttie	04/06/13
4	Technical Specification Update	Liam Couttie	19/07/13
5	Voltage Amendment	Liam Couttie	30/08/13
6	Added Hi-Flow Information	Liam Couttie	24/10/13
7	Brand Colour Change and VAVE Updates	Liam Couttie	12/02/14

Related Manuals

Document number	Manual name	Description
UM-MSTable	MS Table User Manual	Describes the operation of the generator and all service requirements. Supplied with the generator.
IG-MSTable	MS Table Installation Guide	Details the installation process of the generator. Supplied with the generator.

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Safety Notices

Symbols

This manual uses the following symbols to highlight specific areas important to the safe and proper use of the Generator:

	A **WARNING** notice denotes a hazard. It calls attention to an operating procedure, process or similar, which if not correctly performed or adhered to, could cause personal injury or in the worst case death. Do not proceed beyond a **WARNING** notice until the indicated conditions are fully understood or met.
	A **CAUTION** notice denotes a hazard. It calls attention to an operating procedure, process or similar, which if not correctly performed or adhered to, could cause damage to the Generator or the application. Do not proceed beyond a **CAUTION** notice until the indicated conditions are fully understood or met.

Safety Notice to Users

This site preparation guide must be read thoroughly and understood before installation and operation of your Peak MS Table Generator. Incorrect preparation or use of the Generator in a manner not specified by Peak Scientific MAY impair the SAFETY provided by the equipment.

When handling, operating or preparing for installation, personnel must employ safe practices and observe all relevant local health and safety requirements and regulations. The attention of UK users is drawn to the Health and Safety at Work Act 1974, and the Institute of Electrical Engineers regulations.

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Technical Specification 1B/1N/1N Hi-Flow

Environment

Min/Max Operating Ambient Temperature	5°C (41°F) / 30°C (86°F)
Maximum Relative Humidity	70% Non-Condensing
Maximum Altitude	2000 meters
Min/Max Storage Temperature*	-20°C (-4°F) / 60°C (140°F)

*NOTE – When taken out of storage the Generator should be allowed to acclimatize at room temperature for a minimum of 3 hours before operation.

Inlet Conditions

	1B	1N	1N Hi-Flow
Min/Max Air Inlet Pressure	N/A	8.3-10 bar / 120-145 psi	
Minimum Air inlet Flow	N/A	115 l/min	

Generator Outlets

	1B	1N	1N Hi-Flow
Curtain Max Flow	N/A	12 L/min (0.42 cfm)	10 L/min (0.35 cfm)
Curtain Max Pressure	N/A	5.50 bar (80 psi)	5.5 bar (80 psi)
Source Max Flow	N/A	26 L/min (0.91 cfm)	22 L/min (0.77 cfm)
Source Max Pressure	N/A	7.50 bar (110 psi)	7.5 bar (110 psi)
Exhaust Max Flow	N/A	8 L/min (0.28 cfm)	10 L/min (0.35 cfm)
Exhaust Max Pressure	N/A	4.1 bar (60 psi)	4.1 bar (60 psi)
Dew Point	N/A	-11°C / 12°F	
Purity	N/A	≥95	
Particles	N/A	<0.01µm	
Phthalates	N/A	NONE	
Suspended Liquids	N/A	NONE	
Gas Outlets	N/A	3 x ¼" BSPP	
Drain Outlet	N/A	1 x ¼" BSPP	
Pressure Gauges	N/A	3	
Start-Up Time For Purity	N/A	30 minutes	

Electrical Requirements

Voltage	110-240 VAC
Frequency	50/60 Hz
Current	1 Amp
Input Connection	C14
Fuse	T1.6A
Power Cord Type	C13
Pollution Degree	2
Installation Category	II

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General

Dimensions in cm (“) W x D x H	100 x 83 x 80.4 (39.4 x 32.6 x 31.6)					
Weight	**1B**	100 kg	**1N**	103.5 kg	**1N Hi-Flow**	103.5 kg
Shipping weight	**1B**	132.5 kg	**1N**	135 kg	**1N Hi-Flow**	135 kg
Noise level	54 dBA @1m					
Heat Output	820 BTU / Hr					

Technical Specification 2B/2N

Environment

Min/Max Operating Ambient Temperature	5°C (41°F) / 30°C (86°F)
Maximum Relative Humidity	70% Non-Condensing
Maximum Altitude	2000 meters
Min/Max Storage Temperature*	-20°C (-4°F) / 60°C (140°F)

*NOTE – When taken out of storage the Generator should be allowed to acclimatize at room temperature for a minimum of 3 hours before operation.

Inlet Conditions

	2B	**2N**
Min/Max Air Inlet Pressure	N/A	8.3-10 bar / 120-145 psi
Minimum Air inlet Flow	N/A	115 l/min

Generator Outlets

	2B	**2N**
Curtain Max Flow	N/A	18 L/min (0.63 cfm)
Curtain Max Pressure	N/A	5.50 bar (80 psi)
Source Max Flow	N/A	26 L/min (0.91 cfm)
Source Max Pressure	N/A	7.50 bar (110 psi)
Exhaust Max Flow	N/A	25 L/min (0.88 cfm)
Exhaust Max Pressure	N/A	4.86 bar (70 psi)
Dew Point	N/A	-11°C / 12°F
Purity	N/A	≥95
Particles	N/A	<0.01µm
Phthalates	N/A	NONE
Suspended liquids	N/A	NONE
Gas outlets	N/A	3 x ¼” BSPP
Drain outlet	N/A	1 x ¼” BSPP
Pressure gauges	N/A	3
Start-Up Time For Purity	N/A	30 minutes

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Electrical Requirements

Voltage	110-240 VAC
Frequency	50/60 Hz
Current	1 Amp
Input Connection	C14 Plug
Fuse	T1.6A
Power Cord Type	C13 socket to local connection (13A minimum)
Pollution Degree	2
Installation Category	II

General

Dimensions in cm (inches) W x D x H	100 x 83 x 80.4 (39.4 x 32.6 x 31.6)			
Weight	**2B**	105 kg	**2N**	108.5 kg
Shipping Weight	**2B**	137.5 kg	**2N**	140 kg
Noise Level	54 dBA @1m			
Heat Output	820 BTU / Hr			

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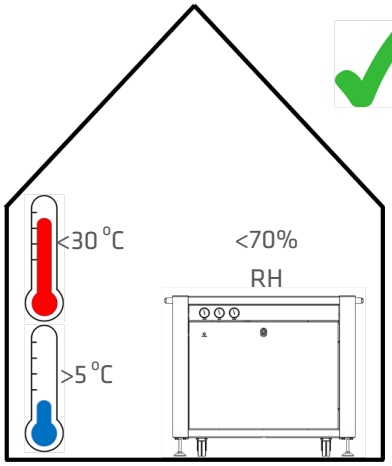
Site preparation

Environmental control

The generator must remain on its castors to allow air intake from the bottom of the generator.

If the generator is stored in an enclosed space the environment must be controlled via an air conditioner or extraction fan.

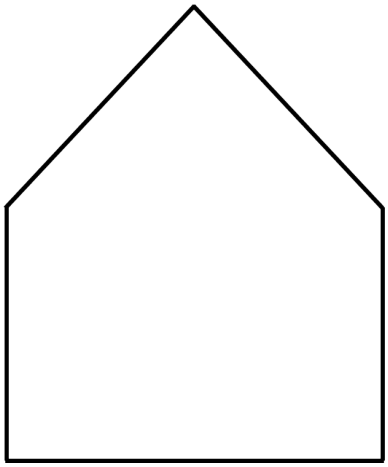


Max Temp;

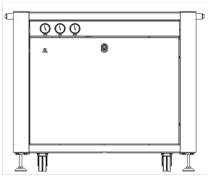
30 °C

Max Relative Humidity;

70% Non-Condensing



Generator MUST NOT be stored or installed outside.



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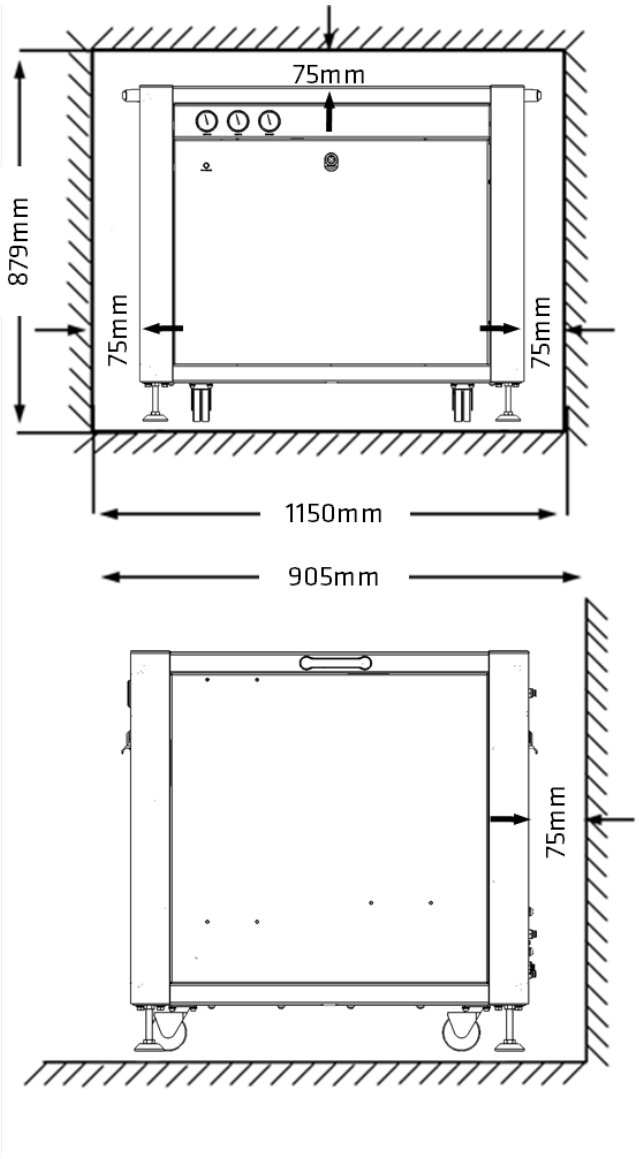
Space provision

The minimum space should be provided as follows....



CAUTION

Failing to provide adequate cooling space around the generator may cause damage to the membranes. This will reduce service life and invalidate warranty.

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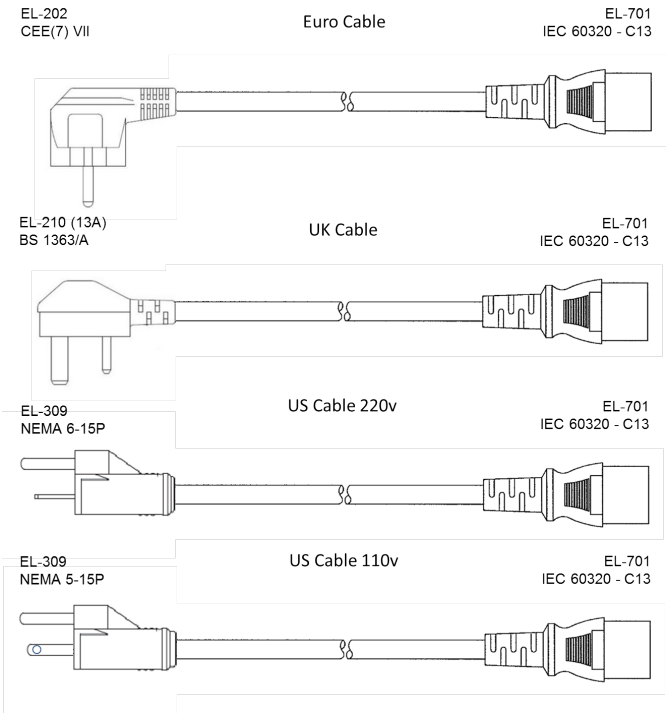
Electrical requirements

The power cables shown below are supplied with the generator.



For cables pertaining to countries not displayed above, it is the responsibility of the end user to provide an appropriate power cable which meets the requirements defined in the Technical Specification section on page 6.

This unit is classified as SAFETY CLASS 1. THIS UNIT MUST BE EARTHED. Before connecting the unit to the mains supply, please check the information on the serial plate. The mains supply must be of the stated AC voltage and frequency.

The power cable supplied with the generator is 2.5m long.

A mains socket providing the power should be located adjacent to the generator and within a 2m radius to the generator.

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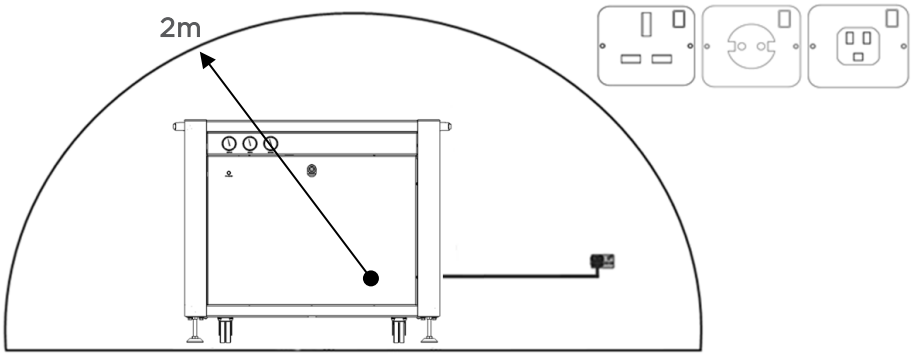

Air Connection

The Table–1N/1N Hi-Flow/2N Generator should be connected to a clean, dry, oil-free source of compressed air. A minimum inlet pressure of 120 psig (8.3 barg) is required. Any doubts as to the suitability of your compressed air supply should be referred to Peak Scientific or any of their authorised partners.

The Compressed Air supply should be connected to the inlet located at the rear of the unit as shown in the Rear Connections section of this manual.

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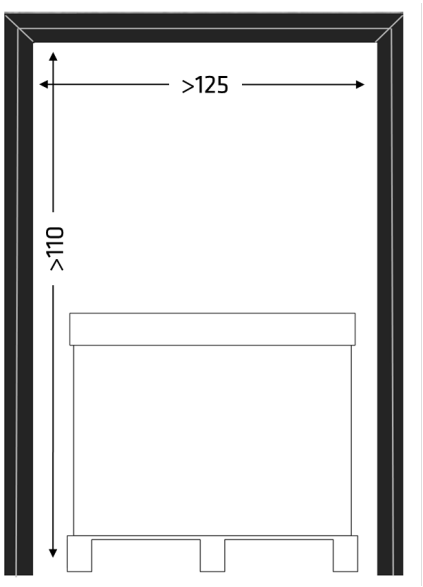
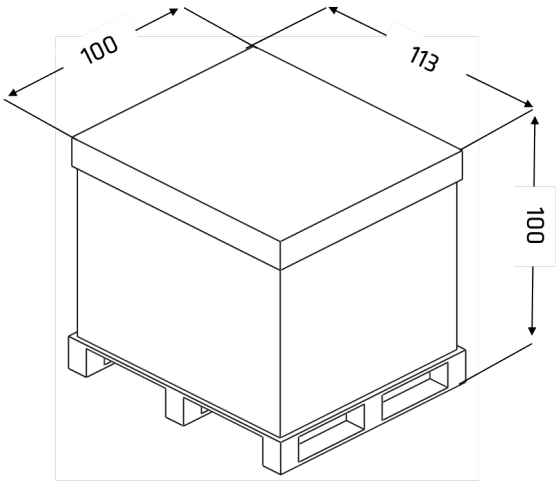
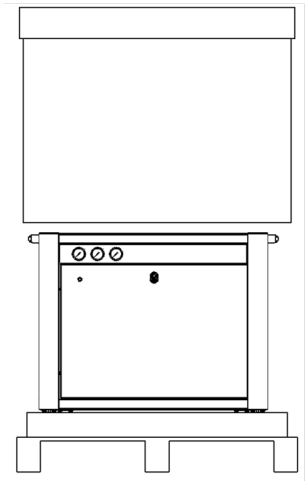
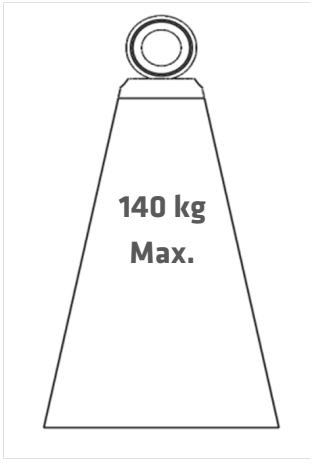
On-Site Transit

When moving the generator in its shipping crate, doorways and other openings such as elevators must fit with the sizes in the image below.









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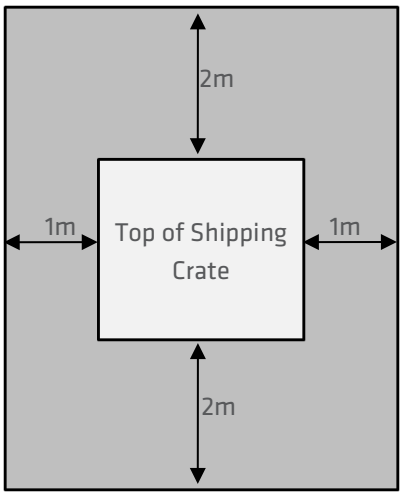
Unpacking

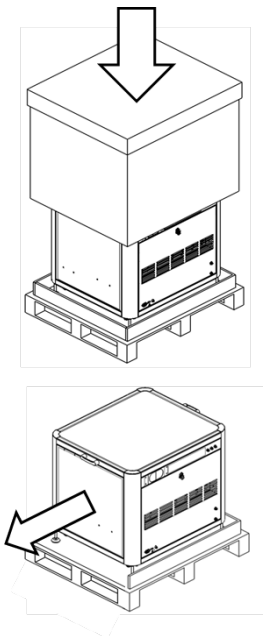
Space Required

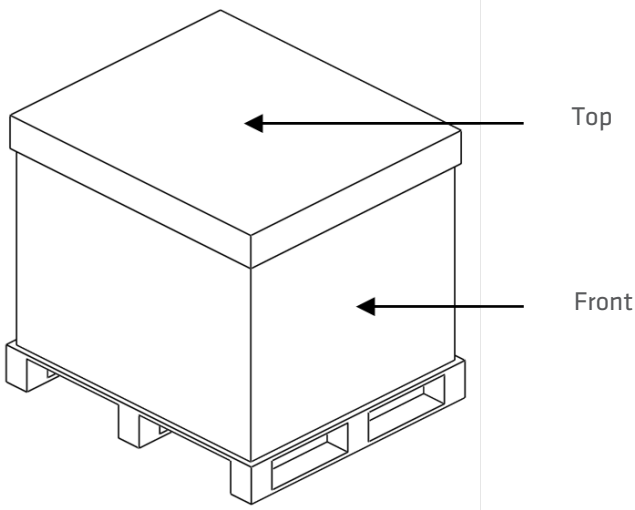
The image below shows the minimum space required to unpack the generator from its shipping crate.



Unpacking

Remove the securing straps from the packaging and lift the cardboard lid and sleeve upwards.
Then remove the front beam, and roll generator down to the ground.





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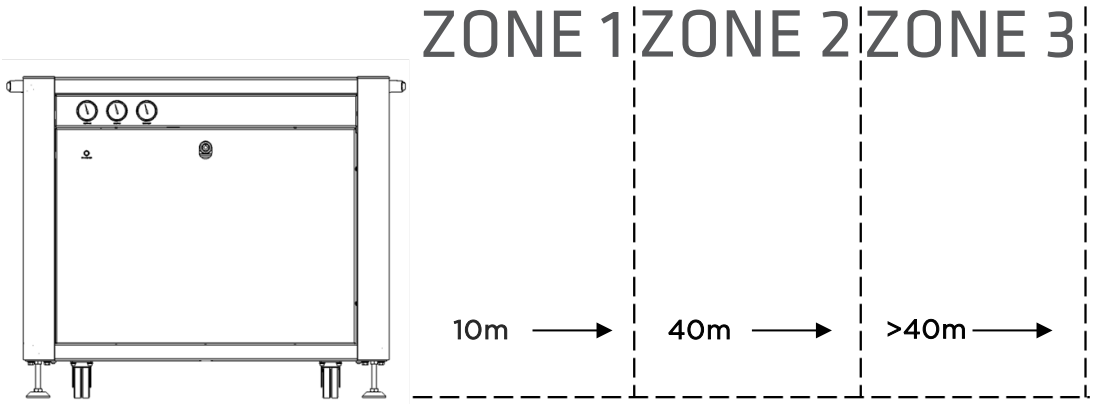
Tubing lengths

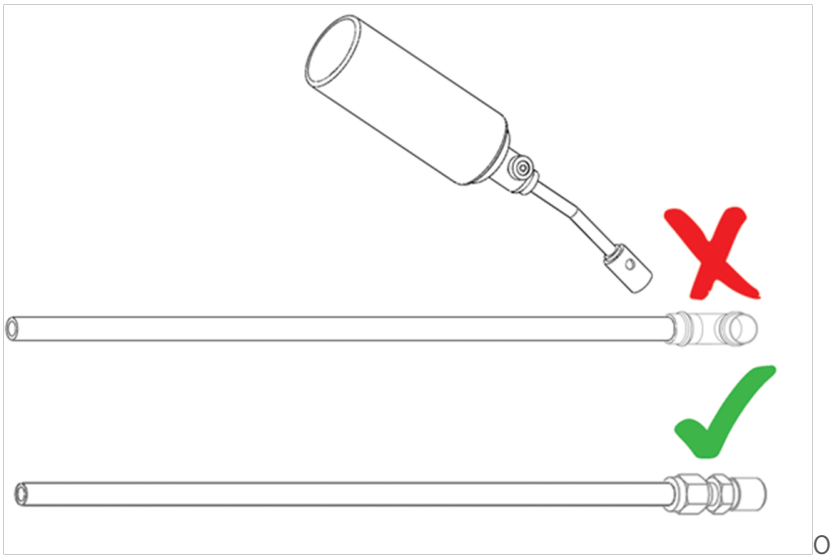
Tubing sizes should be chosen with accordance to the diagram below.



Zone	Distance from Instrument	Tubing Thickness OD/ID mm (Inches)
1	Up to 10m	6mm/4mm (1/4" 3/16")
2	Up to 40m	10mm/8mm (3/8" 5/16")
3	Over 40m	Consult Peak Scientific

The diameter of the tubing which will be connected to the gas outlet is important and is determined by the length of tubing required. Failure to follow these recommendations could lead to accelerated compressor wear.

Copper Tubing



Soldering may lead to contamination. Compression fittings recommended.

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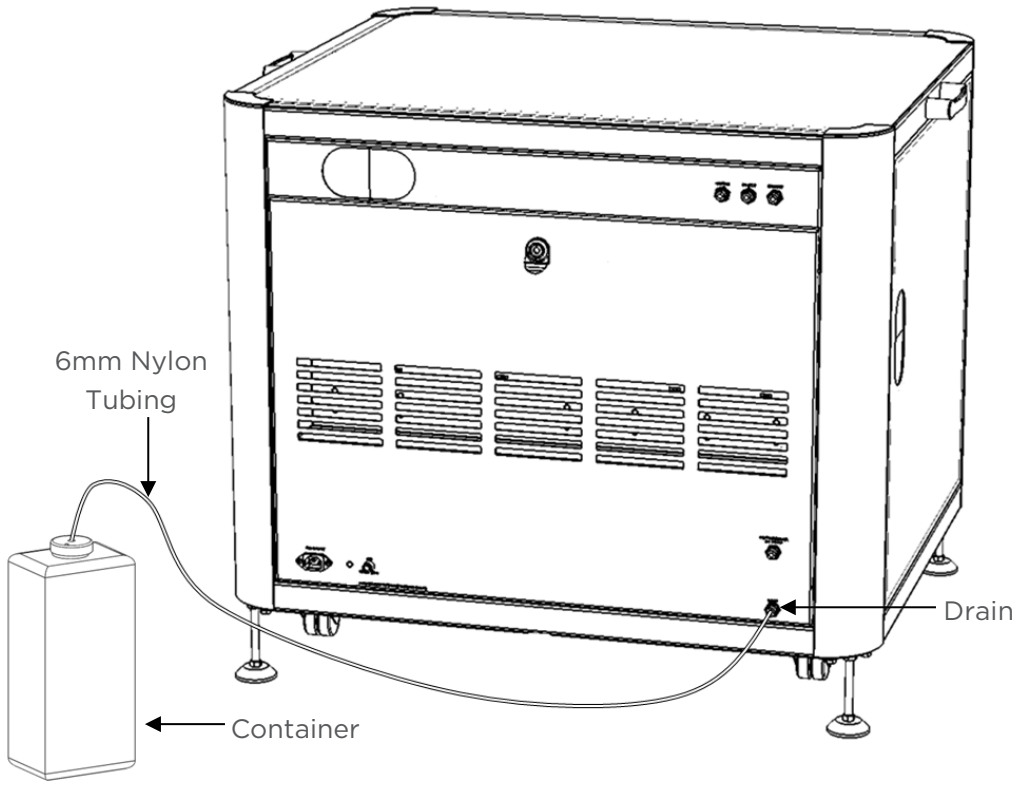
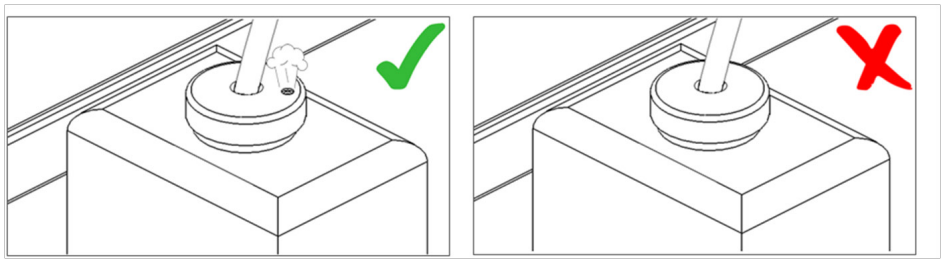
Drainage



Connect the 2m Nylon tube to the drain outlet, ensure the tube is pushed fully in and gripped securely by the fitting.

Fit the other end of the drain line to a suitable drain connection or container.

Containers **must not** be airtight.



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