SOVDA

Global Site Preparation Guide

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Service Department

knowledge.sovdacoffee.com service@sovdacoffee.com +1 (971) 200-5140

Introduction & Overview

Thank you for choosing Sovda for your coffee processing needs!

This document will guide you through the process of receiving your equipment, adopting an appropriate layout, and ensuring you have the correct electrical and air utilities prior to your commissioning of your equipment.

While this document provides helpful information and resources, please feel free to contact your Technical Representative with any questions. You may also explore our Knowledge Base for additional guidance at any time.

🔨 Checklist Items

If you've ordered a Pearl Mini, we'll require you to submit a Site Preparation Checklist. Throughout this document, you'll see specific Checklist Items, and these Checklist Items will be in your Site Preparation Checklist. We'll ask for photos to verify these have been completed before scheduling the technician to commission your Pearl Mini.

Note: The reference to commissioning in this document specifically refers to the Pearl Mini commissioning only.

Workflow Considerations

While Sovda equipment is designed to enhance workflow, it's worth taking a moment to envision how your equipment will integrate into your day to day operations. Whether you're outfitting an established roastery or designing a brand-new space, exploring different workflow configurations can help you maximise speed and efficiency during production.

Here are some common factors to consider:

Roaster Cooling Tray Outlet

Some coffee roasters have the ability to swivel or adjust the cooling tray outlet direction—others do not. Be sure to factor this into your equipment positioning.

Space Constraints

Sovda equipment is designed with modularity in mind, making it adaptable to a variety of environments. If your space includes obstacles like pillars or narrow sections, reach out to your Technical Representative for guidance.

Roasting Space vs. Packaging Space

Our packing line is designed to streamline production from green coffee to the final product. Whenever possible, integrating roasting and packaging zones minimizes manual handling and improves operational efficiency, saving both time and labor costs.

Travel Corridors

Maintain clear and accessible pathways to ensure safe and efficient movement throughout your workspace.

Once you have a solid concept of your workflow post-Sovda implementation, you'll be ready to dial in the details with a finalised site layout. If you require support in evaluating your layout or optimizing your workflow, please contact your Technical Representative for guidance.

Equipment Dimensions

Pearl Mini (including Lift)

Base Type	Height	Width	Depth
No base	2710mm	900mm	1095mm
250mm base	2960mm	900mm	1095mm
400mm base	3110mm	900mm	1095mm

Pearl Mini (excluding Lift)

Base Type	Height	Width	Depth
No base	2250mm	900mm	1095mm
250mm base	2500mm	900mm	1095mm
400mm base	2650mm	900mm	1095mm

Other Products

Product	Height	Width	Depth
Precision Fill (including Lift)	2946mm	780mm	810mm
Precision Fill (excluding Lift)	2486mm	780mm	810mm
Precision Fill Mini	1200mm	440mm	608mm
Precision Fill Mini w/ Hopper Ext.	1400mm	440mm	608mm
Sovda Blend	1310mm	1204mm	1387mm

Recommended Product Clearances

To enable a comfortable working environment, we recommend the following clearances for each product.

General

All ceilings must be a minimum 3300mm.

Pearl Mini

Recommended clearance of 600mm from the front, and the right side for operation.

Precision Fill / Precision Fill Mini

Recommended clearance of 600mm from the front for operation.

Pump Box

Recommended clearance of 600mm from the front for maintenance access.

Blend

Recommended clearance of 600mm from all sides for operation.

Electrical and Air Utility Points

For all products, the control box should be installed within 4 meters of both a power outlet and the control wire connection point. Additionally, we recommend positioning the compressed air inlet within 1.5 meters of your compressed air supply outlet.

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📏 Checklist Item - Design your Layout

In your Site Preparation Checklist, we will ask you for your equipment layout. Your layout may consist of any of the following:

- A scale drawing of your space and the equipment orientation
- A photo of the equipment locations marked out with masking tape in your actual space.
- A photo of your space with machine locations digitally added on
- Any other image/document that effectively communicates machine positioning in your workspace

Electrical Compliance Disclaimer

SOVDA LLC provides the products, specifications, and related materials contained herein for informational purposes only. Regulatory approvals, certifications, and compliance requirements for electrical products vary by country, state/province, and municipality. The products described herein may not carry the necessary certifications or approvals for local electrical codes or safety standards in your jurisdiction. It is solely your responsibility to:

- 1. Verify that any SOVDA LLC product you purchase complies with all applicable laws, regulations, and installation requirements in your region;
- 2. Consult with a qualified electrician or local authority to confirm compliance with your local electrical regulations prior to installation or use.

SOVDA LLC disclaims any liability for damages, losses, or penalties arising from the use of products that do not meet local regulatory requirements.

Electrical Requirements - North America

For Rest of World Electrical Requirements, see Page 7

Lift

You'll need a different amp breaker depending on which lift option you've ordered, both options will come with one control box per lift.

Standard Vacuum Option	Pump Box Option	
A 120v outlet with a 15 amp breaker is recommended; the operating current is 13 amps. <i>Type B NEMA 5-15</i>	A 240v outlet with a 20 amp breaker is recommended due to a high current spike at start up. The operating current is 15 amps. <i>L6-15 P</i>	
Control Box: The control box requires a standard 120v outlet and has a peak operating current of 1 amp. <i>Type B NEMA 5-15</i>		

Pearl Mini

One 120v outlet with an operating current of 7 amps. The machine will ship with a transformer to convert the voltage from 120v to 220v, which is necessary to run the machine. There is no plug installed, one should be installed to match your transformer.

Precision Fill or Precision Fill Mini

One 120v outlet, operating current is 1 amps. *Type B NEMA 5-15*

Blend

One 240v outlet, operating current is 15 amps. *L6-15 P*

Electrical Requirements - Rest of World

Lift

You'll need a different amp breaker depending on which Lift option you've ordered, both options will come with one control box per lift. Plug type is specific to the country of installation and will be confirmed at time of order.

Standard Vacuum Option	Pump Box Option
A 220v outlet with an operating current of 7 amps.	A 220v outlet with a 20 amp breaker is recommended due to a high current spike at start up. The operating current is 15 amps.
Control Box: The control box requires a standard 220v outlet and has a peak operating current of 0.5 amps.	

Pearl Mini

One 220v outlet with an operating current of 4 amps.

Precision Fill or Precision Fill Mini

One 220v outlet, operating current is 0.5 amps.

Blend

One 240v outlet, operating current is 15amps.

Necklist Item - Electrical Information

In your Site Preparation Checklist, we will ask you for your electrical information. Electrical information includes all the following:

- Plug Selections.
- Photos or layout of plug locations, and each breaker.
- Written confirmation that the total circuit demand does not exceed circuit capacity.

• Written confirmation that all plugs are grounded, have correct voltage, and have correct polarity.

Compressed Air Requirements

Before installing the machine, you must install air lines with shutoff valves. The air line from the compressor to the farthest shutoff valve shouldn't be longer than 20 meters (65 feet). The final hose from the shutoff valve to the machine must be 3 meters (10 feet) or less. You can use PEX or metal pipe for the main air line and hang it from the ceiling or attach it to the wall behind the machines.

Note: The air connection for the Lift is directly adjacent to the cyclone (on top of the machine)

- If the Lift sends coffee to a Precision Fill or Pearl Mini, put the Lift's shutoff valve next to the other shutoffs.
- If the Lift loads green coffee into a roaster, put the Lift's shutoff valve near the roaster.

Air Line Shutoffs

We recommend one shutoff per lift, and one shutoff per machine within 1.5m-3m (5-10 feet).

Pearl Mini

You'll need an air <u>compressor capable</u> of providing a minimum 0.04M³/min at 0.4 - 0.6mpa or 12CFM at 60-90 PSI continuously with a 100L+ tank. A refrigerator-type dryer is mandatory to prevent moisture-related issues like sticking ejectors and corrosion. Good filtration is equally vital – removing oil, dust, and water particulates is necessary to protect ejectors and internal components from damage and ensure reliable sorting performance.

To ensure your air compressor is adequate and meets all requirements, Sovda suggests collaborating with a local contractor or company and using the <u>Pearl</u> <u>Mini Compressed Air Demands</u> document. They can verify compatibility and ensure compliance with local laws and safety regulations.

Lift, Precision Fill or Precision Fill Mini

The Precision Fill and Lift model requires 0.6 MPa pressure and 0.006 m³/hour of airflow. This is a low requirement that nearly any air compressor can meet. If your roaster already uses a compressor, it's sufficient – just run the necessary additional air lines from it.

Blend

The Blend requires 0.4MPa pressure and 0.017 m³/hour airflow. This is a low requirement that nearly any air compressor can meet. If your roaster already uses a compressor, it's sufficient – just run the necessary additional air lines from it.

Equipment	Max Distance from Compressor	Outlet Line Size
Pearl Mini	0 - 10 metres: 18mm pipe (~3/4 inches) 10m-25m: use 25mm pipe (~1 inch)	¹ / ₂ inch FPT outlet (Female Pipe Thread) ideally would have a ball valve
All other products	Up to 8 metres (25 ft) of 12mm pipe (~ ¹ ⁄ ₂ inch)	1/2 inch FPT outlet (Female Pipe Thread) ideally would have a ball valve

Note: Checklist Item - Compressed Air Information

In your Site Preparation Checklist, we will ask you for your compressed air information, which includes all the following:

- Photos of installed air lines
- Photos of installed shutoff valves with correct outlet size

Next Steps

The next steps of your site preparation will involve the completion of your electrical and air utility connections. Once these are in place, you can proceed with the assembly of your equipment.

For Pearl Mini Installs Only

After the equipment is assembled and all necessary connections are established, you will then need to fill out the Site Preparation Checklist.

Support

If you need any extra support, or have any questions please feel free to contact your Technical Representative with any questions. You may also explore our <u>Knowledge Base</u> for additional guidance at any time.

Knowledge Base: <u>https://knowledge.sovdacoffee.com/</u> Service Email: <u>service@sovdacoffee.com</u> Service WhatsApp: <u>+1 971 200 5140</u>

Glossary

Air Compressor

A machine that produces pressurized air. Different equipment needs specific air pressure and airflow to function properly.

Amps / Operating Current

The amount of electrical current (or power) a device uses during normal operation. Higher numbers mean more power usage.

Breaker (Amp Breaker)

A safety device in your electrical panel that prevents too much electrical current from flowing through a circuit, which could cause overheating or fire.

cfm (Cubic Feet per Minute)

Measures how much air the compressor delivers per minute. Higher cfm = more air flow.

Commissioning

The process of setting up and testing the Pearl Mini on-site to ensure it's installed correctly and working properly. This is tailored to your specific voltage and air supply.

Compressed Air / Air Lines

Pressurised air used to power certain parts of machines. Delivered through pipes or hoses.

Control Box

An electrical box that houses switches to operate the lifts.

FPT (Female Pipe Thread)

A type of pipe connection where the threads are on the inside, allowing for a secure fit with a matching male-threaded pipe.

MPa (Megapascal)

A unit of pressure. Machines require a certain pressure level to work properly. Often shown as 0.3 MPa or 0.6 MPa.



PEX or Metal Pipe

Types of piping used to transport compressed air. PEX is a flexible plastic alternative to metal.

Plug Polarity

Refers to the correct wiring of the plug to ensure safe electricity flow—important for grounding and avoiding shocks.

Refrigerated Air Dryer

Removes moisture from compressed air to prevent water damage inside the equipment, which is critical for the Pearl Mini.

Roaster Cooling Tray Outlet

Part of a coffee roaster that releases roasted beans to cool them. Some can swivel; others are fixed.

Rotary / Screw Compressor

Types of air compressors. These are industrial-grade machines designed for higher air flow and continuous use.

Site Preparation Checklist

This is a checklist for customers who've ordered a Pearl Mini. The checklist will ask for photos to verify you have installed the correct requirements to schedule a commissioning.

Shutoff Valve

A valve that allows you to quickly turn the air supply on or off to a machine. It's used for maintenance or safety purposes.

Transformer

A device that changes electrical voltage levels—for example, converting 120v (USA) to 220v (Rest of World) for machines that need higher voltage.

Voltage (e.g., 120v, 220v, 240v)

The amount of electrical power supply. Different machines may need different voltages in different countries, so it's important to match your outlet with what the machine requires.