

Gerber M Series Site Requirements

Preparing for the arrival of your new machine.

Prior to the arrival of your Gerber M Series Cutting System there are certain things you can prepare to facilitate a quick and smooth installation. The following information will guide you.

It is also important that you complete the **Site Preparation and Warranty Checklist** (the last page of this document) and return it to Gerber Sales Support so that they can schedule the installation of your cutting system.

- ☞ Floor Plan Preparation
- ☞ Electrical Inputs and Connections
- ☞ Vacuum Blower
- ☞ Shipping and Handling
- ☞ Site Preparation Checklist

Floor Plan

Refer to Appendix A – Floor Plan for the dimensions of the machine and necessary clearances.

Preparation

- ☞ Allow sufficient room for operator access and work handling.
- ☞ Vacuum, electrical and pneumatic connections are most conveniently attached at the rear and to the left of the machine.
- ☞ Clean and wax the floor if appropriate. To avoid static electricity, which can interfere with computer operations, carpets are not recommended.
- ☞ Isolation of machine by partitions or windowed walls should be considered, as the machine generates noise that may be distracting to CAD personnel.

External Inputs and Connections

Setup requirements

- ☞ 90psi air at 6 SCFM, filtered to 5 microns. Minimum 3hp.
- ☞ 2 dedicated 110 power outlets rated for 20 amps with no extension cables.
- ☞ 3 phase 35amp power for blower
- ☞ Motor starter for blower (manual or magnetic starter)

Vacuum Blower

Prior to delivery of your machine, the vacuum blower should be shipped to you. The blower must be installed as close to the machine as is practical.

- ☞ The blower is to be mounted on the supplied rubber shock mounts. Do not bolt directly to a floor as this can distort the blower housing. The blower may be mounted vertically or horizontally on a wall, or suspended from a roof. The maximum allowable ambient temperature is 100 degrees F (38° C). The blower has a high airflow and produces considerable heat and noise, even with the supplied muffler.

Four-inch PVC piping must be run between the vacuum blower to within six feet of the rear of the Cutting Table. Try to minimize the use of 90-degree elbows to minimize flow losses. Reduce to a 2 1/2" NPT female thread at each end. Gerber supplies 2 1/2" NPT barbed fittings and flexible hose to connect the blower and machine to the 4" PVC.

Contact customer service to be sure the vacuum pump is shipped early. The motor starter is customer-supplied and must be wired in conformance with local electrical codes. The start/stop switch should be mounted near to the front left of the Cutting Table.

Automatic Blower Operation

Note that if you would like to use a magnetic starter as opposed to a manual starter, provision is made inside the Gerber controller to pilot the starter. We provide a normally open set of relay contacts and two terminals for field hookup. The vacuum blower can then be automatically controlled by the cutting system.

Pneumatic

A 90 PSI @ 6 SCFM pneumatic supply is required for the machine. The air quality should be clean, dry, and filtered to 5 microns. A male & female quick disconnect fitting is supplied with the machine. The barb fitting is for 5/16" ID hose. The connection on the Cutting Table is in the left rear of the base.

Piping runs over 50 feet long should use 3/4" or larger piping. A drip leg and coalescing filter should provide sufficient quality. Dryers may be required on pneumatic systems that produce more water than a coalescing filter can accommodate.

If your existing air system lacks sufficient capacity, a compressor will be required. The minimum acceptable size is 3 HP. You will have to provide filtration and possibly a drier to meet the above air quality requirements.

Electrical

Table 1 shows the electrical requirements for the 10 HP vacuum blower.

10 HP Vacuum Blower		Electrical Requirements
HP/kW	60 Hz	10/7.5
	50 Hz	8/6
Voltage	60 Hz	208-230/460-3
	50 Hz	190-220/380-440-3
Amps	60 Hz	35-29.5/15
	50 Hz	27-23/13.5-12.3
Starting Amps	60 Hz	120 @ 460V
	50 Hz	143 @ 380V
Insulation Class		F
Recommended NEMA Starter Size		2/1
Net Weight (lbs/kg)		293/133

Table 1

Electrical

Customer must provide service per local code. The machine requires a dedicated 20 AMP circuit at 115V/60 Hz. An equivalent 50 Hz. power source may be used if the factory is notified at the time of order.

- ☞ Note that on a nominal 115V USA installation, the line voltage must be in the range of 110V to 122V for proper operation of the machine. The service outlet should be within 4 feet of the left rear of the machine. The machine must not be run through an extension cord.

Network

A network cable is desirable for connection between the Cutting Table and the CAD computer. If no network exists or if no connection is setup, a disk must be used to transfer substrate files from the CAD computer to the Cutting Table.

Vacuum Blower

Dimensions

Figure 2 shows the dimensions of the vacuum blower supplied with your Cutting Table.

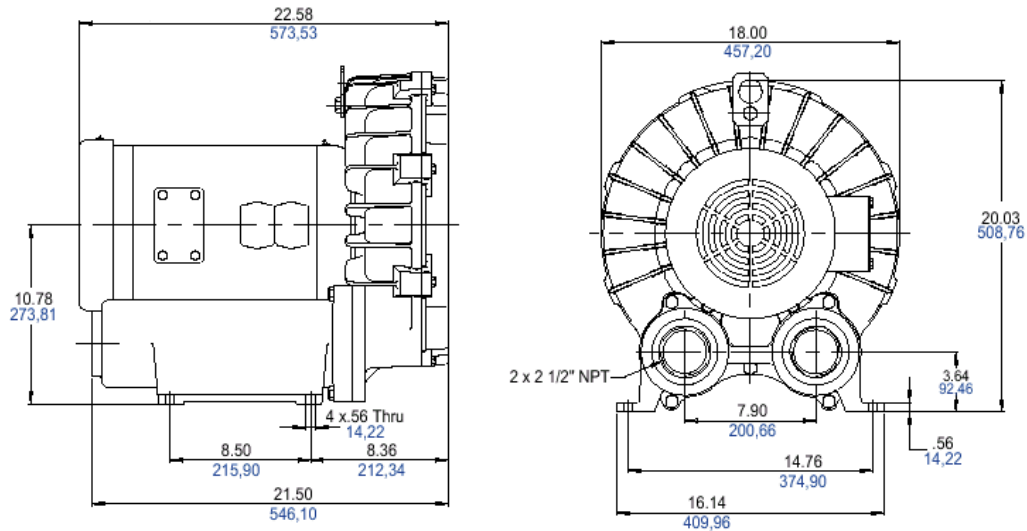


Figure 1 – 10 HP Vacuum Blower

Shipping and Handling

Access

During installation, large machine parts will need to be moved into final position. Any large objects in the work area should be moved out of the way prior to installation.

Arrival

Refer to Appendix B – Shipping Crate for the dimensions of the shipping crates.

The M1200 is shipped fully assembled. Refer to Appendix A – Floor Plan to determine if the machine will fit through any doors or elevators to get to the final location. If the machine will not fit then it will need to be disassembled and moved in pieces. The service technician will require help during this process.

☞ Note that the vacuum pump skid is usually shipped early.

Labor requirements:

Two people, each capable of lifting 50 lbs. (23 kg) must be available to assist the technician on the first day of installation. It is the customer's responsibility to ensure that these people are on hand. If on-site staff is not available, contact local temporary agencies or moving companies to hire them.

With any other machine except the M1200, four persons can handle the major assemblies, all of which break down into sub-assemblies weighing 250 or less.

Loading Dock

The availability of a loading dock will determine what type of truck is used. Please inform Gerber of this in advance of installation.

Fork Lift

A forklift is desirable but not necessary. A pallet and hand-operated jack and dollies are necessary.

Uncrating

☞ Wait for Gerber Service personnel before uncrating.

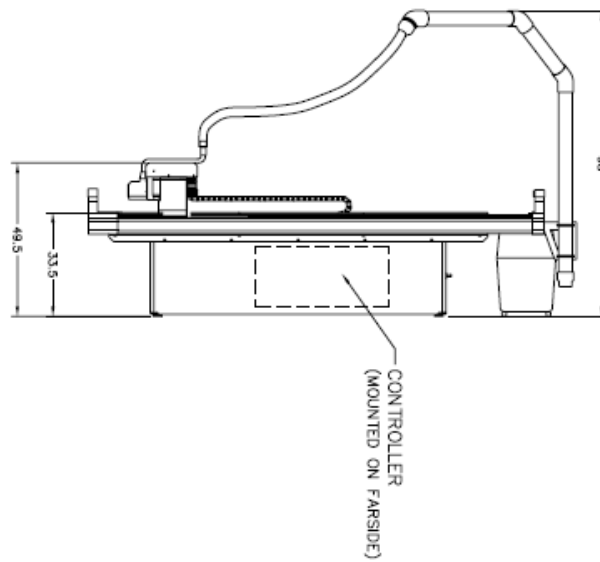
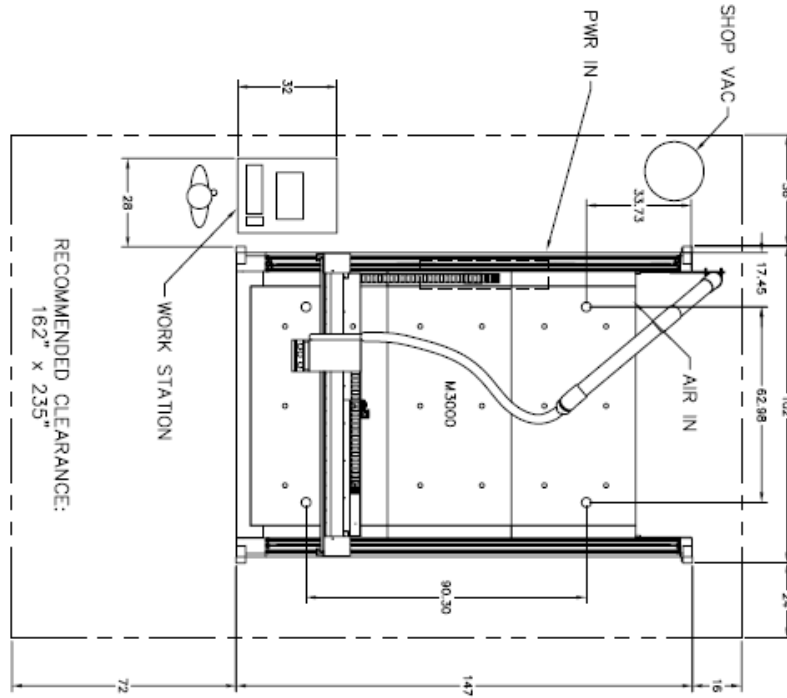
Tools

When installing the machine, Gerber Service personnel will need access to the following:

1. Claw hammer
2. Pry bar
3. 3/8" reversible/variable speed pistol drill
4. Extension cord
5. Fantastic or another general purpose cleaner
6. Cloth rags
7. Spray can of 10-weight oil
8. Vacuum cleaner

Appendix A – Floor Plan

	Floor Plan Width x Depth	Recommended Total Clearance
M1200	94" x 76"	154" x 164"
M3000	103" x 151"	163" x 239"



(All units are in inches)

Appendix B – Shipping Crate

Dimensions – Length x Width x Height (Weight)

	Crate – Base*	Crate – Surface	Crate – Cross Beams	Crate – Gantry	Skid – Vacuum Pump
M1200	81" x 98" x 67" (1500 lbs.)	N/A	N/A	N/A	36" x 36" (250 lbs.)
M3000	28" x 103" x 32" (800 lbs.)	51" x 84" x 22" (1070 lbs.)	31" x 152" x 29" (920 lbs.)	35" x 106" x 29" (920 lbs.)	36" x 36" (250 lbs.)

Site Preparation and Warranty Checklist

In order to expedite the Gerber M Series installation, complete this checklist and fax it Gerber Sales Support at 800-227-6228.

Description	Complete
<p>Power requirements for the Gerber M Series:</p> <p>Cutter: Two 20 AMP circuits at 115V/60 Hz. Line voltage must be in the range of 110V to 122V for proper operation of the machine. Machine MUST NOT be run through an extension cord.(See page 3 for details)</p> <p>Blower: 3 phase, 35amp, 60Hz power for blower (See page 3 for details.)</p> <p>Motor starter for blower (manual or magnetic starter) must be installed by licensed electrician.</p> <p>A licensed electrician will install the proper electrical service prior to the arrival of the cutting table.</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>
<p>Compressed air requirements</p> <p>90psi air at 6 SCFM, filtered to 5 microns. Minimum 3hp.</p>	<p><input type="checkbox"/></p>
<p>Weight and clearance requirements for M3000 Series Cutting Table:</p> <p>Does not have a loading dock but has a forklift to take the Gerber M3000 Series crates (maximum weight ~1,000 lbs. (454kg)) off the carrier's truck.</p> <p>Has a loading dock and a forklift or pallet jack to take the Gerber M3000 Series crates (~1,000 lbs. (454kg)) off the carrier's truck.</p> <p>Does not have a dock or a forklift or pallet jack and will hire riggers to facilitate the delivery and installation of the Gerber M3000 Series cutting table.</p> <p>The outside doorway into the facility is at least 53" (135cm) wide.</p> <p>Interior corridors and doorways are at least 53" (135cm) wide. (Wider widths are needed for turning radius)</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>
<p>Weight and clearance requirements for M1200 Series Cutting Table:</p> <p>M1200 Cutting Table ships assembled. If doorway clearances are not sufficient, the table must be disassembled and moved in pieces. The Gerber service technician will require assistance.</p> <p>Does not have a loading dock but has a forklift to take the Gerber M1200 Series crate (1,500 lbs. (680kg)) off the carrier's truck.</p> <p>Has a loading dock and a forklift or pallet jack to take the Gerber M1200 Series crate (1,500 lbs. (680kg)) off the carrier's truck.</p> <p>Does not have a dock or a forklift or pallet jack and will hire riggers to facilitate the delivery and installation of the Gerber M1200 Series cutting table.</p> <p>The outside doorway into the facility is at least 82" (208cm) wide.</p> <p>Interior corridors and doorways are at least 82" (208cm) wide. (Wider widths are needed for turning radius)</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>
<p>General delivery requirements:</p> <p>The path from the loading dock to the printer's permanent location is free and clear of obstructions.</p> <p>Business location/area.</p> <p>Residential location/area.</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>
<p>Labor requirements:</p> <p>Two people capable of lifting 50 lbs. (23 kg) will be on hand to assist the technician on the first day of installation.</p>	<p><input type="checkbox"/></p>
<p>Work area and operating requirements:</p> <p>Has sufficient work area clearance on all sides of the printer as shown on in Appendix A.</p> <p>The floor is level and free of debris.</p> <p>There is a clean area for storage of media. Media should not be stored on the floor.</p> <p>Will store the shipping crates in its original condition for use during reshipment.</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>
<p>Warranty acceptance:</p> <p>I have read and understand the Gerber M Series warranty and accept the terms and conditions.</p>	<p><input type="checkbox"/></p>

Customer Name: _____ Signature: _____

Title: _____ Date: _____

Company name: _____ Phone: _____

Service Technician Name: _____ Signature: _____