Southwestern Industries, Inc.

# Site Preparation Guide TRAK LPM

Before an Authorized Field Service Technician can perform the machine's final checkout, the following requirements must be met:

- The machine must be in position and placed on its rest pads.
- To move the machine while on the pallet, a 15000 lb. forklift with a 24" load center & 6' fork extensions is required. Depending on the load center or rating of the forklift, a larger forklift may be required. The center of gravity (CG) of the machine while on the pallet is 50" from the edge of the pallet. Please see the manual for more information about lifting the machine.
- The LPM must be lifted from either the left or right hand sides. Make certain that the forks are squarely in the lifting cutouts beneath the machine. See the figures below.
- The LPM may be lifted via 4 eye bolts. 2 are found at the top of the column and 2 can be added to the bed of the machine on the Y axis. See figures below.
- Once the machine is raised from the pallet, but prior to placing it onto the leveling pads, the adjusting screws must be screwed downward all the way, and then backed out ~ 8 turns so the machine sits high enough to clear the coolant tank. For reference, the coolant tank height is ~12 5/8" tall so make sure the machine sits at least this high. The LPM should be placed on the 4 leveling pads labeled L1, R1, L2 and R2. The leveling screws labeled L3 and R3 should be threaded in but not touching the pad. They will be adjusted during installation.
- The machine must be wired (refer to the installation and service manual for additional information).
   Make sure to follow our grounding recommendations.
- The machine must have air hooked up. We strongly recommend that a water separator or air dryer be installed upstream of the LPM air supply.

## **Space & Weight**

- Floor area = 157" x 88"
- Height = 103"
- Footprint = 89.75" x 88"
- Net (approx.) Weight = 7650 lbs.
- Shipping (approx) Weight = 8000 lbs.
- Pallet size = 90" x 100"
- The floor area encompasses the space required to position the chip cart and open the side doors along the X axis.
- A solid and level foundation to maintain approximately 7650 lbs. plus the weight of the workpiece (maximum total of ~ 10000 lbs) is required. Six leveling screws are provided.
- Minimum doorway width is 88" and minimum height is 85" that the LPM can fit through (assumes Z cable carrier collapsed and Z axis motor removed). The 85" height dimension can be reduced to 82" if further items are removed or adjusted."

## **Electrical**

- A separate 220 VAC (208 to 240 V is acceptable), 70 amp minimum, 60 Hz, 3 phase circuit is required.
- Machine tool must be earth grounded with a dedicated 8-foot long copper rod. The 6-gage ground wire should run from the copper rod to the 3-phase filter in the electrical cabinet.
- A step down transformer is required for 440V.
  Southwestern Industries provides this as an option.
  The transformer must be rated at 30 KVA.

## Air

- ½" ID minimum air connection is required.
- Air pressure must be a minimum of 90 psi.
- CFM = 2.5 or SCFM = 18 at 90 psi.

Figure 1 – Overall Dimensions of LPM

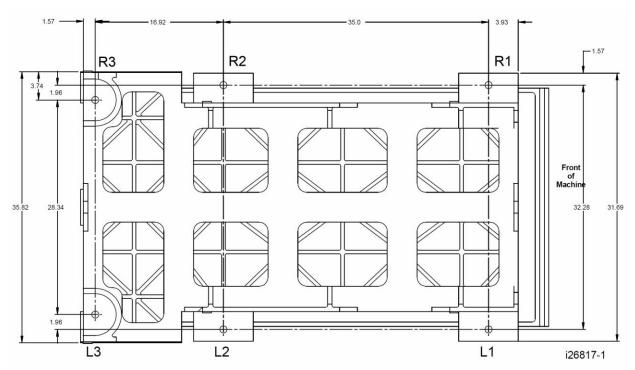


Figure 2 – Leveling Screw Locations



Figure 3 – Lifting the LPM



Figure 4 – Lifting the LPM

Figure 5 – Lifting the LPM

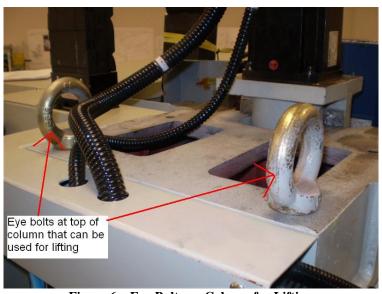


Figure 6 – Eye Bolts on Column for Lifting

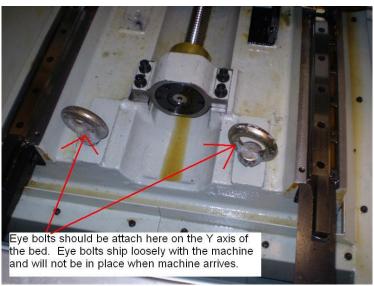


Figure 7 – Eye Bolts on Bed for Lifting

#### **Electrical Connections**

#### Main Power to the Machine Connections

The 3 phase 220 voltage (208 - 240 V acceptable) is connected to L1, L2 and L3 at the power switch inside the electrical box. Connect the ground wire as shown in the figure 8.

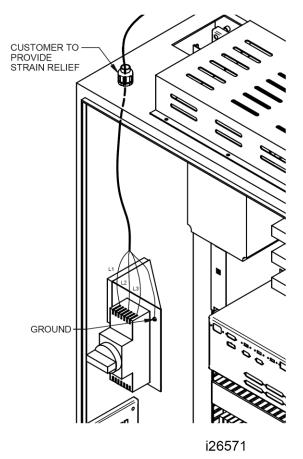
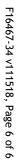


Figure 8 - Connect the Ground Wire

#### **Machine Grounding**

It is strongly recommended that the machine be earth grounded. A dedicated copper rod 8 feet or so in length should be driven into the ground near the LPM. A ground wire should then be run from the filter ground to the copper rod. Please see Figure 9 for where to connect the ground wire on the filter. The ground wire should come up through the bottom of the electrical cabinet in the hole nearest the door. The wire should be 6 gage in size. Figure 10 shows an OK method for grounding.



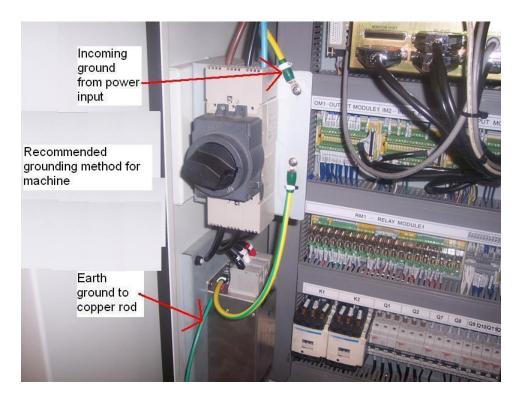


Figure 9 - Recommended method for grounding the LPM



Figure 10 – Alternative method for grounding the LPM



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