

# Installation & Operating Instructions

## Metalfab Live Bins

### Description

Metalfab Live Bins are a complete package of a bin with an attached vibrator and a support stand. The bin has vibration isolators between the bin and the stand.

### Instructions

The unit should be lifted by the support stand only.

If the bin itself is lifted, undue strain will be put on the isolators and may cause their failure. The unit should be installed on a level, firm support floor. There are bolt down holes provided in the frame leg brackets.

The vibrators are dual voltage and should be wired according to the diagram in the conduit box and the manufacturers instruction manual. Because the bin is vibrated, the wiring must be flexible to prevent failure. Neoprene covered braided wire is suggested.

There should be **NO** hard connections to the Live Bin. A flexible connection should be at both the inlet and outlet of the bin.

Because the bin is supported by elastomer isolators, the only ground connection is through the motor leads. If further grounding is required, use a braided cable from the bin to the support stand or any other ground connection.

After the unit is wired (rotation can be either clockwise or counter clockwise, it should run for ten (10) minutes and then all bolts should be checked for tightness per the chart below:

3/8" BOLT .....	35 FOOT POUNDS
1/2" BOLT .....	125 FOOT POUNDS
5/8" BOLT .....	160 FOOT POUNDS
3/4" BOLT .....	310 FOOT POUNDS

THE TIGHTNESS SHOULD BE CHECKED PERIODICALLY THEREAFTER.

## Vibrator Force Adjustment

**WARNING! Before any adjustments, vibrator should be electrically LOCKED OUT.**

1. The centrifugal force setting of the vibrator is set at the factory for the minimum force level that will produce flow of product. If flow is not instantaneous or continuous, it may be necessary to increase the centrifugal force. To do so, the following procedure should be followed:
  - 1) Remove the bolts of both the upper and lower end covers.
  - 2) Remove the covers exposing the four (4) eccentric weights.
2. To increase the force setting, loosen the clamping bolt on the two (2) weights that will be adjusted. (See note above).
3. Refer to the applicable vibrator operation and maintenance instructions for force settings and technical information.
4. As the centerline of the adjusted weights approach the centerline of the fixed weights, the centrifugal force is increased. When the weights centerline are opposed, the centrifugal force decreases. If the centerline of all four (4) weights are completely aligned, you will develop the maximum force available for that size vibrator.
5. Regardless of which vibrator you have, when you have completed your force adjustment, the OUTER weights should be in line with each other and the INNER weights should be in line with each other. ANY OTHER ARRANGEMENT WILL RESULT IN A MOTION THAT CAN DAMAGE THE VIBRATOR AND BE VERY DETRIMENTAL TO THE APPLICATION, WELDS OF THE BIN ACTIVATOR AND SUPPORT STRUCTURES.
6. Assemble the unit by reversing the procedure outline as above.

**Note: Bin Activator vibrator should be electrically interlocked with down stream feed devices, i.e., when screw, belt, rotary, etc., feeder stops \_ vibrator should also stop.**

## Full Load and Starting Current

See Vibrator Instruction Manual and Motor Nameplate Data.

# Maintenance Instructions

## 1. Vibrator Lubricaton

The vibrators are lubricated as supplied. The lubrication is good for 2,000 to 5,000 hours. SEE MANUFACTURING INSTRUCTIONS.

## 2. Isolators

Because of the various size Live Bins and the varying density of products being handled, we use three (3) styles of isolators:

### 1) Solid Rubber Mounts

These require no maintenance, only periodic checking for damage due to aging, chemical attach, or severe overloading.

### 2) Air Mounts

These require periodic checking for loss of pressure. If re-pressurization is required, standard tire filling equipment can be used to fill mount to the proper pressure.

### 3) Liquid Filled Air Mounts

These are air mounts that are filled with a mixture of water and antifreeze. They are pressurized to a design height of 5 \_ to 6 \_ inches. If pressure is lost, they can be filled using an air hose and fittings fitted to a water tap.

**WHEN INQUIRING ABOUT ANY LIVE BIN, ALWAYS REFER TO THE SERIAL NUMBER STAMPED ON THE METALFAB NAMEPLATE.**

## Metalfab Service

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