

Instructions for Operation & Maintenance

Spin Loader

General Description

The Spin Loader lets you utilize bulk storage facilities to their fullest capacity. It eliminates the pyramiding which occurs when powders, flakes and granular materials are loaded into bins, hopper cars and piles and enables you to load up to 15% more product into virtually any storage facility.

Compact, ruggedly-built, the Spin Loader consists of an inlet tube, which guides the material through the unit and a spinner, which distributes the material in a 360° arc or as refined by deflectors and reduces the possibility of particle segregation and enables the particles to intermix. The spinner is rotated by the use of a direct coupled motor. Since the unit is completely enclosed, it totally eliminates product waste, contamination and dust problems. The SL-100 is supplied with a 2 horsepower drive and is rated at a maximum feed rate of 100,000 pounds per hour. The SL-200 is supplied with a 5 horsepower drive and is rated at a maximum feed rate of 200,000 pounds per hour. For models other than these listed, check formal quotation for horsepower ratings and maximum rates.

Installation

Except for the paddle of the optional rotary level indicator, the Spin Loader is shipped assembled and ready for installation. After the unit is unpacked, examine it for any possible shipping damage. Notify carrier if any is found.

The paddle of the rotary level indicator is simply screwed into the shaft end. A roll pin is inserted through the shaft to lock the paddle in place.

The Spin Loader must be rotated at least once a month to insure proper bearing grease distribution. If a high temperature or moist environment is expected, the unit must be rotated at shorter intervals. Please contact the factory for their recommendations.

Examine the nameplate data of the motor to see that it agrees with the power circuit to which it is to be connected. Connect the power leads or air line to obtain the specified direction of rotation. **CORRECT DIRECTION OR ROTATION IS STAMPED ONTO HOUSING***DO NOT OPERATE IN REVERSE DIRECTION.** The spinner should rotate freely when turned by hand. The electric motor should run smoothly with little noise. If the motor should fail to start and produces a decided hum, shut down immediately and investigate for trouble.

Electrical and Air Requirements

The standard units are provided with either AC motors or air operated motors. The electric AC motors are TEFC 900 RPM and operate at 230/460 volt, 3 phase, 60 hertz. The air motors are 4-vane models and are provided with air mufflers. Both the 2 and 5 horsepower motors operate at 900 RPM with 100 PSI air. The air consumption of the 2 horsepower model will be 80 CFM (free air) with the 5 horsepower model requiring 150 CFM (free air).

Operation

The Spin Loader is designed to be hoisted by a lifting device. A power winch with steel cable, spreader bar and safety hooks of sufficient capacity (1/2 ton is recommended) is used to raise and lower the unit as needed onto the hatchway or the hopper car. **BEFORE THE SPIN LOADER IS OPERATED, IT MUST BE SECURED TO THE HATCHWAY OF THE HOPPER CAR, TRUCK OR BIN BY MEANS OF SWING BOLTS, T-BOLTS OR CLAMPS.** Start motor **BEFORE** material is fed into the Spin Loader. Stop motor when hopper car is fully loaded.

WARNING: *The Spin Loader is not to be used as a lifting platform for personnel. Use safe practices at all times whenever raising or lowering.*

Maintenance

Warning: The electric motor should be electrically locked-out before any work is performed. Air supply for air motors must be disconnected.

The following should be checked at regular intervals:

1. Inspect the gasket attached to the base of the Spin Loader. Replace with new gasket if torn.
2. The Spin Loader's top and lower bearings are packed with a general purpose grease and should not require any additional lubrication. Both bearings have an expected bearing life of 1 to 2 years under normal use. If a bearing fails, it should be replaced with a **Metalfab** spare part or equal.

WHEN INQUIRING ABOUT ANY SPIN LOADER, ALWAYS REFER TO THE SERIAL NUMBER STAMPED ON THE METALFAB NAMEPLATE.

METALFAB SERVICE

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