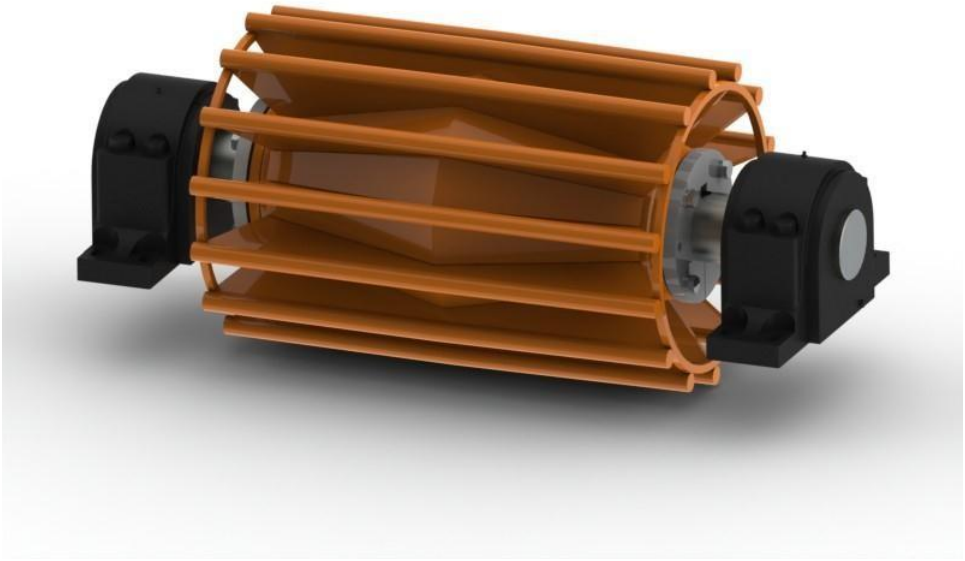
Safety, Operation, & Maintenance Manual

Drum, Wing, Tube, & Elevator Pulleys



Warning: This manual must be read, understood, and followed by anyone that installs, operates, and maintains this product. Failure to follow instructions may result in serious or fatal injury.

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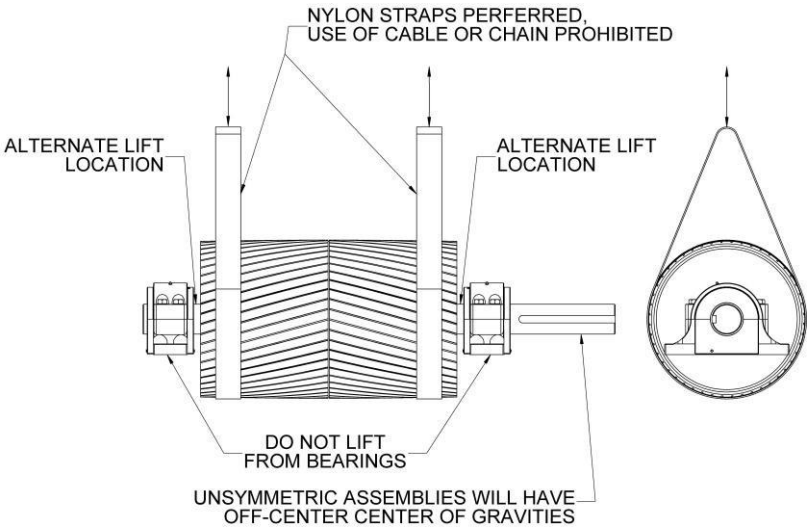
USE SAFE PRACTICES WHEN WORKING ON OR OPERATING CONVEYOR EQUIPMENT

Handling:
Conveyor pulleys can be lifted using a double chain sling hooked onto the inside lip of the shell. If web type slings are available, these should be fixed around the shaft between the pulley face and bearing at each end. Under NO circumstances are the pulleys to be lifted using the bearing housings.



1. Before beginning work on a conveyor always lockout and tag-out the equipment. Follow all OSHA and other guidelines that pertain to lockout and tag-out procedures. ***Failure to follow these procedures may result in serious injury or death.***

2. Foreign material should not be allowed to become trapped between the belt and pulley face. Material buildup should be avoided.

3. Bearings and housings, if provided, have been mounted to manufacturer's instructions provided with the order. For long life use care to keep clean and remount to manufacturers specs, if any work needs to be done. Proper alignment of bearing housings on shaft is necessary for bearing and seal life. Check mounting surfaces and holes before installing pulley assembly.

   Grease: Bearings and housings have been filled as much as practical without causing grease purging during shipping and handling. This reduces the possibility of condensation in the housing. This is the preferred method for larger, slower speed bearings, such as those used on belt conveyor pulleys. Therefore, some grease may be purged out during the first "running" of the pulley. This is considered normal. Immediately after startup, housing and seals should be re-greased until clean grease purges through seals.

4. Units that are not placed into service immediately are to be stored according to guidelines in the Pulley Storage instructions (next page).

5. Adhere to the instructions for Bushing Installation Instructions that are provided for your bushing type.

   Note: Lubricant on the bushing barrel, hub or screws could lead to breakage. Be sure all parts of the bushing/hub assembly are clean and non-lubricated.

6. Before lowering the pulley assembly onto the conveyor frame. Check the following items:

   a. Be sure the conveyor system power has been locked out and tagged-out.
   b. Bearing mounting surfaces should be level across the width of the conveyor frame. If not, shims may be required to level the assembly.
   c. Mounting holes or slots in the conveyor frame must match the bearings about to be installed.

d. If jacking bolts are provided on the bearing mounts, make sure they are flush with the heel of the mount prior to installation.

Greasing recommendations: Douglas recommends high quality #2 grease be used on conveyor pulley applications. Greasing intervals during initial use are as follows:

SUGGESTED GREASING INTERVALS		
Conditions	**0° to 120°F (-20° to 50°C)**	**120° to 200°F (50° to 90°C)**
Clear	2 to 6 months	1 to 2 months
Moderate	2 weeks to 2 months	1 to 4 weeks
Dirty	1 to 4 weeks	1 to 7 days
Extremely Dirty	Daily	Every Shift

Check the condition of the grease for excessive moisture or dirt, and adjust greasing frequency accordingly. For conditions and temperatures outside of this range, consult with a reputable lubricant supplier.

Storage Instructions for Drum, Wing, & Tube Pulleys

Pulleys

A. Block the pulley to keep the face from prolonged contact with the ground.

B. If stored outside, protect the entire pulley assembly from the elements; i.e., sunlight, rain, snow, etc. by using a tarp or other breathable covering.

C. Retighten bushing bolts using the appropriate instruction manual (i.e., QD, XT. or Keyless Locking Assemblies). Inspect the bushings and check the torque setting before startup and once a week for the first month of operation. Thereafter repeat at periodic maintenance intervals.

Lagged Pulleys

A. Store in a cool, dark area where they will not be exposed to direct sunlight or large temperature or humidity variations from normal conditions. Areas of high ozone concentration, such as areas with motor generators or other electrical arc producing machinery, should not be used for storage.

B. Deterioration may result if oil, grease, kerosene, solvents, or other chemicals are allowed to remain on the lagging.

C. When lagged pulleys remain out of service for long periods of time, surface refurbishing by grinding of 1 mm (1/32”) of rubber from the cover thickness; i.e., reducing the diameter by 2 mm (1/16”) will usually remove the oxidized layer.

Warranties shall not apply to any Product which has been subject to misuse, misapplication, neglect (including, but not limited to improper maintenance and storage), accident, improper installation, modification (including but not limited to the use of unauthorized parts or attachments), adjustment, repair, or lubrication. Misuse also includes, without implied limitation, deterioration in the Product or part caused by chemical action; wear caused by the presence of abrasive materials, and improper lubrication. Identifiable items manufactured by others but installed in or affixed to our Products are not warranted by us, but, bear only those warranties, express or implied, given by the manufacturer of that item, if any.

Responsibility for system design to insure proper use and application of Douglas Manufacturing Co., Inc. Products, within their published specifications and ratings, rest solely with the customer. This includes the analysis of loads created by vibrations within the entire system regardless of how induced.