



## Lubrication of Chain Guide Strips

Portec conveyor chain guide strips will lose grease due to normal conveyor operation, chain motion, gravity and displacement. To protect against premature wear, Portec recommends lubrication on a periodic basis. Specifically, the upper and lower chain guide strips of the Portec MT, FT, Sigma, Spiral Curve<sup>®</sup> and Spiral Lift<sup>®</sup> conveyors should be greased by a **Portec recommended lubricant** when any of the following conditions are observed:

1. The grease has become dry or caked.
2. The grease has lost its viscosity and/or separating due to exposure to environmental liquids.
3. The grease consistency is gritty and coarse, when rubbed between fingertips.

More detailed information on when to grease the guide strips can be found by referring to the "Lubrication - Chain Guide Strips" section of the Portec Owner's Manual.

**Safe practice requires that if the conveyor is to be opened for inspection, cleaning, maintenance or observation, the electric power to the motor driving the conveyor must be LOCKED OUT/TAGGED OUT in such a manner that the conveyor cannot be restarted by anyone; however remote from the area, until conveyor cover or guards and drive guards have been properly replaced.**

Grease should be applied between the chain and the vertical upper guide-rail strip. The grease can be applied near the location where the chain rises over the sprocket from the lower return and onto the upper guide. Chain travel will distribute the grease along the entire wear strip.\*

Portec recommends **Lubriplate Mo-Lith No. 2** as a primary friction barrier lubricant. If it is not available, a lubricant of equivalent quality should be chosen using the following industry advice (quoted from John Kurosky, Anderol, "Maximizing Grease Performance Through Optimal Compatibility - An Overview of Compatibility Testing". Machinery Lubrication Magazine. July 2003):

*"When the performance properties of mixed greases are equal to or better than the lower performing grease they are considered compatible. In some cases, performance properties of mixed greases may be less than the lower performing grease."*

Maintenance and engineering personnel can minimize the risk associated with grease changes by doing each of the following:

1. Select greases with similar thickening systems.
2. Select greases designed for the environment in which the equipment is operating.
3. Relubricate frequently, taking care not to over lubricate. (It is best to both increase the frequency and reduce the volume.)

The final determination of compatibility comes with proper testing of greases in the application for key performance properties.

*\*During guide service or new belt installation, Portec recommends that the guides are wiped clean and 1/8" bead of grease be applied in the groove of the vertical guide. The grease should be applied to the **full length** of the guide.*



## Portec Recommended Conveyor Lubricants

Portec recommends **Lubriplate Mo-Lith No. 2** as a primary friction barrier lubrication between the belt roller chain and the chain wear guide materials.

The following are acceptable alternative\*\* lubricants for the belt chain wear guides on the Portec MT, FT, Sigma, Spiral Curve<sup>®</sup> and Spiral Lift<sup>®</sup> conveyors:

<u>Manufacturer</u>	<u>Name of Lubricant</u>
Cam2	Moly EP2
Citgo	Mystik Power Lube 3% Moly-Lithium EP #2
Exxon	Ronex Extra Duty Moly 2
Gulf	Gulfex Moly Lith Grease
Jet Lube	202 Moly Lith Grease
Lubrimatic	Moly EP Grease
Lubriplate	X-357 Spray Grease
MPC	PL-10
Mobile	Mobilgrease Moly 51

The above-mentioned products may be purchased through local lubricant distributors. Contact your local [Portec Representative](#) for assistance.

**Note:** If the conveyor is operating in a food application, refer to the appropriate government regulation for the correct type of food-grade grease.

*\*\*Cost and availability may prohibit use of Lubriplate Mo-Lith No. 2.*