

# Recommended Preventative Maintenance Program for Freezer Spirals

Your Ryson Spiral operating in a freezer environment will require more maintenance than our standard spirals operating in above freezing temperatures. The lubrication used in the bearings, chain and gearboxes is rated for the sub-zero temperatures and are not suitable to operate in temperatures above freezing. The chain will stretch during operation and needs to be shortened occasionally.

## Daily:

1. Inspect chain and slats for damage and cracks. Replace any damaged or missing parts. Do not run the spiral with missing parts or slats.

## Weekly:

1. Check the chain tension. Shorten the chain when needed. The chain may have to be shortened within the first 200 hours of operation (see the chain shortening instructions in the manual).
  - The chain tension bar should operate at an angle between +6° and 0°. The chain needs to be shortened when the tension bar is at 0° (horizontal).
  - Spring tensioned - Measure the tensioner spring compression and adjust if needed to keep it between 460 and 400 mm.
2. Check the transition rollers and holders. All rollers should turn freely, and the holders adjusted to the proper height for smooth product transfer. All hardware should be tight.
3. Apply lubricant **rated for freezer applications** sparingly, to prevent dripping and buildup.
4. Check speed matching. The in-feed, spiral and out-feed conveyors must be running at the same speed.

## Monthly:

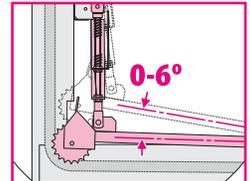
1. Check the chain tensioner and safety circuit for functionality. Fault out the slack chain proximity sensor. The spiral and the in-feed conveyors should ramp down and stop immediately and **not** automatically restart.
2. Check the overload protection device and safety circuit for functionality. Fault out the overload proximity sensor. The spiral and the in-feed conveyors should ramp down and stop immediately and **not** automatically restart.
3. Check the outfeed jam sensor for functionality. Loads should not back up into a running spiral. The spiral and the infeed conveyors should stop immediately.

## Quarterly:

1. Check the rail system and sprockets for wear. (See the inspection guide in the manual).
  - Remove 4 continuous non-master link slats and carrier assemblies.
  - Rotate the chain assembly and inspect the poly, rails and load arm brackets every ¼ turn.
2. Check the chain and sprockets for wear and lubrication.

## Every 2 years:

1. Change oil in the motor gearbox.



Please refer to the maintenance manual for more details. The Ryson Service Department is always available to assist with installation and service questions. Feel free to call 757.898.1530 or e-mail [service@ryson.com](mailto:service@ryson.com) with questions.



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