Conveyor Belt Adjustments & Tracking a Dryer Belt

Belt Tension:
There are two adjustable pulleys on your Lawson Conveyor Dryer. Before making any belt tension adjustments, run the conveyor with the Heat On and the Temperature Controllers set at your normal operating temperature. This will allow for proper belt tensioning. The conveyor belt will not track properly without heat!

Turn the Tracking/Adjustment Bolts clockwise on the idler pulley to increase tension on the belt. Turn the adjustment bolts counterclockwise to decrease tension on the belt. Adjust the belt tension in small increments only and avoid adding too much tension to the belt. Be sure to adjust the tension equally on both sides, when you are initially installing a belt.

It is a good idea to adjust the tension on the in-feed pulley first, then use the drive roller (motor-end) to "fine-tune" the belt tension as necessary. Do not over-tension the belt.

Belt Tracking Adjustments:
Please note that the belt will always "walk" on the pulley. As long as the belt does not go over the edge of the pulley, the belt is tracking properly. It’s ok for the belt to walk from side to side as long as it does not go over the end of the pulley.

If the conveyor belt is shifting or “walking” to one side and is in danger of going off the pulley, the idler and drive pulleys are not parallel and/or the dryer is not level. Adjust the Tracking Bolt(s) on the side towards which the belt is shifting, by turning the adjustment bolt slightly clockwise (this will increase the tension on this side). Run the belt for several minutes to check the adjustment.

Most of the adjustments of the belt tension should be made at the In-Feed end of the dryer. Please note that as long as the dryer belt is not “walking” off the pulley, it is normal for the belt to shift back-and-forth (walk) on the pulley.

1. Check all bolts and bracing on the frame to make sure they are properly installed and are tight.

2. Dryer should be level and on a solid base (so that a “rocking” motion will not develop). Place a level on the frame (not the top of the dryer) in order to level the dryer.

3. Make your belt adjustments with the Heat On! Set the heat at your normal operating temperature.

4. Always run the belt as loose as possible. The belt should have approximately ½” deflection measuring four inches away from the pulleys. NOTE: Pay special attention to the alligator clip as it goes around the end of the pulley. If the belt tends to dramatically slow down and struggle as it goes around the pulley, then the belt is too tight. Reduce the belt tension by turning the Adjustment Bolts counterclockwise.

5. If the belt is tracking over the end of the pulley, then go to the side where the belt is over-hanging the pulley, and tighten that side so the belt will "walk" in the opposite direction. Once the belt starts to "walk", loosen the tension by half the amount tightened on the side you adjusted. If you are afraid that the belt is too tight on that side, you may loosen the other end of the pulley (the lateral side) to adjust the walking of the belt. Try to make all adjustments on the in-feed end of the dryer (the end opposite the motor). Unless absolutely necessary, do not adjust the motor end.

6. If your belt is too tight: Loosen both adjustment bolts on the in-feed of the dryer and “re-center” the belt, by sliding the belt over to the center by hand…then follow steps 4 and 5.

7. If the belt dramatically slows down when the connecting link goes over the pulley, the belt tension is too tight. If the belt starts to have an “S-Curve” where the belt connects, the belt has been over tightened. “S-Curves”, once they exist can not be “fixed”. Sometimes a belt will track even with an “S-Curve”, sometimes it will not.

8. The preferred direction of belt travel is towards the motor. It is easier to track the belt in this direction. You can run the belt in the opposite direction if you choose, but when you change directions of the belt, you will have to re-track the belt.