

Ladder-Track Conveyor Belt

Installation Guidelines

Positively Sprocket Driven

Preparation

Before installing a new belt, always check the conveyor structure;

- Shafts to be at 90° to direction of travel, and horizontal.
- Rollers to be free to rotate
- Belt supporting surfaces are smooth and level with adequate belt edge clearance. Check that there are no parts of the structure that can catch the belt.
- If a take-up mechanism is fitted, ensure that it is functioning correctly.

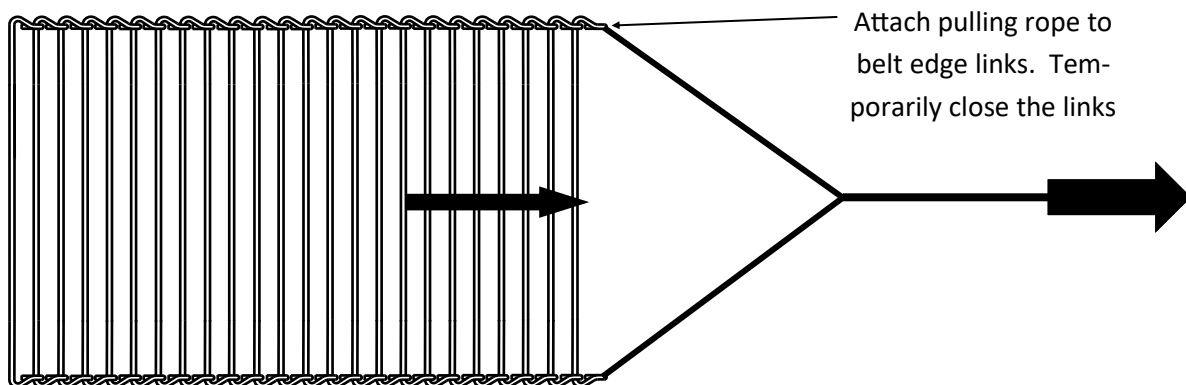
Installation Procedure

Tools you will need:

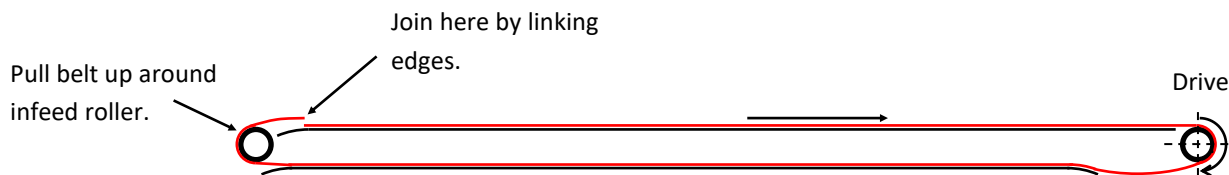
- Safety glasses
- Ladder-Track™ belt maintenance tool (Part No. 017012)
- Pulling rope (optional—for long new conveyor installations)
- Necessary tools for conveyor belt take up adjuster

- In general there is no top or bottom of the belt. However it is best practice to have the cut tail of the edge link on the underside where possible. Where belts are supplied with alternating up & down closed edge links there is no top or bottom surface to the belt.
- The direction of travel is defined by the connecting edge links. The closed loop of the edge link points in the direction of travel with the cut end of the link lagging. This ensures that the edge link will not catch at transfers and on parts of the conveyor structure.

1. First ensure that the electrical supply to the conveyor is turned off and the power supply locked out.
2. Release any conveyor belt tension take up mechanism to allow maximum adjustment during installation.
3. The belting should be pulled through the conveyor circuit until the two ends meet. There are 2 approaches to this:
 - a. The first being when a belt is replaced for a belt in situ on the conveyor. In this instance, using the Ladder-Track™ belt maintenance tool, open up the edge links of the existing belt at a position close to the infeed end (non drive end) of the conveyor. Unhook the edges of the belt and attach the leading edge of the new roll to the lagging edges of the existing belt on the carry way surface. In general there is no need to close the loop edges of the new belt until installation is complete. By means of supporting the new belt roll you will be able to carefully drive the belt (operate at slow speed) into the conveyor using the existing belt. Always maintain suitable belt tension to ensure there is no belt slip on the drive shaft sprockets. Whilst the belt is being driven in the old belt should be collected as it exits the underside at the infeed end and layered carefully onto a pallet or suchlike for disposal. Once the new belt exits the return way then disconnect it from the old belt. Then continue from step 4.
 - b. The second is when a new belt is fitted to a conveyor and there is no existing belt (such as a new installation). The belt will have to be fed through the conveyor circuit by hand. Position the belt close to the infeed end (non drive end) of the conveyor. For short conveyors you will be able to pull the belt through by hand ensuring the new belt aligns correctly with the drive shaft sprockets and any circuit rollers. For long conveyors attach a pulling rope to the open leading edge loops. You may need to close this link to ensure that the attachment rope does not unhook from the edges during installation. The rope is first fed through the conveyor to the discharge. From here the belt can be pulled through the carry way part of the circuit. Once the lead edge of the belt is at the discharge end the rope should then be fed back through the return way of the belt circuit to the infeed end. It can then be pulled (maybe with slow speed drive assistance) to the infeed end. Once the leading end of the new belt exits the return way at the infeed end of the conveyor the pulling rope is then removed. Then continue from step 4.



4. The edge links of the leading end are then re-opened if they were closed after fitting a pulling rope.
5. Pull the leading end of the belt up around the idle infeed roller and lap over the trailing end of belt.
6. Excess belt is then removed by opening the edge loops at the join position of the trailing end of the new belt. Remove the excess belt and put aside for spares use. When setting the required belt length ensure that any take-up mechanism is set to minimum to ensure further belt length adjustment in use.



7. The two opposing ends of the belt are then pulled together.
 8. The link edges of the leading end of the new belt is then linked over the trailing end rod.
 9. Check that the belt is lining up with the sprocket & roller arrangements throughout the circuit.
 10. By use of the Ladder-Track™ belt maintenance tool close the edge links securely to prevent unhooking in operation. Care should be taken when closing the loops not to close them too much and prevent correct articulation of the belt at this position.
 11. Re-tension the belt enough to maintain adequate drive without over tensioning, whilst maintaining further belt length adjustment for continued use.
 12. Check there are no belt parts or tools left on, or in the conveyor.
 13. Remove power lock off and then start the conveyor and test run under slow running conditions before running at normal operating speed.
- Longer belts may be supplied in sections and therefore multiple belt joins will be necessary.
 - In general these instructions also cover the installation of Radial Ladder Belts.