

INSTALLATION FOR CHAIN DRIVEN BELTS

CAUTION: Improper installation procedures can cause premature failures, damage to belt or conveyor, reduced performance, or unnecessary downtime.

SAFETY WARNING: Never attempt installation or maintenance on a moving conveyor belt. Conveyor must be "off" with the power source locked out. Always wear proper safety equipment when performing installation or maintenance. Keep clear of moving conveyor belts at all times.

Procedure

1. Pull the belt in to the conveyor with a cable or rope. The cable should be attached to a rigid pull bar which is attached to the belt at the chains. Secure the leading edge of the mesh to the pull bar with wire ties to keep it from becoming damaged during installation.
2. Pull the belt into the conveyor slowly, apply even tension to both chains, and try not to jerk the belt. Be very careful not to allow one strand of chain to take all of the tension.
3. Watch the belt carefully as it comes out of the crate. Remove any kinks from the chain or fabric as the belt leaves the crate — **before** it enters the conveyor.
4. As the belt enters the conveyor, make sure all the spirals are lying flat. **Any spirals which are turned up, creating a hump in the fabric (Figure 1), must be turned to lie flat (Figure 2).** If these spirals are not turned as the belt is installed, they may become permanently deformed as tension develops in the belt.
5. Join belt sections near the crate, on a flat surface, where the two ends can be brought together under no tension. Connect the fabric first, then connect the chains. The chains will hook up in one of two ways: either a cross rod will be provided that acts as a chain pin or a standard chain connector link will be provided.

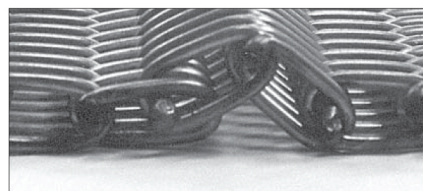


Figure 1. Turned-up spirals.



Figure 2. Spirals turned to lie flat.

- a. If a cross rod is provided, slacken the fabric and connect the chains together. Then, insert the cross rod to act as a chain pin and weld the provided washers to each end of the cross rod (some belts use cotter pins in the rod ends instead of washers welded).

- b. If a standard chain connector link is provided, slacken the fabric and connect the chains together. Then, insert the connector link so that the free side bar goes on the outside of the chain.
6. Prior to running the belt, inspect all sprockets for proper engagement with the belt. Pay **close attention** to ensure that the drive sprockets are keyed in line and that each strand of chain on the belt is engaged in the same sprocket tooth relative to the cross rods. If one strand of chain is installed ahead or behind the other strand (on the opposite side of the belt) the belt may be damaged at start up. **All tail and idler shafts should have only one sprocket keyed to the shaft.** The other sprocket should be free to float rotationally, but be constrained from moving laterally by locking collars or some other means.
7. Most conveyors require a support drum or wheels located between the sprockets.
8. Consult the Cambridge Metal Belt Engineering Manual for other guidelines, or contact Cambridge.

MAINTENANCE

FOR CHAIN DRIVEN BELTS

The following are some general recommendations for achieving optimum performance from your Cambridge Chain Driven Belt.

Procedure

1. Periodically inspect belt for damage, excessive sag, or interference with the conveyor structure.
2. Operation of the belt with severely worn sprockets may result in abnormal belt wear. Sprockets should be periodically checked and replaced when worn.
3. Belt life is directly related to system cleanliness and lubrication. Whenever possible, chains should be continuously lubricated in operation. For most room temperature applications, a good grade of light mineral oil (without additives) should be sufficient. For elevated temperatures, freezing temperatures, and other special processes, a lubricant manufacturer should be consulted for selection of the most effective lubricant. The system should be kept clean and free from foreign objects.