

# Self Tracking Belt

## Installation Guidelines

### Friction Driven - Pin & Endless Seam Joint

#### 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

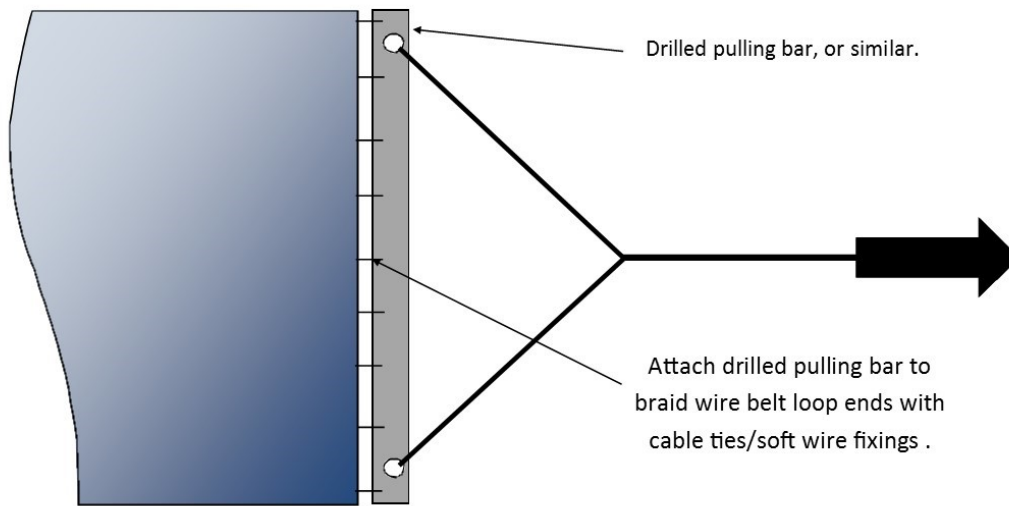
Tools you will need:

- Safety glasses
- Flat end pliers
- Side cutting pliers
- Needle Nose Pliers
- Cable ties/soft wire/rope (optional)
- Pulling rope (optional—for long new conveyor installations)
- Necessary tools for conveyor belt take up adjuster
- Welding set to complete the belt edge at the pin joint strand.

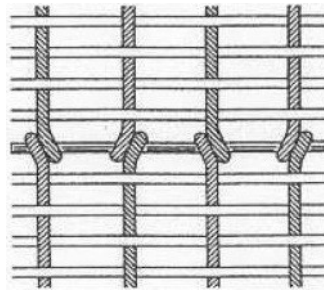
**Important Note:-** The following procedure is for a “Pin Joint” process only. “Endless Seam” join belts can only be fitted to a conveyor with a special design to enable fitting from the conveyor side.

- Please note that the belt length is predetermined and should be ordered as a fixed length to suit the conveyor. It is not possible to adjust the belt length during installation.
- The top of the belt is smooth whilst the underside of the belt has formed “V” sections in the cross wires to locate in the grooves of the grooved drive & idle infeed rollers.
- There is no direction of travel as both ends of the belt are identical.

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 drive the existing belt to a position where the join pin is assessable at the infeed non-drive end of the conveyor. The existing join pin is cut at its ends and withdrawn. The new belt is then temporarily attached to the lagging end of the old belt by means of a connecting pin laced through the opposing braid wire loop ends of the new and old belt. 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 roll. 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.  
Then continue from step 4.
  - b. The second when a new belt is fitted to a conveyor where there is no existing belt (such as a new installation) then the belt will have to be fed through the conveyor circuit by hand. Position the replacement belt at the infeed with the smooth surface uppermost. The underside “V” forms of the belt are to align with the grooves of the infeed and drive rollers. For long conveyors you will need to attach a steel bar to the leading braid wire loops with cable ties or suchlike (see below). To this bar then attach a pulling rope which 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.  
Then continue from step 4.



4. The two opposing ends of the belt are then pulled together. Remove the drilled pulling bar assembly. Push the connecting wire through the opposing loop ends as shown.



5. The connecting wire should then be cut to length and welded to the corresponding cross wire at the edges.
  6. Check that the "V" sections on the belt underside are aligning with the grooves in the drive & idle infeed rollers.
  7. Re-tension the belt enough to maintain adequate drive without over tensioning the belt.
  8. Check there are no belt parts or tools left on, or in the conveyor.
  9. 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.
  - Extra care should be taken when installing a belt with "Bent Up Edges".