

Installation Instructions for Chain Drive Belts

For successful and efficient belt operation it is essential that the following installation and operating instructions be followed carefully. Please use this technical data sheet in conjunction with LB200 general installation instructions for belts.

Chain Driven Mesh belt are constructed to overcome the limitations of the standard woven mesh belt, in regard to tracking, positive drive requirements and loads. Chain is normally selected according to the strength and speed required.

The most common chain is a standard roller chain but pintle chain can be used in applications with either elevated temperatures or heavier loads. The chain is then attached by the use of a cross rod that either goes through or under the mesh.

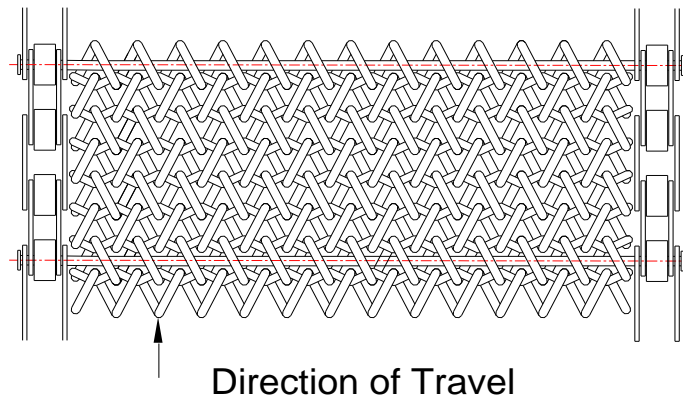
Options of side flights and cross flights are also available.

Prior to installation the following precautions need to be observed:

- Extreme care is to be taken during un-packing of belt/belts to prevent damage to weave.
- The belt should be kept clean and away from contaminates during installation.
- The conveyor should be checked to ensure head and tail drums, sprocket drives and support rollers or beds are square and level and free to rotate.
- The conveyor should be checked to ensure sprockets are properly aligned with chain centres and conveyor bed.
- The conveyor belt support bed is to be checked for excessive wear, alignment and catch points.

During Installation

- Whilst unrolling the belt for installation, observe mesh to ensure correct seating. As once tension is applied incorrect seating will permanently damage the mesh.
- Make sure conveyor path is free from obstructions.
- Avoid applying more tension to belt than required to initiate movement.
- Check direction of travel, spirals ends should be trailing.
- Before applying tension, upon completion of installation, ensure all spirals are seated correctly.
- If the condition of the old belt is acceptable this can be used to pull the new belt through.



Splicing Belt ends together

- Bring the two ends together with the belt edges inline.
- Ensure the spirals are of opposite weave - one left hand and one right hand.
- The two end spirals should be meshed together allowing insertion of a single crimped pin (supplied). Pin should remain 1 – 2mm longer than width of belt.
- Crimped pin and spirals are fuse welded together to complete joining of mesh.
- Insert cross rod through chain and mesh at correct location (pitch of mesh). If cross rod has machined end to suit chain, insert end with longest portion of machining into chain first. The other end should now be inserted into chain on other side of belt. (If side flights are a part of the belt construction please ensure that these are assembled during this operation.
- Weld cross rod to chain, weld collars or insert split pin into cross rod, depending on belt construction.

Operation

- Run at a low speed during initial tracking.
- Operate the belt for at least 4 hours without any load or increase in temperature.
- Load on belt should be distributed evenly across belt width.
- Damaged sections of the belt should be repaired immediately.
- Do not increase tension of belt above that necessary to drive under full load conditions.
- Remove section from belt when take up mechanism is near its maximum stroke.
- During the first 200 hrs of operation ensure the belt is monitored regularly and that tensions are kept to a minimum. This will assist in achieving optimal belt life.
- Chain lubrication is an essential factor in the performance of a chain driven mesh belt. If available an automatic means of lubrication should be installed.
- Daily visual checks are advisable to look for product build up on belts that will impact tracking and or performance of the belt. Left unchecked this will also shorten the belt life.