

Background:

This guide is designed to help decrease the maintenance needs of your Lineshaft/Tranzband conveyor, and where maintenance is required, make it simple.

Overview of Potential Issues:

The main issues with Tranzband conveyors are as follows:

- Geared motor failure
- Worn drivebands, spools and spacers
- Broken / Missing drivebands, spools and spacers
- Broken coupling chains

Lineshaft Bearings:

- Lineshaft bearings must only be greased with one shot of grease each bearing at least 1 year apart.
- Excess grease in bearings can migrate onto drive shafts which either causes:
 - Spools to slip excessively
 - o Clogging up the spools and prevents them from slipping at all (required for accumulation)
 - o Create mess which can get onto other products/machinery
- If drive shafts have lubricant on them or are excessively dirty, clean them as well as possible with a suitable degreaser that does not leave any residue. Fuelite or Shellite are good shaft cleaners.

Tips to Reduce Maintenance:

To reduce wear, ensure good band life, and give excellent long-term drive, THE BANDS MUST RUN ON THE SPOOL

Band running direct onto the shaft will wear rapidly especially during accumulation.

Normally bands that have migrated off the drive spool can be easily spotted from above conveyor (Img.1 below).



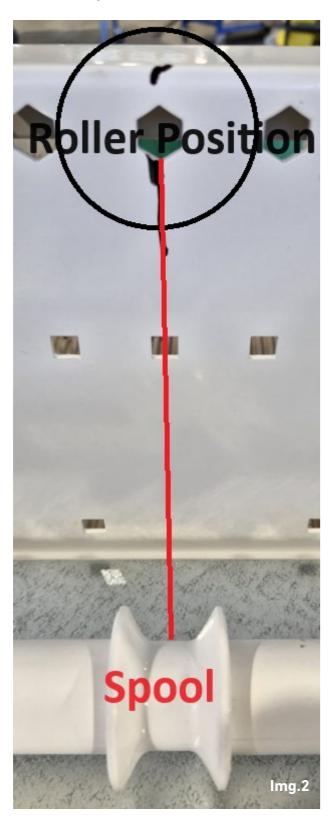
Conveyors should be checked monthly that the drive bands are all running on spools.

Band can easily be pulled back onto the spool.





The most common cause of bands running off spool is poor alignment of the spool – this should be directly under the roller (Img.2 below).



Incorrect or worn spacers are the main cause of spool misalignment.





Replacing Spacers:

To begin repairs, mark the inside of the frame holes that have/had rollers located in them (Img.3 below).

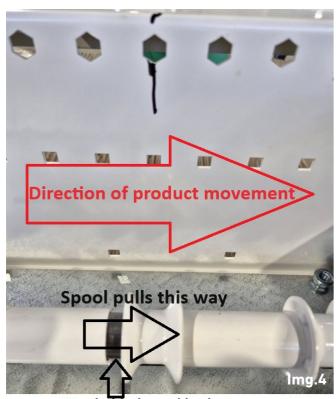


Once marked, remove rollers from the section to be repaired.

The lineshaft can now be removed, and the correct/new spacers, spools and drivebands can be fitted If it is not convenient to remove the shaft, split spacers or cliplocks can be added to reposition spools to line up with the rollers.

Note: The spool will always migrate along the shaft in the same direction that the product is moving.

Ensure spools are lined up with the rollers hard against spacers on the front side of the spool (Img.4 below).



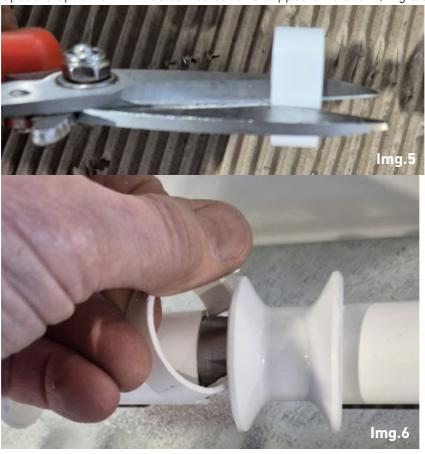
Gap behind spool is okay





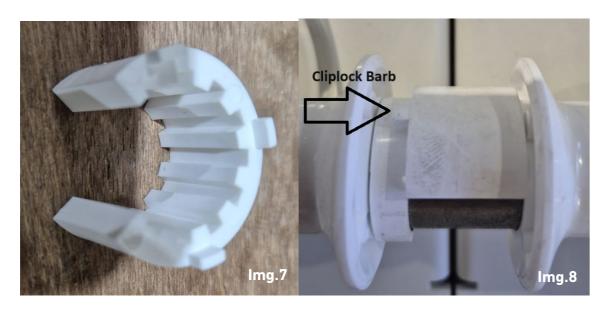
Note: Spools and spacers should have approx. 10mm accumulated clearance/movement on the shaft between each lineshaft bearing.

Spacers up to 20mm wide can be cut and clipped onto shaft (Img.5 & Img.6 below).



Cliplocks can be used as spacers if returned.

Note: Unless extra drive is essential, the barbs must point away from the spool (Img.7 & Img.8 below).







Replacing Spools:

If the spool is damaged or split, this must be replaced immediately (Img.9 below). Remove the shaft and replace.



If it is not possible to remove the shaft, cut the spool with a chisel and hammer to remove. Then the spool can be replaced by using a red split spool (Img.10 & Img.11 below).

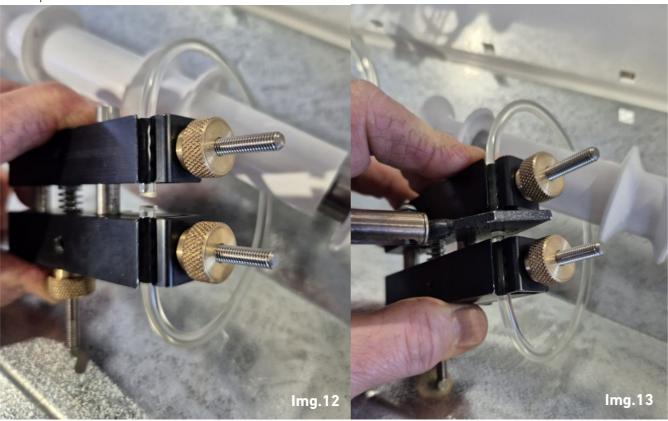




Replacing Bands:

If drive bands are worn, new bands can be welded in place without removing shaft (Img.12 & Img.13 below).

See separate 'DRIVE BAND JOINING GUIDE'.



IMPORTANT! For successful drive band joins, they must be clamped to harden for at least 5 minutes after welding (set your timer!).

