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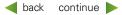




# INSPECTION PROCEDURE AND REPLACEMENT CRITERIA

The below inspection methods provide measurement criteria for functional characteristics (i.e. chain pitch) of conveyor components. If the recorded value during inspection exceeds the maximum allowable value, the conveyor component should be replaced. Refer to replacement criteria for requirements.





# A - CHAIN/BELT INSPECTION METHOD

### **A1- CHAIN/BELT PITCH**

Inspection device:

Tape measure

Inspection method:

- · Make sure that the chain/belt is under light tension and straight
- Measure the length of 10 chain links/belt modules. Make sure you take the same reference edge at the
- · Divide measured link/module values by 10 to have the average. Record this value
- Subtract original chain pitch from measured chain
- Divide difference by original chain pitch to get percent elongation



10 pitches of 828 measured 393.7 mm (15.5"); 393.7/10 = 39.37 mm (1.55") pitch. 828 has a 38.1 mm (1.5") pitch, so (39.37-38.1)/38.1 \* 100% = 3.33%

### **A2- REPLACEMENT CRITERIA:**

- All belts and chains should be replaced when percent elongation exceeds 3%
- The chain or belt is jumping the sprocket. This typically begins at around 3% of elongation
- The hinge is worn to an extent that the pins are visible
- · Conveyor is surging due to elongation, which is causing product handling issues

# A3- CHAIN/BELT THICKNESS

Inspection device:

· Calliper gauge

Inspection method:

- · Clean the links to be measured
- Measure 5 links
- · Eliminate the smallest and the largest value
- Calculate the average out of the three remaining readings. Record this value

# **A4- REPLACEMENT CRITERIA**

- · Chains should be replaced when the flight thickness has been reduced by 50% of the original value
- Belts should be replaced when the module thickness has been reduced by 2 mm (0.08")
- The surface becomes uneven or scratched causing product stability problems
- · Product handling issues are occurring

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# **INSPECTION PROCEDURE AND REPLACEMENT CRITERIA**

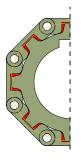
# **B - SPROCKET INSPECTION METHOD**

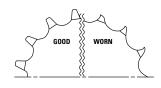
Inspection method:

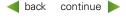
A visual check for:

**B1- SPROCKET TEETH** 

- A proper engagement with chain/belt
- · Worn teeth
- · Embedded dirt, glass particles that cannot be removed







# **B2- REPLACEMENT CRITERIA:**

- Sprocket teeth are worn, damaged, or have a hooked profile
- · Chain is no longer engaging sprocket properly
- Chain/belt does not release well

# **B3- SPROCKET BORE AND KEYWAY**

Check bore play against shaft: Feel the play just by moving the sprocket by hand. If the play is too big or the sprocket swivel angle is too much, double-check the play with a feeler gauge. Visual check of keyway for any damage.

Inspection device:

· Feeler gauge

Inspection method:

- Measure the play with the feeler gauge
- · Calculate the average measured values. Record this value

# SWIVEL ANGLE

# **B4- REPLACEMENT CRITERIA**

- · Sprocket is loose on drive shaft
- · Bore of sprocket is worn out and sprocket starts to oscillate. Bore lays against shaft is over the limit value of 1 mm.
- · Hub or keyway is damaged
- · New chain/belt is installed



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