

## STANDARD MAINTENANCE PROCEDURE (SMP)

**SMP NO:**

### CONVEYOR BELT TENSIONING

**Equipment Type:**

**Conveyor Belt**

**System:**

**Equipment Name:**

**Date:**

**Equipment No:**

**Approved:**

**Maintenance Type:**

**Insp**

**Lub**

**S&A**

**Test**

**Cal**

**Rep**

**O/H**

**Frequency:**

**Daily**

**Weekly**

**Mth**

**3 Mth**

**6 Mth**

**Annual**

**Risk Assess No:**

### Materials/Tools Required:

- 1 Measurement Tape
- 2 Rubber Marking Ink Pen
- 3 Open/Box Wrench (Size to Fit the take-up jacking bolts)
- 4 Refer to Video for further Instructions

### Method:

- 1 **SAFETY:** When working on the belt or in and around the carrying and return rollers, always make sure that the drive system is locked out.
- 2 Proper conveyor belt tension is very important. If too slack, it will cause slippage on the drive pulley resulting in premature belt wear. If too tight, it could result in belt splice premature failure.
- 3 This method is using the elongation of the belt.
- 4 It is very important that the rollers and pulleys are clean of any build-up. The underside of the belt must also be clean of any build-up.
- 5 Make sure the belt is empty, with no load. Also ensure that there is no belt tension by backing off the take-up jack screws.
- 6 Make marks on each edge of the belt that are precisely 50" apart. These marks need to be perpendicular to the centerline of the belt. Be sure to take the time to double-check your measurements.
- 7 With the use of the take-up jack screws, apply evenly gradual tension to both sides of the belt. This will ensure the take-up roller is kept parallel with the other conveyor rollers. There should not be any slop between the belt and the pulley.
- 8 Measuring the distance between the marks as you tension the belt will provide you with the tension percentage of your belt. For instance, if the belt is stretched to 51" - there is now 2% tension on the belt. As a rule of thumb, most single and 2 ply rubber belts call for a 0.5% to 3% elongation. Because you might have different belt manufacturers and model #s at your site, you will need to consult your belting supplier or the manufacturer, for the recommended tension on each belt.
- 9 Run the belt for a few revolutions so as to allow the belt tension to distribute throughout the entire length.
- 10 Stop and relock the conveyor belt.

