

## STANDARD MAINTENANCE PROCEDURE (SMP)

**SMP NO:**

SG-SMP-MAINT-004

## CONVEYOR BELT TRACKING

**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 2 Open/Box Wrenches (Size to Fit the take-up jacking bolts and jam nuts)

2 Refer to the 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 This method applies only to belt that have already been properly tensioned.

3 Before attempting to track an off-centered conveyor belt, it is very important to verify the following:  
 3.1-Every rollers and pulleys are clean of any build-up.  
 3.2-The underside of the belt must also be clean of any build-up.  
 3.3-Every pulleys, head, tail, snub and take-up, carrying and return rollers must all be parallel to each other, and perpendicular to the frame.  
 3.4-Make sure that all rollers and pulleys are turning freely.  
 3.5-Check rollers and pulleys bearings condition.

**NOTE: Remember that all rolling components steer the belt.**

4 The fundamental rule of conveyor belt tracking is that the belt will move toward the side that has more friction or the side that reaches the friction first. Therefore the more pressure being applied to a roller or a pulley, the higher the friction between it and the belt. This causes the belt to track towards that point of contact.

5 Make sure the belt is empty, with no load.

6 Apply the bicycle riding handlebar rule. Meaning the direction in which you turn the take-up pulley, will drive the conveyor belt in that direction. The belt will track to the side with the least tension as per picture below. For example, to move the belt left, pull the right side of the idler forward (or push the left side back).



7	Apply the 3-Revolutions Rule: After each adjustment, allow the belt to complete at least three full revolutions to settle before making further adjustments.
8	With the belt running, as per described under item 6, tighten the appropriate take-up roller jack bolts in order to steer the belt in the desired direction.
9	Only make small incremental adjustments at once, and observe.
10	In order not to over-tension a belt, as oppose to tighten a jack screw, the opposite side screw can be loosened up, resulting in similar results. Refer to concept described under item 6 So by loosening a jack screw, the belt will move
11	Once the belt is properly aligned, load the conveyor and monitor the belt tracking. Fine tuning adjustment might be required.
12	Upon completion of proper belt tracking, do not forget to lock the jack bolts jam nut(s).
<b>SAFETY, REPORT ANY ABNORMAL ITEMS TO DEPARTMENT OR SAFETY MANAGER</b>	