



Welcome to Conveyor Maintenance

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overview

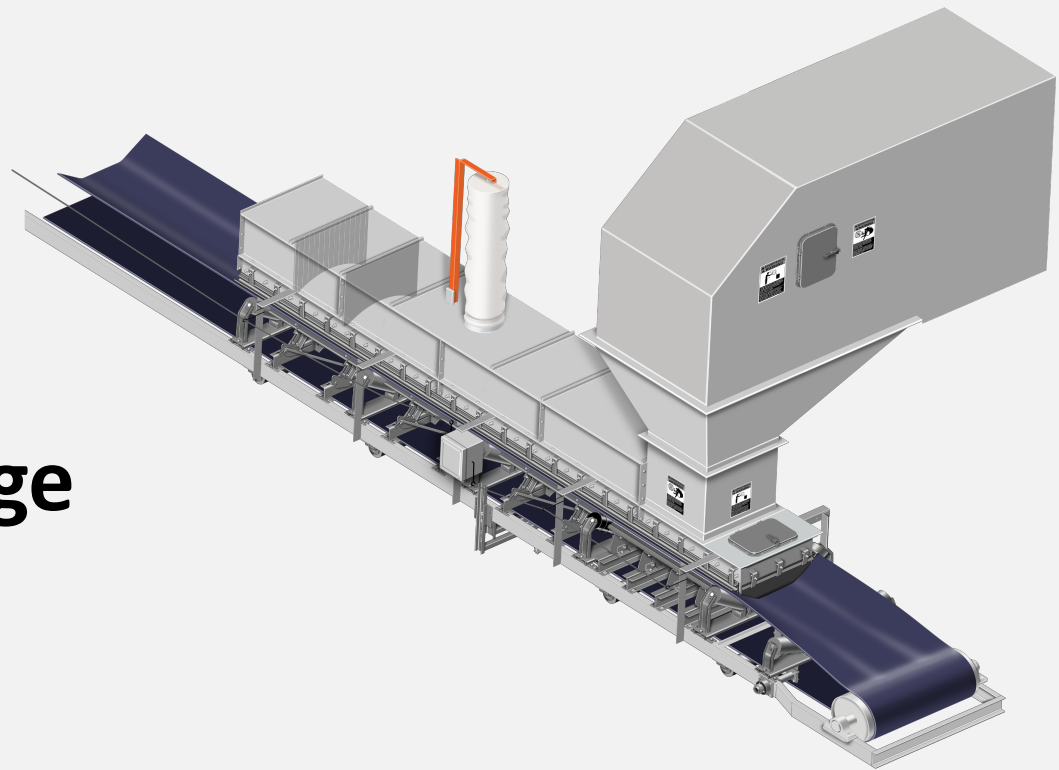
1. Discuss Problems With Belt Conveyors
2. Learn How to Prevent or Repair Problems
3. Explore Shortcomings in Execution

1. Discuss 4 Problems With Belt Conveyors
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Problems with conveyor belts

1. Dangerous
2. Carryback
3. Dust and Spillage
4. Mistracking



A photograph of a large industrial facility, likely a steel mill or manufacturing plant. In the foreground and middle ground, there are long, parallel conveyor belts supported by metal frames. Above the conveyors, there are large, orange-colored mechanical components, possibly part of a hot metal handling system. The word "martin" is visible on one of these orange components. In the background, there are more industrial structures, including a staircase and various pipes. The overall scene is brightly lit, with some areas appearing overexposed. The text "Reducing risk of injury from conveyors" is overlaid in the center in a large, bold, black font, with a thin orange horizontal line underlining the word "injury".

Reducing risk of injury from conveyors

Reducing risk from conveyors



1. PPE
2. PPP
3. Training
4. Guarding / Estops
5. Reducing Clean Up

E-stops Checked every 30 days



- Test for slack in cable
- Measure and record runout
- Inspect cables and clamps
- Inspection length and location

Guard installation and

maintenance

Proper distance

Can't reach around

Require a tool to remove

Stand out in color



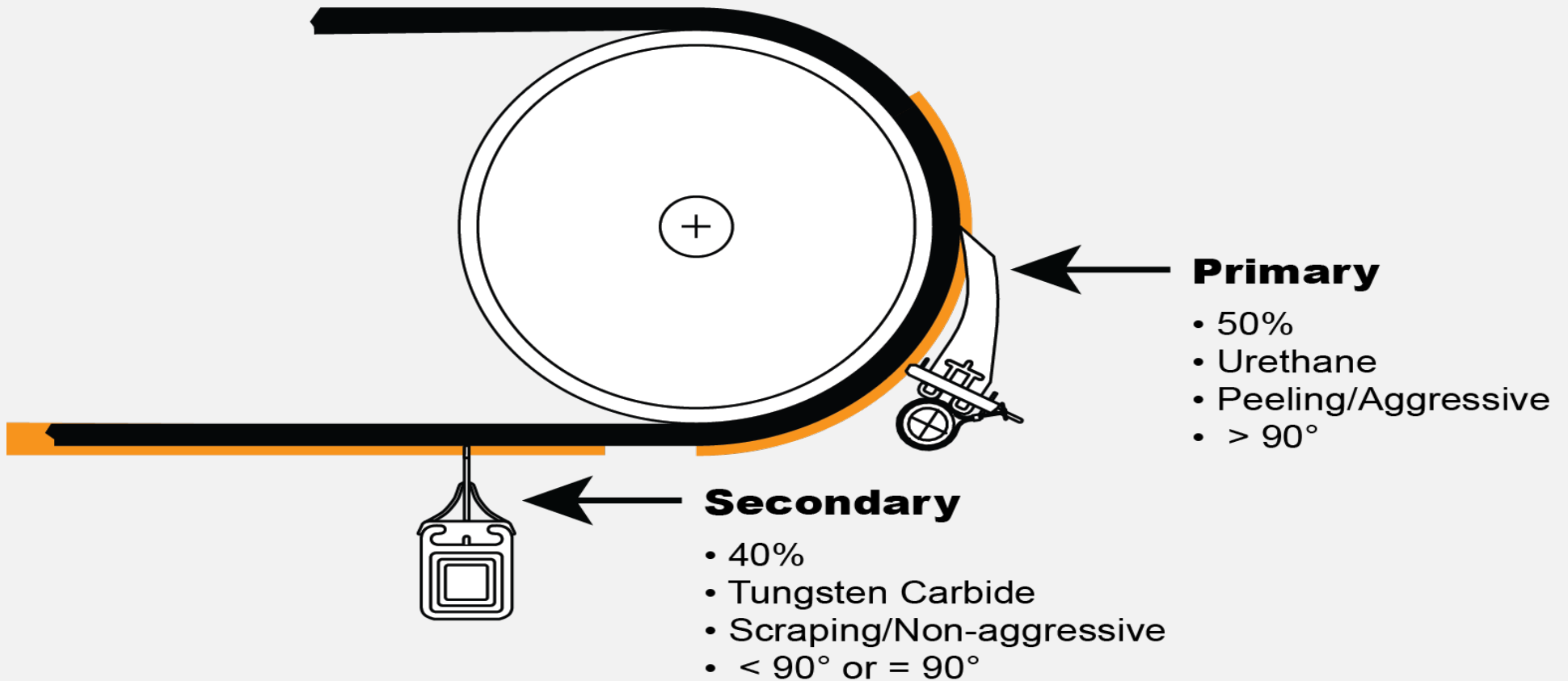
Best to reduce clean up

- 85% of accidents while cleaning
- Increase clean up means increase risk
- Added benefit of conveyor performance



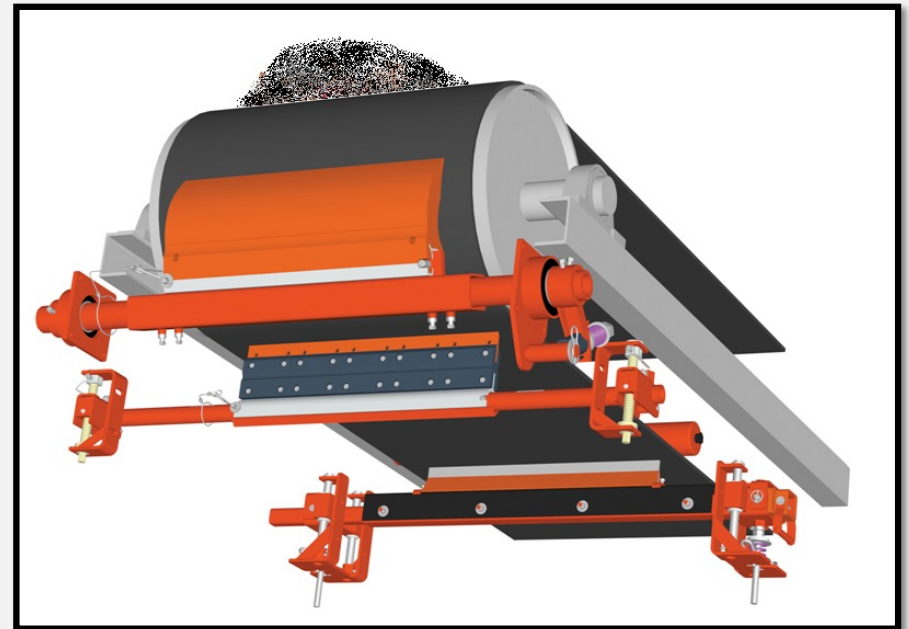
Reducing carryback

Multiple Belt Cleaner System

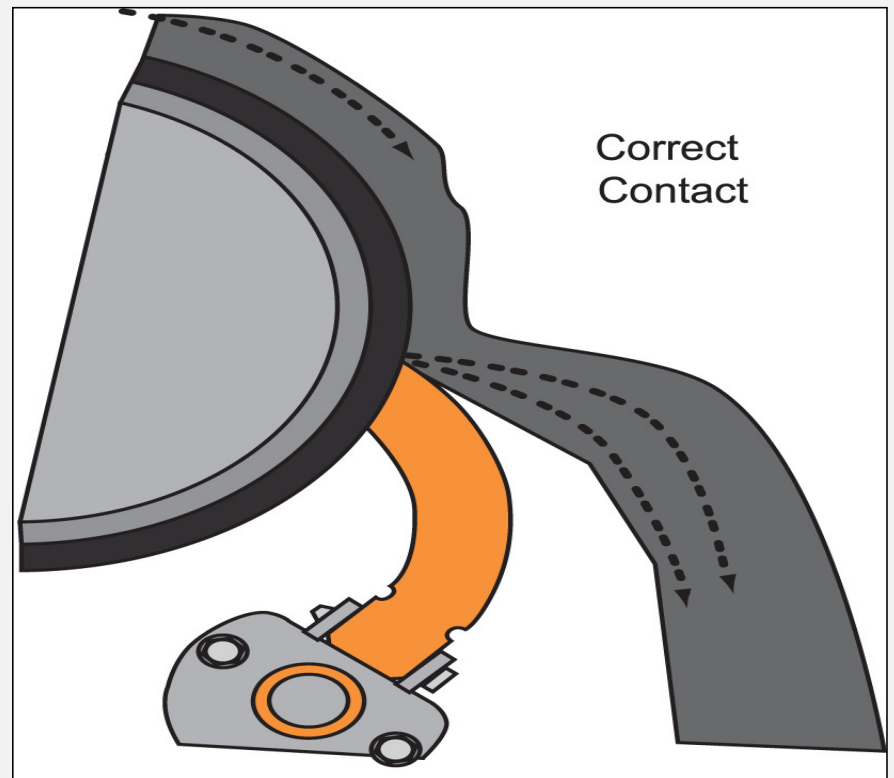
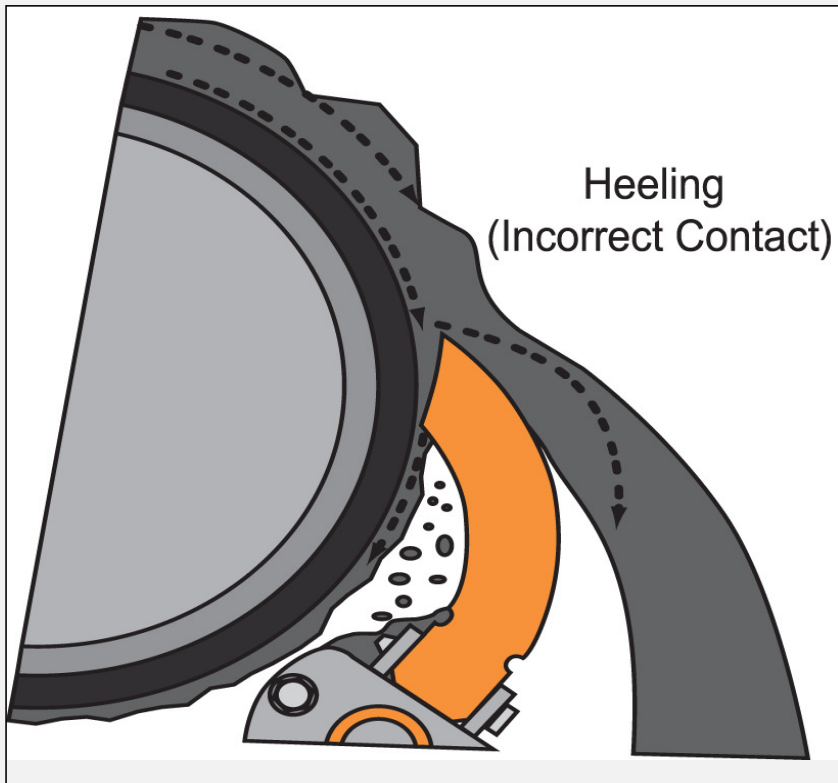


Selecting the cleaner

1. What's the material
2. Diameter of head pulley
3. Belt Speed
4. Primary cleaner width



Primary installation



Secondary installation



- Install secondary cleaners about 1" off the pulley
- Helps with splice
- Doesn't pinch belt



Other belt cleaner considerations

- Belt Condition
- Maintenance
- Splice



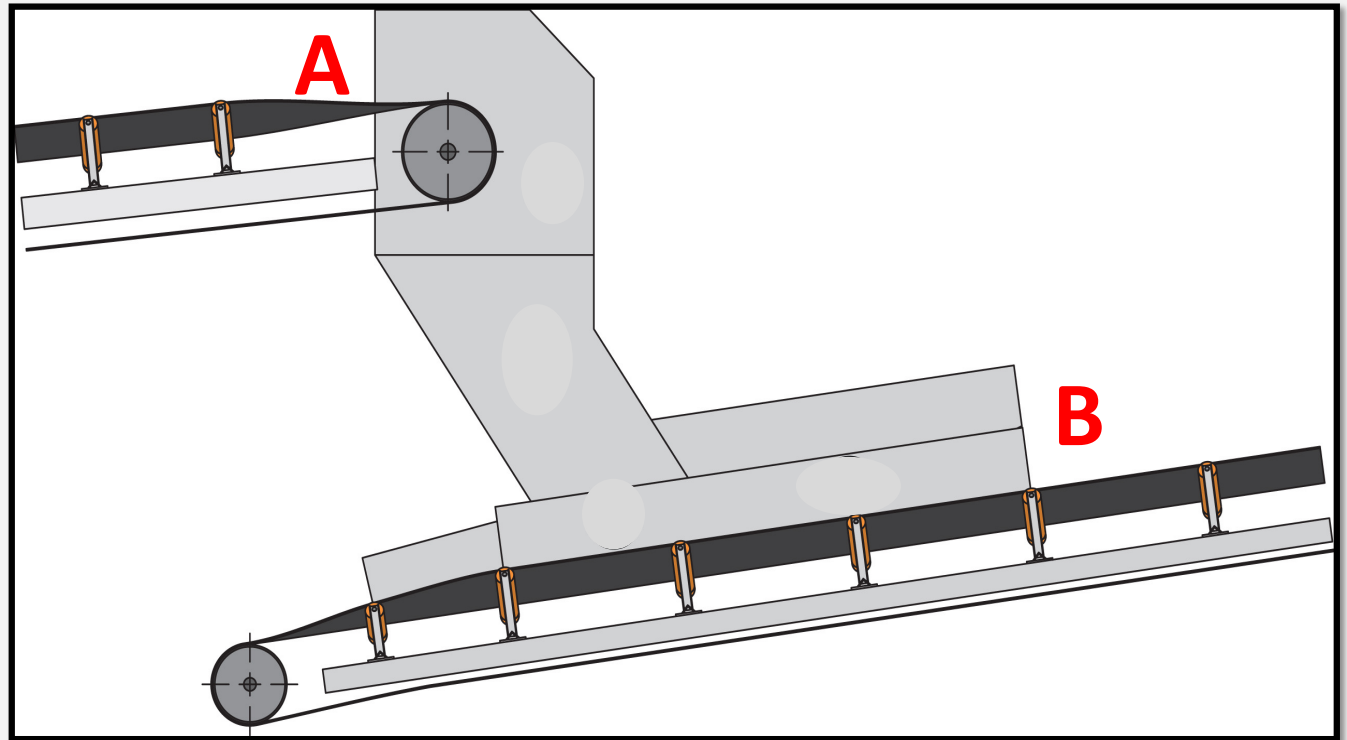
Reducing dust and spillage

Dust and Spillage control at

loadzone

Containment

- At B the air is slowed to less than 200 fpm
- No air escapes before point B



Steps of containment



1. Proper Belt Support
2. Wearliner
3. Skirting
4. Tail Sealing
5. Slow air velocities

Slowing air velocity

Curtains / Chute Enlargement / Dust Bags



Tracking conveyor belts

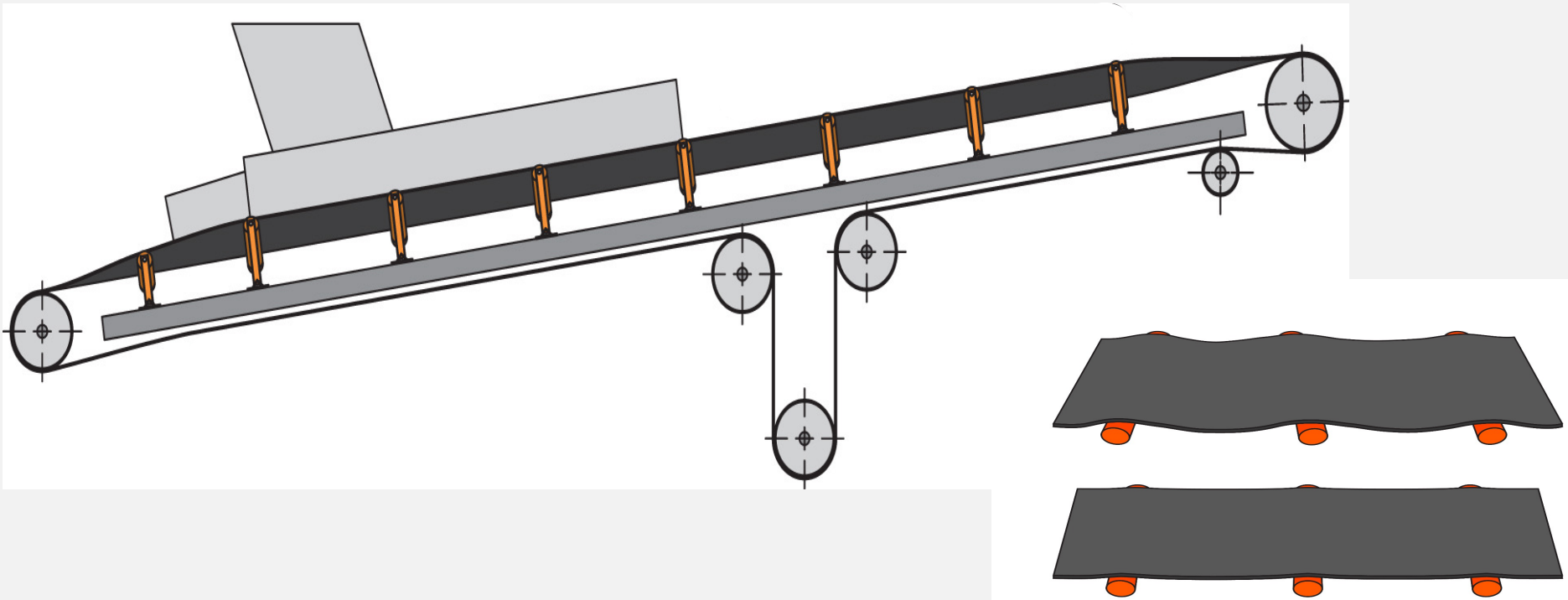
Minimize Operating conditions



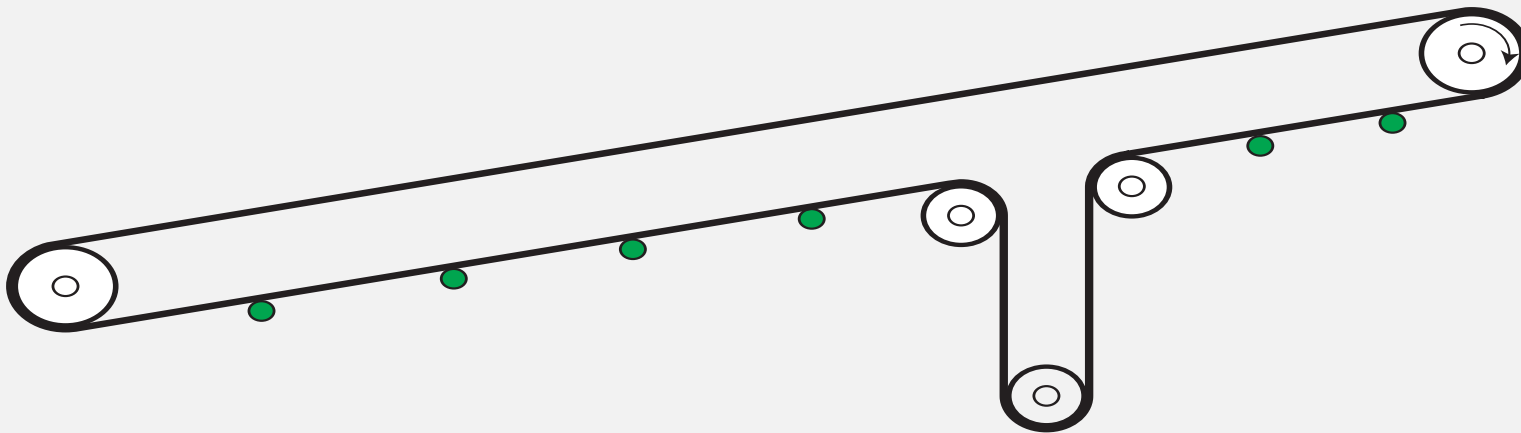
Minimize Equipment Conditions



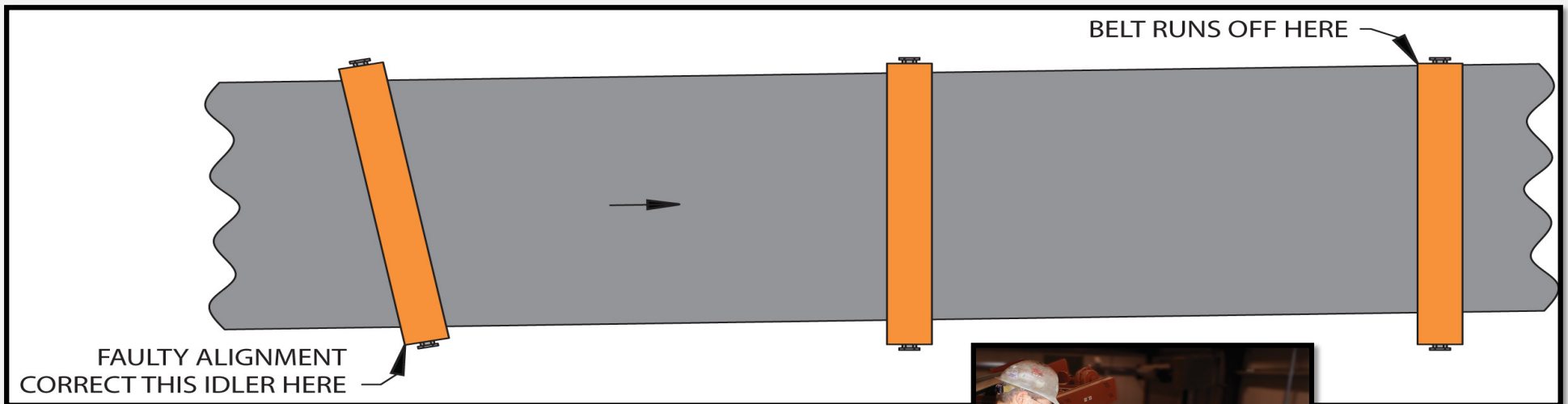
Low tension rollers and tracking



Adjustments to rollers



Adjustment to rollers



A wide-angle photograph of a large industrial facility, likely a manufacturing plant. The scene is filled with complex machinery, including large orange overhead cranes and conveyor systems. The floor is concrete, and there are various pipes and structural elements visible. In the background, several workers wearing hard hats are visible, engaged in tasks. The lighting is bright, coming from large windows or skylights. The overall atmosphere is one of a busy, large-scale industrial environment.

Shortcomings in execution

Why this might fail

Expertise
Funding
Manpower
Complacency



Before we end



LET'S WRAP IT UP

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