



Controlling Carryback: More Than Just Belt Cleaners

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**CLEAN SAFE PRODUCTIVE
BULK MATERIAL HANDLING**



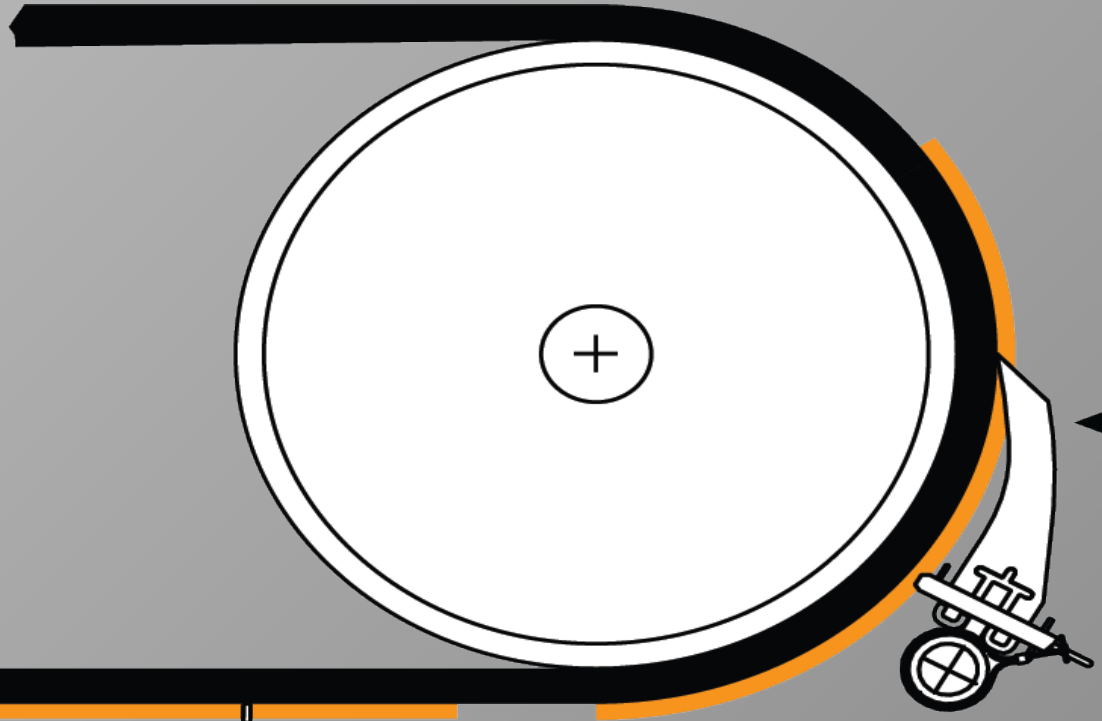
What we'll cover



1. Belt cleaner performance expectation
2. Critical installation and selection guidance
3. How splices and belt affect carryback



Belt Cleaner Expectations



Primary

- 50%
- Urethane
- Peeling/Aggressive
- $> 90^\circ$

Secondary

- 40%
- Tungsten Carbide
- Scraping/Non-aggressive
- $< 90^\circ$ or $= 90^\circ$

Improved Metal Primary Cleaners



Delivers tip of blade to belt at 90 without shelf



When belt cleaners won't meet expectations



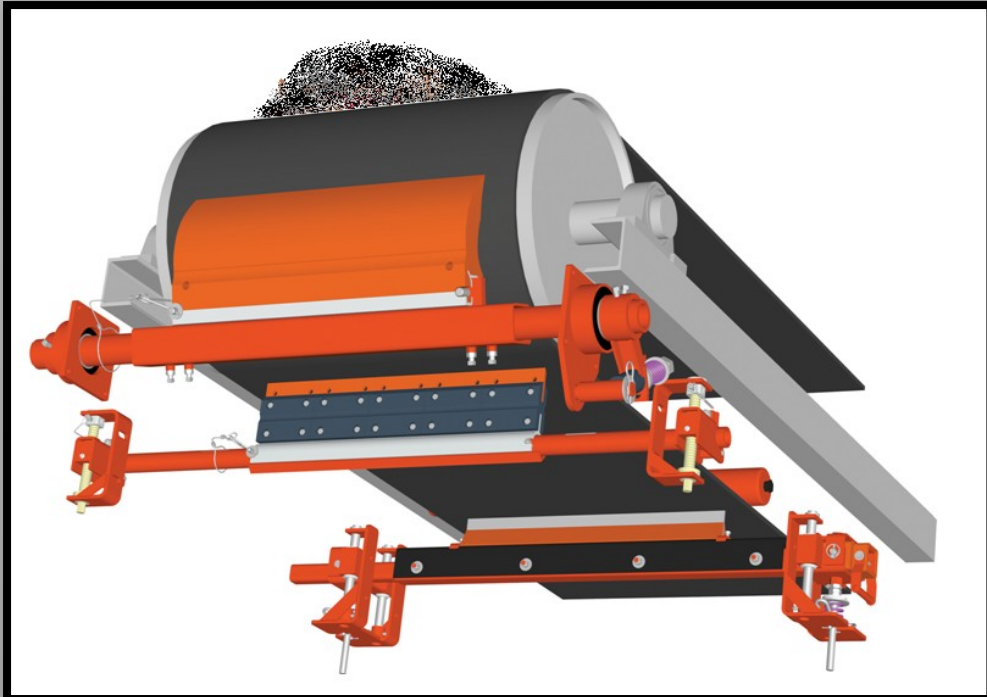
- Improper or Lack of Maintenance
- Interference of Splice
- Belt has surface damage
- Installation errors
- Only using urethane
- Incorrect cleaner selection



Belt Cleaner Selection



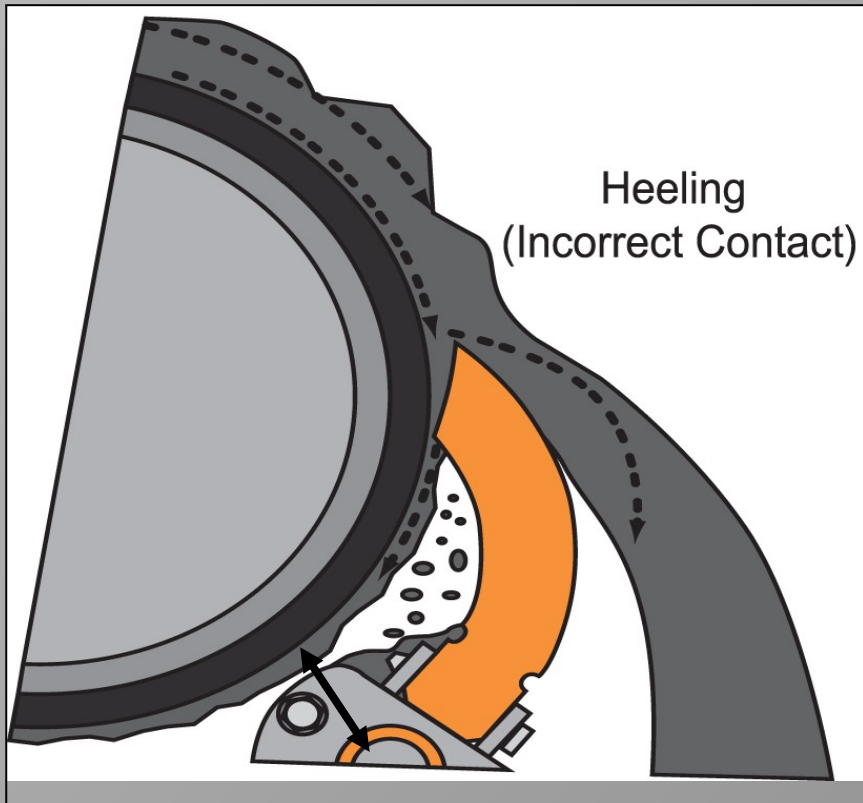
1. What's the material
2. Diameter of head pulley
3. Belt Speed
4. Primary cleaner width



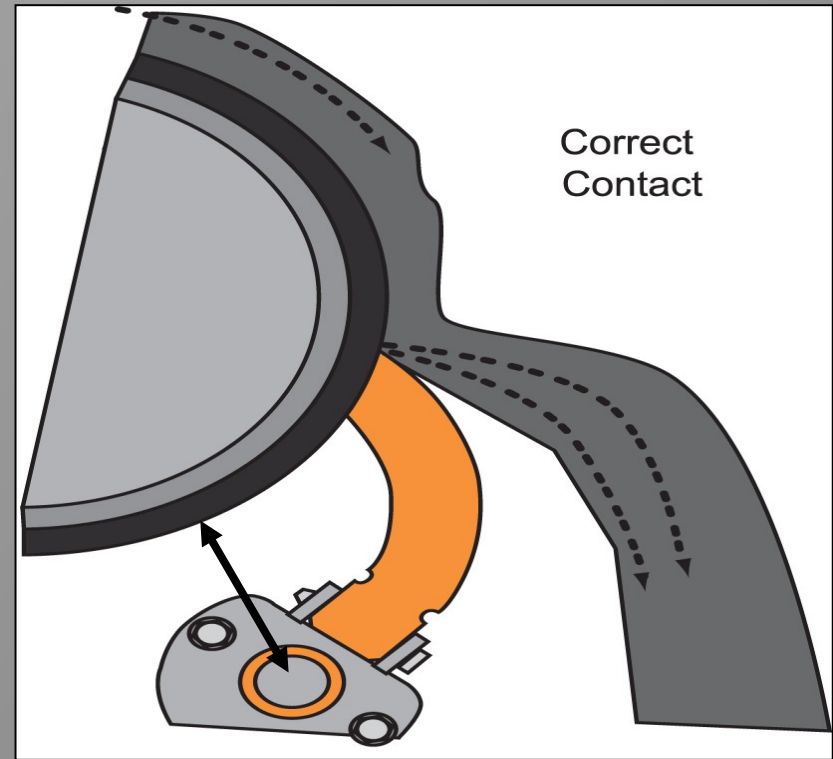
Primary cleaner installation



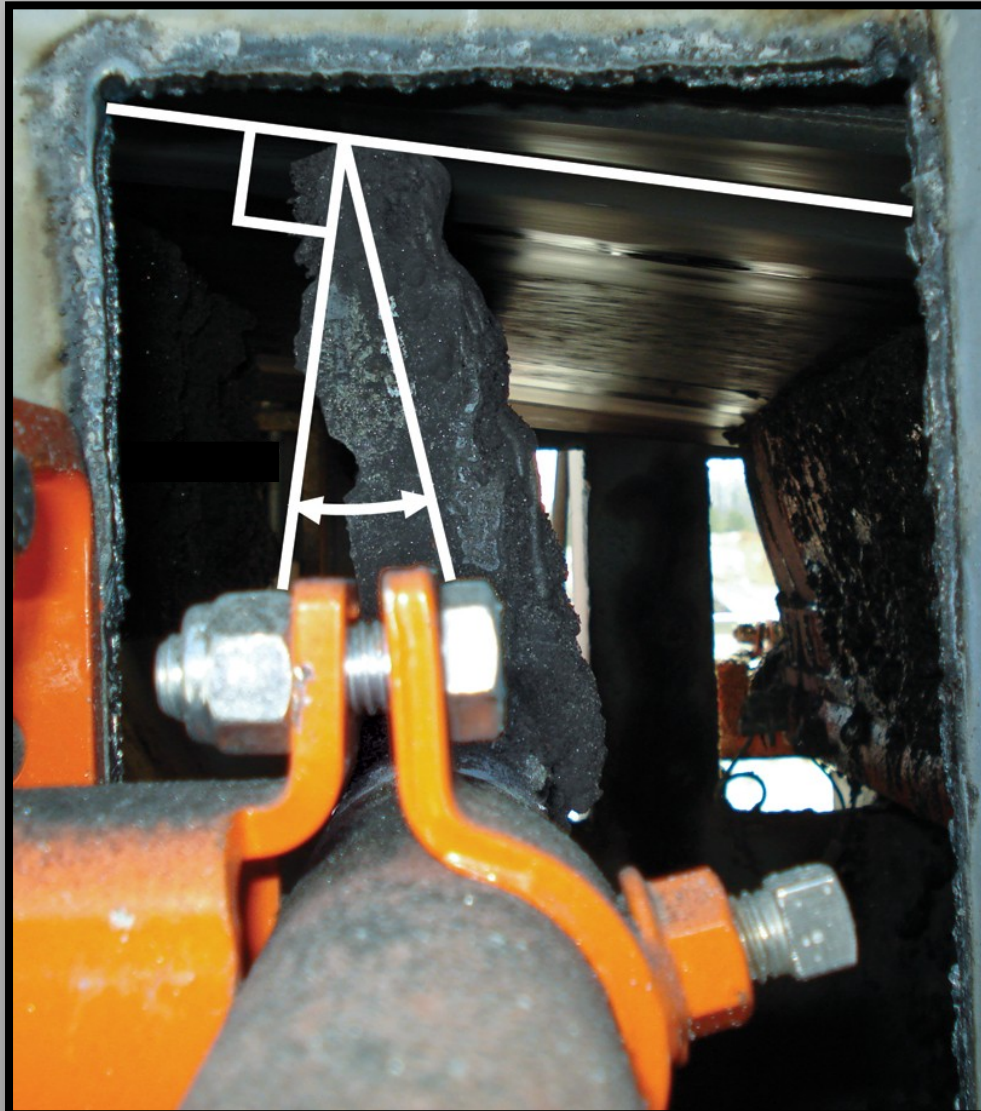
Too close



Perfect



Secondary cleaner installation



- Don't "recline" secondary cleaners too far
- Can be less than 90° , but shouldn't be less than 75°

Secondary cleaner installation

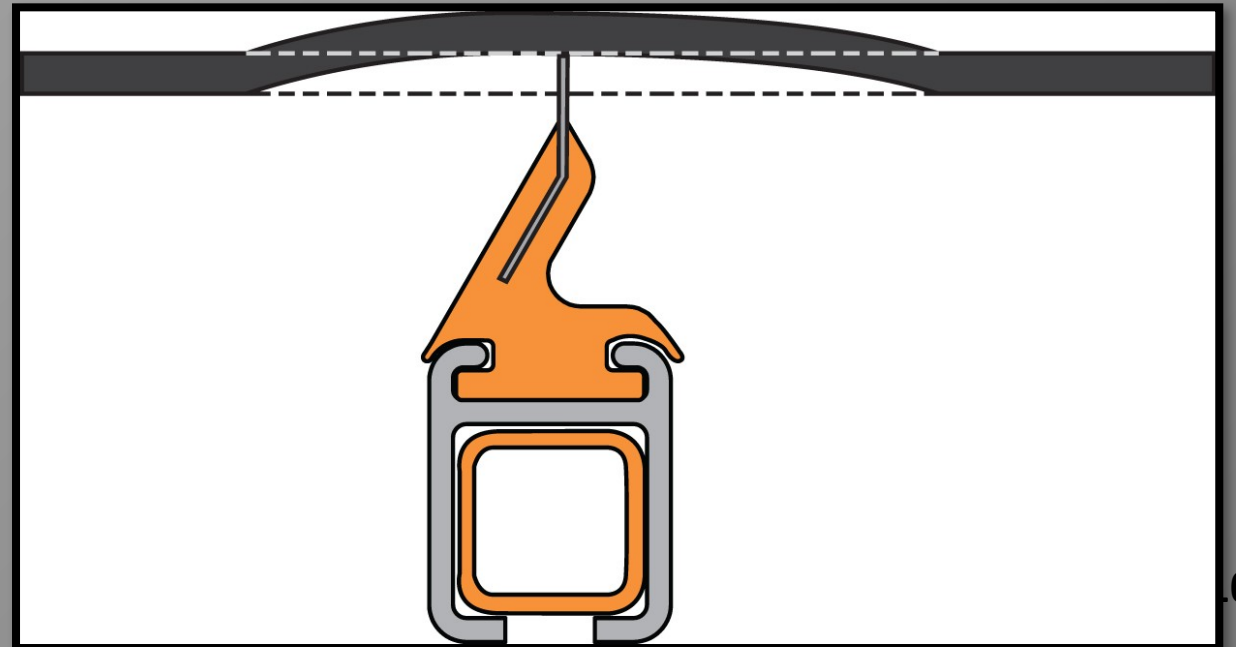


- Install secondary cleaners about 25mm off the pulley
- Helps with splice
- Doesn't pinch belt

Secondary cleaner installation



Secondary cleaners need some resistance. Install “hold down” roll after or before secondary cleaners.

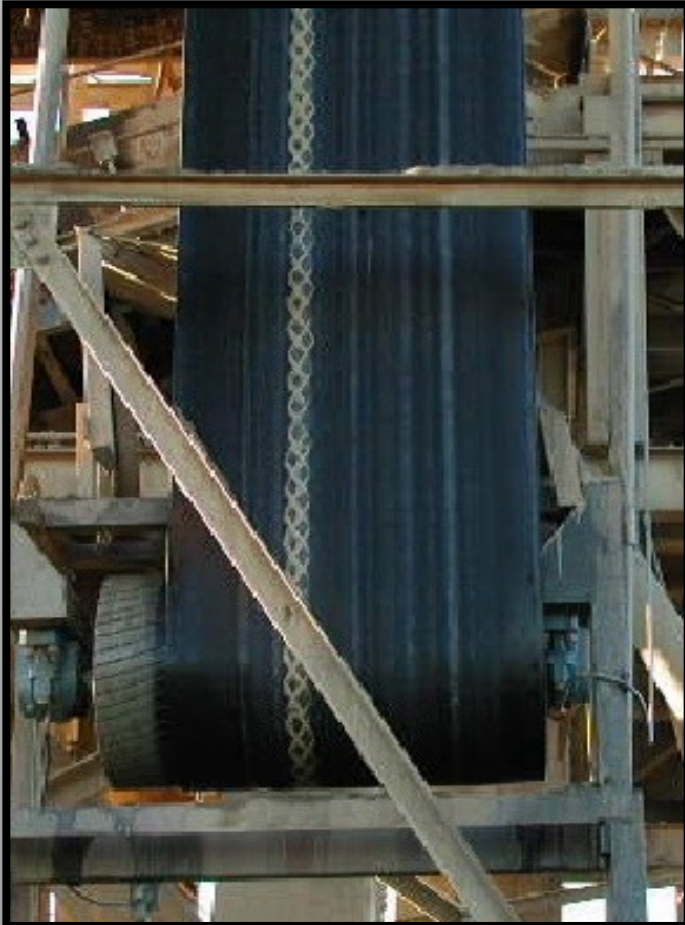


How splices and belt affect carryback



Belts that have surface damage won't come as clean.

Entrapment Damage



Impingement Damage



Heat Damage



How splices and belt affect carryback



Belt markings affect cleaner performance

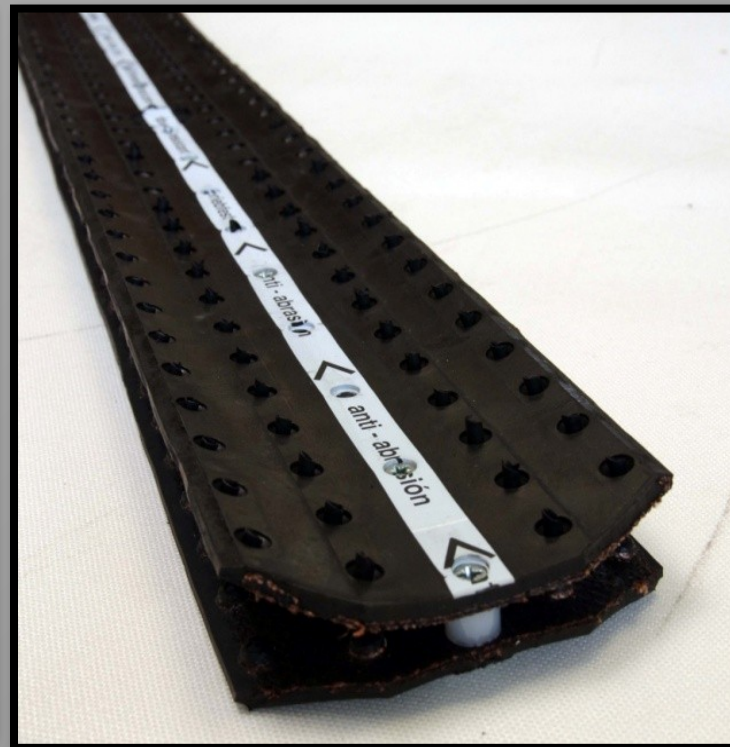
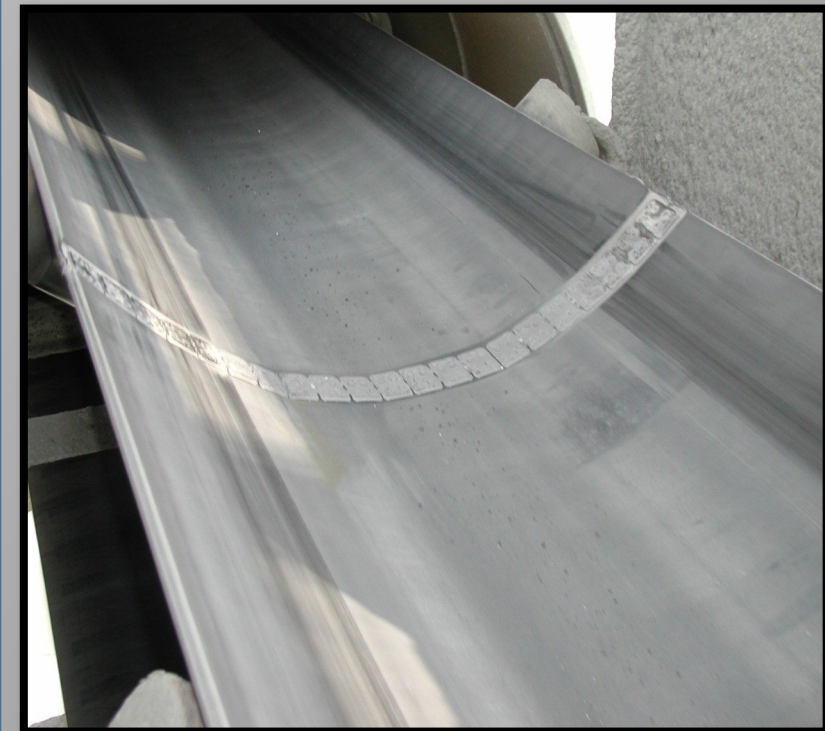
How splices and belt affect carryback



Skived

Super Screw

Vulcanized



How splices and belt affect carryback

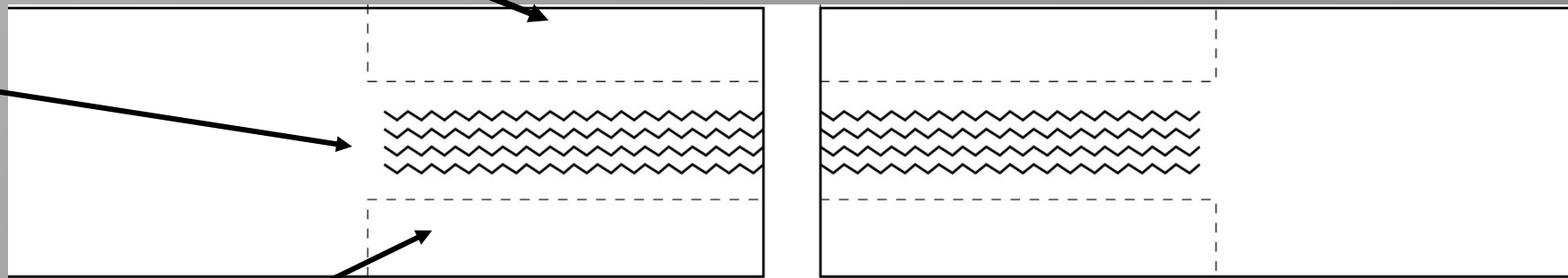


Skiving removes top cover so clip is flush with belt surface

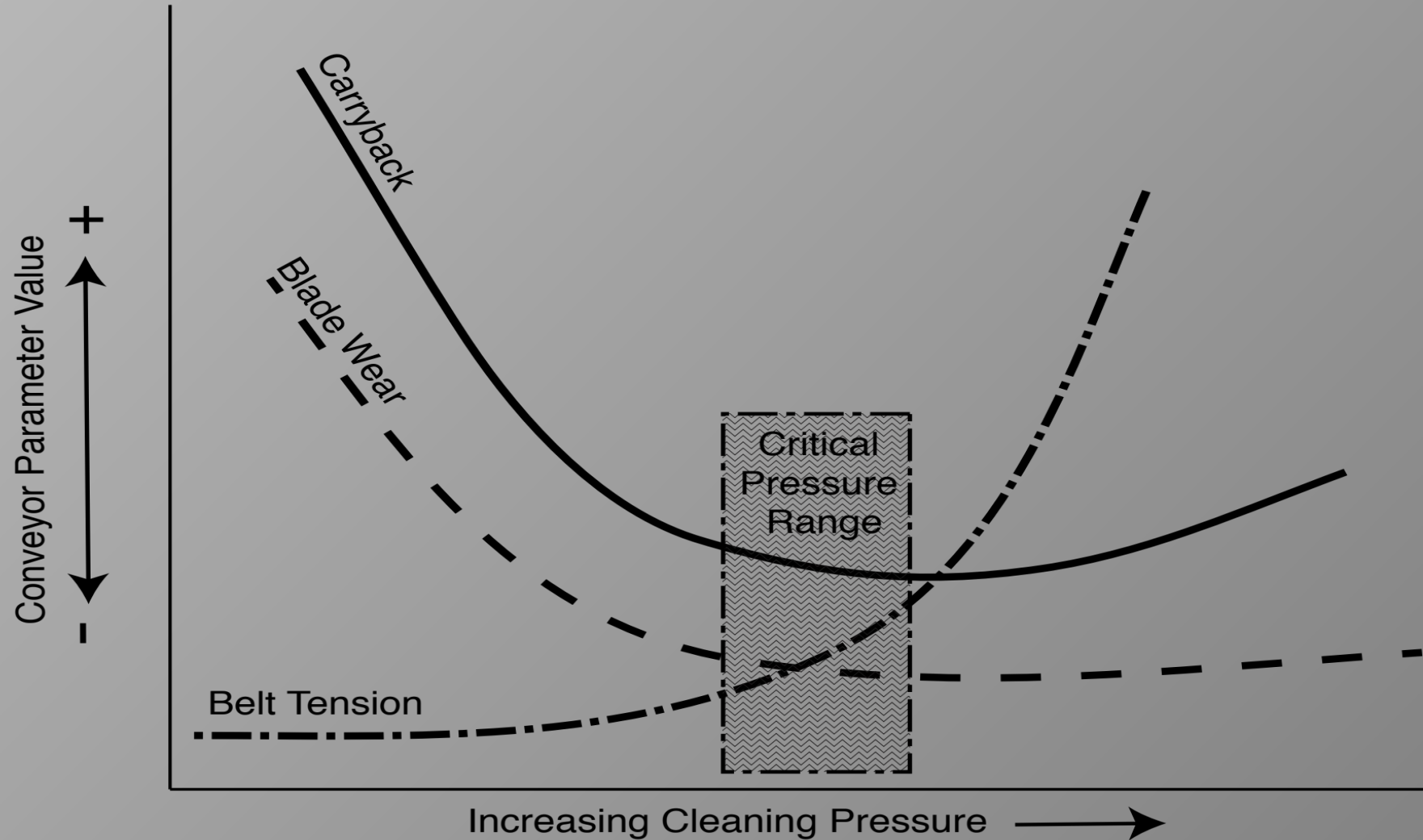
Top cover

Carcass

Bottom Cover



Belt Cleaner Maintenance



Before we end



Remember...

1. Proper belt cleaning could get 90% of carryback eliminated.
2. Installation, selection, and maintenance will affect performance.
3. Belt surface and splice make a difference.



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