Belting Best Practices

Ensure your bucket elevator and conveyors are:
1) Properly Belted
2) Stored Correctly
3) Properly installed, trained and maintained

Properly Belted
Calculate Tension Required - PIW
Minuteman Tension Calculator
Ensure belt has proper rubber compound for application
Grain requires High Oil Resistance, Static to OSHA standards
and Fire to MSHA standards

Stored Correctly
If possible, store in cool dry building away from sunlight
Rubber side down in factory packaging
If stored for long period of time, rotate 90 degrees every 6 months

Properly Installed, Trained and Maintained

Bucket elevator
Best practices indicate not exceeding bucket manufacturers’
bolt torque specs
Belts without back covers have lost their static
conductivity
Over torqueing of bolts can exacerbate pulley cover
delamination
When installing new belt ensure head pulley lagging isn’t worn.
New belt = new lagging
Let belt hang for 24 hours with buckets to remove initial stretch
Bucket elevator and conveyor

Belt tension

Only tension a belt so that it doesn’t slip
Tighter is NOT better
If blister has started in middle of bottom cover
Belt is too tight
Herringbone Wing Tail pulley has been shown to alleviate this problem

If bulges/blisters are starting at idler junction area
Belt doesn’t have sufficient cross rigidity to span idler junction area. Stronger belt or a belt with more plies may be required. Idler Junction failure could also be transition distance issue. Transition distance is distance from last full troughed idler to head or tail pulley. General Rule of thumb is that transitions should be 2 x belt width.

Vulcanized Splices

Square Splice
Ensure manufacturer and compound of splice kit matches that of the belt
Ensure the splice kit is within parameters of expiration date

Mechanical Splice

Square splice
Ensure non-sparking AB or Everdur fasteners are used in any splice in grain application


Schedule your free belting assessment. Call Angela Field, Applied Power Products at 651-253-3682. We will look at your belts and provide a written report at no charge.