

Installing Bias Splices Reduces Noise for Package Handler

Industry

Package and Parts Handling

Application

Transporting packages

Product

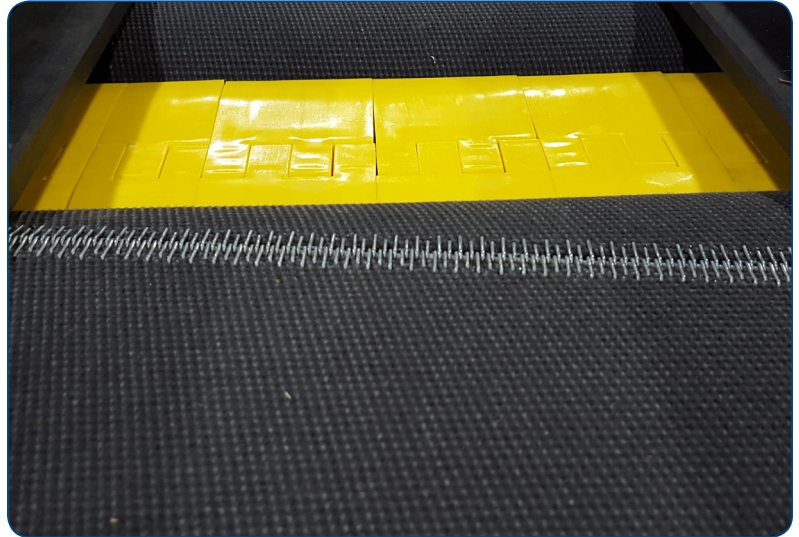
Clipper® Wire Hooks

Objective

Reduce noise in facility

Conveyor Detail

Solid woven PVC belt



Problem:

With so many conveyors running in a large package sortation facility, the noise from fasteners going over the rollers made communication difficult. In many facilities, the employees learn to tolerate the noise, but a major parcel handling operation was looking to significantly minimize the distraction in the plant.

Solution:

Mechanical belt fasteners are traditionally installed into belt ends cut at a 90-degree angle to the belt centerline. Instead, it was suggested that the maintenance team install the Clipper® Wire Hooks they were using on a "bias," which calls for both belt ends to be cut at a matching angle, with a recommended maximum of 7 degrees.

Result:

When installed properly, the bias splice had similar strength to a 90-degree installed splice, but showed a noticeable reduction in noise generation when the mechanical splice interfaced with pulleys, transfer plates, or other fixed conveyor structure located along the belt path. This is because not all the fasteners are going across the conveyor components at the same time. While the noise reduction may seem trivial for one conveyor, installing bias splices across the facility reduced noise substantially.