

NIBA-The Belting Association 6737 W. Washington St. #1300 Milwaukee, WI 53214 Ph: 414-389-8606 www.niba.org

Technical Article Content Pulled from the NIBA Belt Line Newsletter

The Quicker Splicer Upper

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In the world of conveyor belt, there is light duty, medium duty, and heavy duty. The delineation between these is relatively clear, and is generally based upon working tension of the belts. When you talk about light duty belts, the first thing everyone pictures is thin, lightweight, food belts, or black PVC package handling types. There is however, another small group that falls into this category that is mainly overlooked.

Nylon Core

In days gone by, when high speed (500 FPM plus) conveying applications came up, most people turned to nylon core belts. These products were designed for higher speed applications, and the combination of rubber and fabric covers met most requirements. While these products were primarily for flat power transmission applications, they adapted well for the conveying needs. The primary down side to these products was the spicing method used and the time that it took to do them. Where heavier rubber covers were used, two different cements were needed, and the splices had to be aligned perfectly so that no contamination of either adhesive would occur. If the laps did not match up exactly, or the press was not hot enough for the proper amount of time, splice failure would occur.

Quick Splice Options

A better product was needed to answer the demand, and the supply side responded with what is now known as the quick splice products. By eliminating the nylon core tensile member, and replacing it with a thermoplastic material that could be fused together similar to more common lightweight conveyer belts, the time it took to splice these belts was greatly reduced, and the need to skive and use adhesives was eliminated. Splices now were done with fingers or simply butted together, and fused in special high temp presses made for these types. Cooling pliers were also introduced to speed up the cool down cycle, further reducing the amount of time for a splice to be completed and the belt to be put into operation. In addition, shipping of the adhesives ceased to be a problem, and monitoring of those for expiration dates was no longer necessary.

The Place to Go

It started with very thin belts for the print and paper industry. These were high in volume, time consuming to join, and often difficult to reach with the presses for nylon core belts. The new system made it easier to train plant personnel to do the splicing, allowed the splices to be more consistent and repeatable, and significantly reduced the amount of downtime on the equipment. Over the past few years, the breadth of the product offering expanded to heavier covers and stronger belts, so more applications could use this option. You will now find these products in use in the folding carton and box industries, textiles, bookbinding, and numerous packaging applications. Additional cover materials have also been added to expand the application range of these products for the future. New tools for finger punching and splicing have also been added to allow for wider belts and



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even easier preparation.

The Quick Fix

When finding those applications for conveying that run at high speed, may run on common shafts, have minimal take up, and rapid replacement is required, quick splice products can be the answer you need to satisfy your customer. Don't overlook the Quick way to get them back in production.