

Airport's Baggage Scanning System Experiences Fewer Delays with Flexco Narrow Gap Transfer Plate

Industry

Airport

Application

X-ray conveyor/baggage inspection

Product

Flexco Narrow Gap
Segmented Transfer Plate

Objective

- Minimize product choke points

Conveyor Detail

Smooth-top belting



Problem:

A major airport was experiencing problems with bags or their contents getting trapped in transfer points between conveyors. Of particular importance were the transfer points between the conveyor systems before and after the X-ray scanning equipment. Some of these transfer points are hidden from plain sight for safety reasons and to protect the health of the officers performing the screening operation. The servicing of this equipment is often done by a certified equipment technician who is not always readily available. By eliminating the risk of a bag or its contents getting captured between conveyors, the use of bins is a common practice; however in massive airport operations where efficiency and effectiveness are top of mind, passengers often place their belongings directly on the conveyor belt. Items considered high risk for an X-Ray scanning operation include work boots with long shoe laces, bag straps that have little or no rigidity, ID tag lanyards, and knitting items (yarn in particular). The use of bins may help the process, but they do not guarantee the elimination of the problem. Many bag straps fall off the bin immediately after the X-Ray machine curtains; the same happens with shoes and their laces. This practice was creating some havoc inside the scanning system.

Solution:

The use of a Segmented Transfer Plate was suggested in order to minimize these risks by allowing a smooth flow of baggage, with the added benefit of protecting the equipment. The Narrow Gap version of the plates was installed between these conveyors to provide smooth movement through the small gaps from 1.5" to 3" (38 mm to 75 mm) in width. During installation, a combination of paired special brackets, combined with plastic segments, lock together inside the support bar to create the span required for this application. This system is unique to X-Ray scanning equipment; the equipment tolerances and tight component packaging require solutions that can blend with the original design and be easily serviced.

Result:

Installing Narrow Gap Segmented Transfer Plates from Flexco in these areas resulted in a reduction of unscheduled downtime and increased system effectiveness. The lines may be long in security at this airport, but it certainly isn't because of the x-ray machines, which are now moving customer bags safely and smoothly with fewer stoppages.