Enidine by Design

Targeted Braking for Powered Conveyor Systems
Enidine Air Spring Application

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Product Overview

An Ohio-based manufacturer of materials handling equipment for the agriculture, food processing and baggage handling industries needed a stoppage system for one of its powered conveyor systems. The system needed to brake at certain locations, while providing consistent shock and vibration isolation. Currently, the manufacturer was utilizing small air cylinders mounted under power rollers to achieve this effect. However, the space limitations of this particular design prohibited the use of a standard air cylinder.

Product Solution

ITT Enidine Inc. replaced the air cylinders with our YI-1S3-013 Air Spring, a compact and cost-effective air spring that fit well into the confines of the space. The product features an outside diameter of 3.5 inches, a compressed height of 1.5 inches, a stroke of 2 inches and load capabilities of up to 600 lbs. Its compact size and capacity required very limited modifications to the existing conveyor designs. Because of the load carrying capability and durability of the product, it was widely accepted in all markets to which the customer supplies products.

The implementation of this product exceeded the customer's expectations, resulting in full replacement of the air cylinders. The program started out as a fix for certain applications and ended as the standard offering for conveyors that require brakes. The customer was able to keep common components for all conveyors reducing cost and increasing profitability.

Application Opportunity

For material handling manufacturers, the flexibility to offer the customer unique designs is mandatory. With the success of this application, other product lines have been introduced, including shock absorbers, which are utilized as end stops for some conveyors, and rate controls, which are sometimes used to control pneumatically powered swing-arm diverters. Conveyor manufacturers in all industries could benefit from this air spring application.