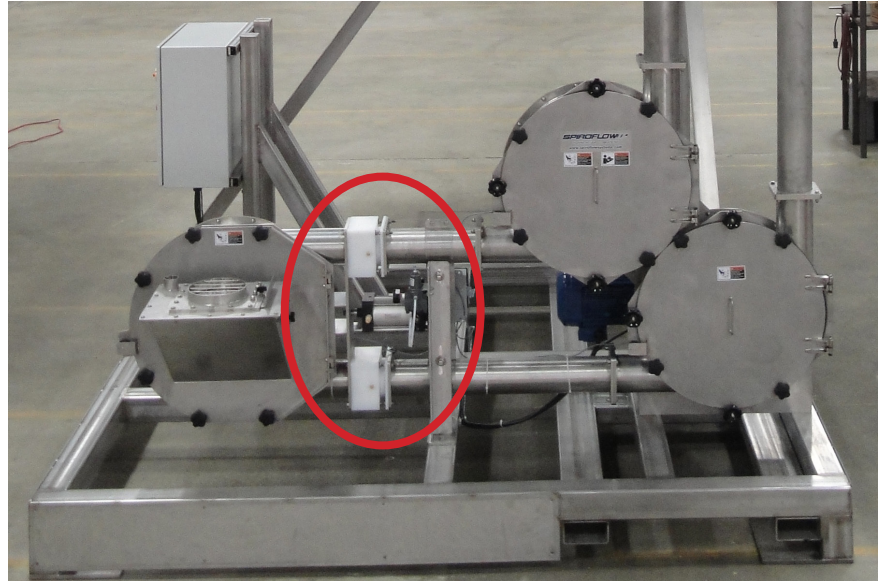


## Spiroflow's Dynamic Automatic Rope Tensioner (DART) For Aero Mechanical Conveyors Extends Rope Life

Spiroflow's Dynamic Automatic Rope Tensioner (DART) offers the ultimate in reduced maintenance and peace of mind for Aero-Mechanical Conveyors users. Aero-Mechanical Conveyors are effectively 'mechanical' pneumatic conveyors offering many advantages of vacuum conveyors but at a reduced capital cost, reduced running costs and without the hassle associated with the filtration equipment required to separate your product from the conveying air.



Until recently, the main disadvantage of Aero Mechanical Conveyors was their relatively high maintenance demands especially during the critical running in period. We have examples of well maintained Spiroflow Aero Mechanical Conveyors running for 14 years before requiring a new rope and disc assembly or any other components. Regular inspection and maintenance are not always an option because of reduced resources or the inaccessible nature of the conveyor in process. In these situations our 'DART' Automatic Rope Tensioner is an invaluable option.

### The 'DART' Dynamic Automatic Rope Tensioner Versions Offered:

#### 1. Basic Model

Clean dry air, from 0.35 to 4 bar, is used via a regulator to maintain a constant force in the conveying rope and disc assembly. The pneumatic circuit maintains the force in the event of interruption to the air supply. Alternatively an optional pressure switch provides a signal which can be used to shut down the conveyor until the air supply is restored.

#### 2. Air Purged Seals

This option is essential where there is a likelihood of product becoming trapped in the sliding seals and compromising the effectiveness of the tensioning apparatus.

#### 3. Basic Control Panel

This model offers the benefit of sensors on the pneumatic cylinder that tensions the rope. These sensors are set to warn that inspection of the rope condition is required and to give a warning when maximum rope stretch has been reached and that replacement is essential. This panel can be offered complete with a Motor Starter for the conveyor.

#### 4. Control Panel and Tension Feedback System

For the ultimate in peace of mind, this model uses a load-cell system that actually checks that the tension is at the force determined for the diameter and length of the conveyor. It maintains it at that level by constantly adjusting the air supply to accommodate changing conditions. This is especially desirable where the product or the ambient air is subject to significant changes in temperature.

This product is covered by one or more of the following: US Patent Nos. 7,798,313 UK Patent Nos. 1245509