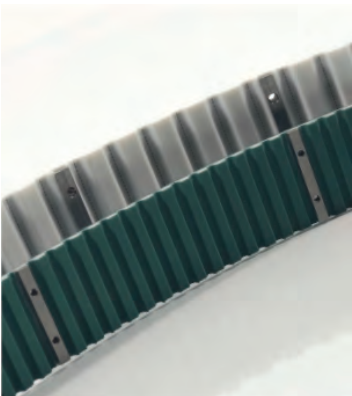
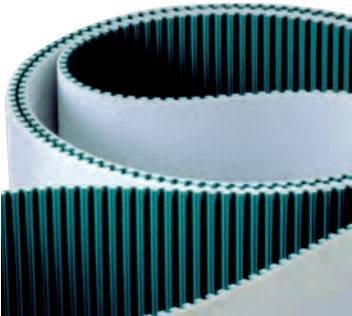


**INDUSTRY**  
TOBACCO

**APPLICATION**  
TOBACCO PACKAGING  
MACHINERY

**PRODUCT**  
MEGAFLEX



## SITUATION/APPLICATION

The tobacco industry faces ever increasing rules and regulations regarding the compatibility of materials that are permitted to come into contact with tobacco products. The list of banned materials increases day by day and is a major consideration in the design of tobacco packaging machinery.

Tobacco packaging machinery is required to be precise and operate at high speeds while assuring that the components used in the process adhere to the regulatory guidelines.

## THE PROBLEM

Tobacco producers must comply with these regulations while continuing to increase productivity and produce a wide variety of products while maintaining production flexibility and the ability to make rapid adjustments on production machinery.

A manufacturer contacted Megadyne requesting design advice for their conveyor drive on a cigarette packaging machine. They needed a long synchronous belt with consistent length that did not contain any of the banned materials. It had to deliver good performance at high speeds with low elongation and high precision positioning. It also needed the flexibility to convey different types and sizes of packages.

## THE SOLUTION

Megadyne application engineers suggested truly endless polyurethane Megaflex belts with FDA compound. This material satisfied the banned materials mandate while the no-splice Megaflex belt construction with thermoplastic polyurethane and continuous spiral steel cords is especially suited for high load/high speed conveying. The addition of nylon fabric on the teeth enhances the running properties and reduces noise. The long length requirement was easily satisfied as Megaflex belts are available in lengths from 1.5 up to 22.7 meters (4.9 to 74.4 feet).

To address the need for conveying different types and sizes of packages, Megadyne FTS (False Teeth – Stainless) mechanical teeth were used for attaching profiles to the belt. These profiles are used for holding the product as it moves along the conveyor belt and give the system a very strong, easy attachment option. FTS offers the flexibility of adjustment and positioning to accommodate all the various types of packaging used in their operations. These mechanical attachments provide easy interchangeability and the flexibility for dimensional re-spacing in this packaging application where timing and positioning is essential.

Mechanical teeth are added to the belt to deliver the spacing requirements needed in an application. The mechanical tooth has a housing that extends up and through the belt. The housing is threaded, thus allowing a profile to be bolted on for easy installation and removal. Additionally, FTS provides the added benefit of cost savings making it easy to replace broken profiles without the need to replace the belt.

## THE RESULT

The customer now enjoys a drive system that not only meets the regulatory requirements, but also delivers precise movement at high speed with the flexibility to easily change the belt configuration to accommodate any type or size of package.

