Food products come in a wide variety of shapes, sizes and densities. They can be liquids, solids or even a mix of both. Food filling machines must be versatile in order to handle all the different container and box products they may be required to process. These machines place food products into cartons that are conveyed in the different steps of the packaging process. The belts must have high positional placement precision in order to place the carton in the correct filling position. Food dispensing heads on these machines must be accurate and smooth in their positioning while moving at high speeds.

The Problem
A manufacturer of food filling machines contacted Megadyne requesting design assistance for a new unit needing refinement in the area of precision movement. They were also interested in a way to increase the flexibility of the belt used on their packaging line. Additionally, the customer was having issues with welded-on cleats previously used due to breakage.

The Solution
After a thorough analysis by the Megadyne OEM application engineer, a truly endless polyurethane belt, Megaflex AT20 with stainless cords and false teeth, proved to be the solution to the customers’ problem. The truly endless (no splice) construction of Megaflex provided the combination of high strength and long length required to meet the parameters of this conveying application. Its stainless steel cord tensile members also contributed to extended life by avoiding corrosion and degradation. The AT20 tooth profile with reduced backlash contributed to high positional accuracy required along with the added benefit of high tooth shear resistance. Megadyne’s FTS technology was supplied giving the system a very strong, easy mechanical attachment option for placement of cleats, profiles and assorted shapes. FTS offers the flexibility of the adjustment for all of the types of food containers used in the operation.

The Result
As a leading manufacturer of and fabricator of product handling products, Megadyne was able to offer a customized, multi-functional solution from our line of standard products that addressed the customer requirements of high positional accuracy and the flexibility to move a wide variety of packaging containers. Megadyne not only supplies quality belts and components, we problem solve and provide world-class customer service!