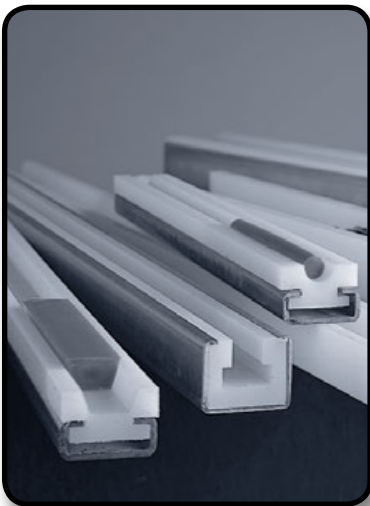


## Circuit Board Assembly Machine

**The Challenge:** The existing part could not stay flat. The warped part damaged leads on the electronic components, which caused boards to be rejected. And static build-up on the part also created rejects.

**The Slideways Solution:** Slideways worked closely with the customer to determine how the existing design was failing. The customer wanted to stay with UHMW for its no-maintenance, long-life properties. Using our knowledge of the application and properties of UHMW, we designed a new part comprised of an aluminum base and an Anti-Static UHMW chain guide. The base is mechanically fastened to the chain guide, giving the UHMW the stability it needs to allow proper setting of each electronic component in the grippers and final installation in the circuit board.



## Belt Guides

**The Challenge:** The anti-static acetal belt guide being used in a glass manufacturing plant was contaminating the product.

**The Slideways Solution:** Slideways designed a UHMW guide that could be made in 20' lengths which not only solved the contamination problem, it reduced installation time, increased guide longevity, reduced cost, and extended belt life.



## ABS Tilt Tray Application

**The Challenge:** A central distribution center (CDC) for a nationwide retailer was having trouble with its conveyer. Tilt trays would occasionally fail to return to a horizontal position after dumping their load. When the conveyer attempted to place a package on the vertical tray it would jam the machine, typically damaging between one to ten trays per occurrence! The customer was very concerned about the high cost of replacement plywood tilt trays from their conveyer OEM.

**The Slideways Solution:** Cost was the primary driver for this project, so we worked with our distributor and the CDC to develop a lower cost tray. ABS plastic was selected for the trays because it is durable, rigid, relatively easy to bend when heated, and less expensive than plywood. A prototype made of  $\frac{3}{8}$ " thick ABS had the right combination of rigidity, bendability, ease of assembly, and low price. Slideways has manufactured several lots of tilt trays for the customer. These ABS tilt trays have considerably lowered maintenance costs for the customer.

## Poultry

Processing speeds in chicken slaughterhouses have increased dramatically over the last several years. Live chickens go in on one end and frozen chickens come out the other end ready to be cooked. Standard and custom plastic parts can be found in many areas of poultry processing plants. Chain guides are used in transporting the birds through many operations, such as deboning guides and guide blocks for wing cutters, which ensure a perfect cut each time and save time in processing labor. Plastic components are lighter, have better wear characteristics, and are FDA compliant.



*A poultry processing plant*

## Plastic Replaces Stainless Steel in Food Processing Applications

Plastic components offer many benefits to food processing applications and is often selected as a replacement material for stainless steel.

**Pump Rotors in Non-packaging Applications:** Ertalyte® components can be used to replace ones made from stainless steel for fluid handling in food and beverage plants. Ertalyte has the required mechanical strength and stiffness, has better wear resistance, and costs less than stainless steel.

**Tomato Sauce Canning:** A customer of ours used heavy stainless steel turnstiles that required an expensive lubrication system, which frequently contaminated the tomato sauce cans with grease. The lubrication system needed daily maintenance due to its constant operating temperature of 210°. These turnstiles were replaced with ones made from Nylatron GSM®, which is both strong and stable at this temperature. Eliminating the lubrication system and the lighter weight of the plastic reduced the drive system and generated significant cost savings. In addition, production increased due to reduced down time.



*SlideRail applications in food processing*



*Common plastic applications in food processing*