

THIN-WALLED CONTAINER DAMAGE

The customer's shelf-ready aluminum containers developed leaks due to small surface markings caused by filler change parts, forcing them to reduce machine speed from 1600 CPM to 800 CPM to avoid damage during filling the aluminum containers, which is not ideal since throughput would be 50% less than target production rate.

Customer at a Glance

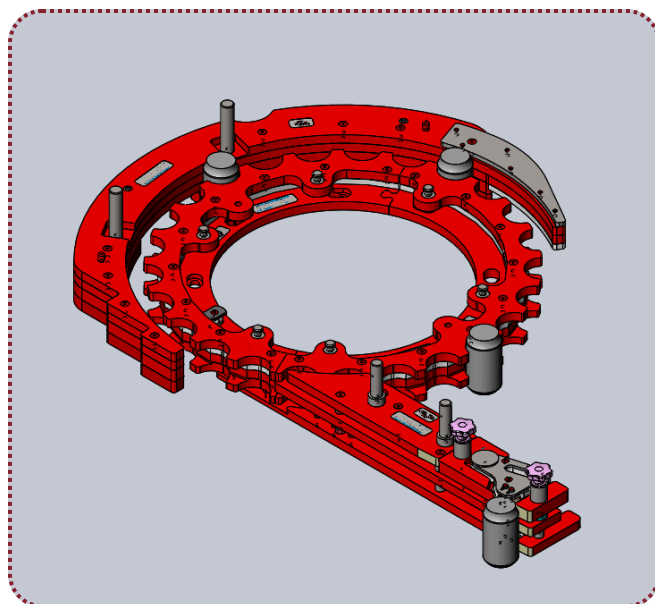
The Customer is a large multi-national manufacturer of consumer beverage products. They introduced 4 new container sizes, which are light weight, thin walled, aluminum containers without the crown applied, which results in a thin walled container.

Septimatech Solution

Septimatech's analysis of change parts supplied by others revealed the need for a unique design for the infeed star and guide.

- An innovative design for the machine bottle stop was also required during the analysis process.

The redesigns Septimatech proposed through collaboration with the Customer were based on insights gained from high-speed camera imaging and CAD simulation studies. A removeable tiered change part was implemented.



Results

The redesign of the container handling parts eliminated the product leaks, increased the visual appearance of the container with no markings, and machine filling speeds were increased from 800/ 1000 CPM to 1500/1600 CPM, while maintaining 5-minute changeovers which don't require adjustments.

100% Increase in Line Speed
Container Damage Eliminated