

ReThink. ReEngineer. RESULTS.

SAY Plastics Brings Sweet Solution to World's #1 Confectioner

CUSTOMER SPOTLIGHT... For this project, SAY Plastics worked with the #1 confectionary company in the world. As the leading manufacturer of a variety of chocolate, chewing gum, mints and fruity confections, they employ over 34,000 employees globally and distribute their world-famous brands in over 180 countries.

BACKGROUND

For years, the confectioner used a custom-thermoformed tub which served as a holding container on their production floor for two top-selling candies. The tubs sit on a wheeled metal frame and each one is filled with 1,000 lbs. of candy. The tubs are then lifted from the frame and transported by an automated system which dumps the candy into a machine for further processing.

For candy #1, the tubs were manufactured from a white FDA Food Grade Full Syntactic Plug Assist entering the mold. ABS material with a 1/2" starting thickness. Tubs for candy #2 were manufactured from a light oak-color FDA-approved material, also with a 1/2" starting thickness. Because of the material and an over 31" depth of draw, the tubs are challenging to produce. And because of their functionality, the thickness and dimensional consistency of the tubs are critical for optimal performance.

THE CHALLENGE

The client's original tub supplier used a very labor-intensive manufacturing process to manufacture the part. When the supplier was sold to another company, the new supplier used



Full Syntactic Plug Assist entering the mold.

different equipment and thermoforming methods to produce the tubs. This required a new tool investment by the client.

After several trials, the supplier was unable to match the quality and performance standards of the original tub. The tubs did not have the strength to carry the load of the candy. The rolled flange around the periphery of the tub carries the load when the tub is lifted during processing. Without the proper material thickness, the tub could pull away from the lifting device.

With their inventory of usable tubs diminishing, the client reached out to SAY Plastics for a solution. The tooling and process design created by SAY Plastics engineering, which utilizes the innovative

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SAYtooling System, resulted in the development of a new tub that met the strength requirements and eliminated the unacceptable product.

THE PLAN

Louis Smith, President of SAY Plastics, visited the confectioner's facility to meet with staff and see first-hand the challenges they were having with the failed tubs. After submitting a process and quality assessment, the client put their trust in SAY Plastics to produce the new tubs.

Drawing on our extensive thermoforming engineering expertise and collaboration with the client, SAY Plastics was successful at producing a tub that worked universally in applications for both candy products and maintained the strongest rolled flange (the area where the mechanical lift suspends the tub). This challenge was met with production of 100% success, with no scrap.

Using syntactic foam material for maximum insulation with minimum friction affects, SAY Plastics created a proprietary plug assist design. The plug assist tool stabilizes the process and provides optimal, consistent material distribution during production of the tubs. This eliminated the unacceptable thin material quality issue faced with the previous supplier's tubs. The result – a time-saving and cost-effective solution that outperformed even the original liners the client had used for years.



SAYtooling Mold & Plug Assist setup in deep draw forming machine.

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THE RESULTS

The tubs produced by SAY Plastics have been in use for several months and are delivering superior quality and performance. The client shared this positive feedback:

"From design conception to final product, it was a pleasure working with SAY Plastics on this project. They met our expectations with flying colors."

Louis Smith from SAY Plastics adds, "Because of our upfront investment in application engineering time at the client's facility, we were able to better understand the challenges faced by our client. And ultimately, we delivered a quality part that outperformed those of past suppliers."



Food Safe ABS Tub with 31.5" depth of forming draw

SAYpack Service

SAY Plastics' innovative custom-thermoformed solution for the world's #1 confectioner is just one example of our proprietary SAYpack Service offering.

SAYpack delivers a lean concept solution that saves time while erasing costly in-system damage issues. Our tooling and engineering teams have worked with clients around the globe who are looking for a more reliable way to pack, ship or transport their valuable in-house cargo as it moves through the assembly or production process and on to the customer. Contact SAY Plastics today to learn more.