Crown Plastics Replaces Aluminum Tool with HYTAC® WFT

Crown Plastics (Festus, MO) is one of the USA's leading suppliers of plastic lighting enclosures. The company uses acrylic, polycarbonate and polyethylene to manufacture lighting components that are shipped all over the USA and beyond. Thermoforming is one of the processes that they employ to create unique designs for the lighting market.

Crown was using an aluminum tool to form deep-drawn, clear acrylic parts but they were struggling with visible chill marks. They needed to find a solution that would perform under demanding conditions for a critical, short-run application. HYTAC WFT was ultimately chosen for its density and temperature properties.

Working with their CMT Process Specialist, Crown settled on a design that optimized the plastic material flow while managing overall costs. The results could be seen immediately. Chill marks were minimized and a more uniform wall thickness was discovered.

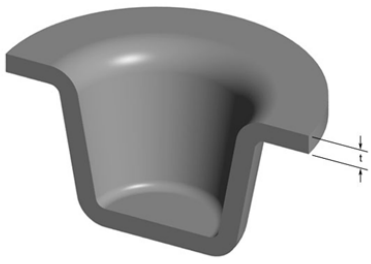
"The part was mainly thicker at the bottom (widest point and deepest-drawn point). This helped to strengthen the part. We also noticed a much more uniform wall thickness with this material compared to the aluminum."

Using 1200 grit sandpaper, Crown was able to achieve an ultra-smooth surface finish which ensured that the formed part met structural and clarity requirements.

HYTAC WFT incorporates PTFE directly into its syntactic structure to eliminate sticking and material build-up on the mold or plug surface. This light green material is a good choice for use with sticky materials and shorter run applications.

REASON #1: IMPROVE MATERIAL DISTRIBUTION

No one likes thin spots; everyone likes consistent and evenly distributed walls. Using the right plug material, geometry and processing techniques will ensure uniform wall thickness and a quality part.



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