UPES™ resin
ENABLED BY QINNEX™ TECHNOLOGY

Case Study: Thermoforming

Challenge

Tray-Pak Corporation, a leading source for customized thermoformed plastic packaging, was experiencing significant warpage, inefficient processing and poor material distribution in fresh produce trays. They needed to develop a product that could withstand the weight of stacking multiple trays, had consistent wall thickness, better throughput and meet Tray-Pak's sustainability criteria.

Solution

Working with NOVA Chemicals, the resin supplier, and Primex, the sheet producer, Tray-Pak engineered a better fresh produce packaging solution. The new tray delivered the perfect balance of performance and cost while meeting sustainability objectives.

UPES resin – an innovative additive solution that broadens the processing window of polymer systems – was added to the sheet and Tray-Pak was able to develop a stronger, stiffer, thinner packaging solution. With UPES resin, the average wall thickness became more consistent throughout the entire tray, providing added stability and strength to the package.

As a result, Tray-Pak has been able to deliver a cost-effective, sustainable packaging solution to fresh produce customers.

Results

Parts were formed 33% faster, with enhanced part definition, shorter start-ups and reduced scrap rates – resulting in increased machine time availability, allowing more parts to be made per run.

The improved processability found when adding UPES resin to the solution provided 20% material source reduction and more efficient machine usage – all without increasing cost to the customer.

About UPES Resin

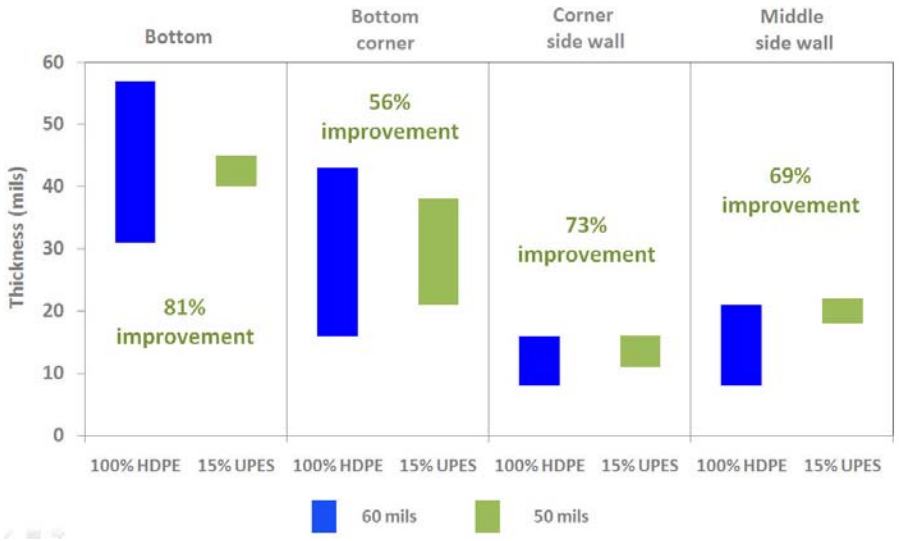
Achieve a balance of performance and cost. UPES resin is an innovative additive solution, enabled by Qinnex™ technology, that broadens the processing window of polymer systems, delivering sustainable performance while enabling source reduction, carbon savings and higher throughput.

A Sustainable Solution, UPES resin enables improved processability, material source reduction and energy savings – helping to limit the environmental impact of polymer based products.

NOVA Chemicals | UPES@novachem.com | 1.866.ASK.NOVA | www.upesresin.com

Modified: July 27, 2009

Thickness Variation Improvements at Key Part Locations



HDPE/UPES Performance Improvements