

Milliken®

# DeltaMax™

Performance Modifiers for Polypropylene

## Reduce Cycle Time & Processing Temperatures



### CASE STUDY

#### CUSTOMER NEED

A housewares manufacturer wishes to optimize operating efficiencies by lowering run temperatures and increasing processing speed. Their molding equipment runs 24/7 at full capacity, which limits line expansion with new and existing customers. Additionally, it is critical this customer find a solution that does not sacrifice impact properties while improving processability.

#### CURRENT SITUATION

Typically, low impact ICPs with MFR between 35-50 provide the best performance for home storage products. To optimize processing time, converters explore using higher MFR resins, but cracking and failures usually occur.

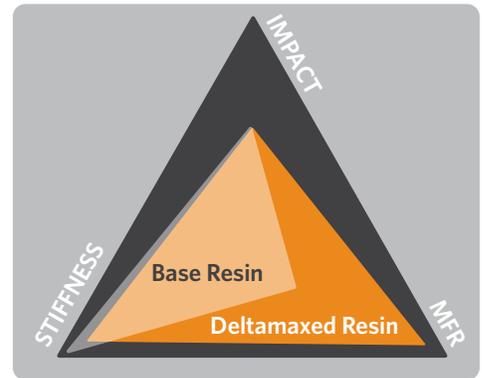
#### MILLIKEN SOLUTION

DeltaMax m100 Melt Flow Modifier allows converters to boost Melt Flow properties up to 5x without sacrificing impact strength. DeltaMax m100 Melt Flow Modifier also allows converters to decrease processing temperatures, increase cycle time and reduce CO<sub>2</sub> emissions.



#### RESULTS

By increasing MFR from 35 to 80, the manufacturer produced 500 more parts per day. Reducing temperatures and back pressure lead to lower wear and tear on equipment, reduced energy use and faster cycle times. This allowed for increased profitability and added capacity for new customer projects.



**IMPROVED COST SAVINGS/  
PROFIT IMPROVEMENT**  
**\$190/T**

**CYCLE TIME  
REDUCTION 11%**

**DECREASED  
MOLDING  
TEMPERATURE**  **6%**  
from 425°F to 400°F

 **7%**  
**reduction  
in CO<sub>2</sub> emissions**



PLEASE NOTE: As each customer's use of our product may be different, information we provide, including without limitation, recommendations, test results, samples, care/labeling/processing instructions or marketing advice, is provided in good faith but without warranty and without accepting any responsibility/liability. Each customer must test and be responsible for its own specific use, further processing, labeling, marketing, etc. All sales are exclusively subject to our standard terms of sale posted at [www.milliken.com/terms](http://www.milliken.com/terms) (all additional/different terms are rejected) unless explicitly agreed otherwise in a signed writing.

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