

# Case Study 128



## Solution / Results:

Currier Plastics addressed all Key Elements with our customer and finalized a new effective design as well as:

- Studied both laser and fly cutting system for the vessel and engineered & sourced a new efficient & precise cutting station placed at the machine for after molding secondary
- Traveled to Asia with our customer for qualifications
- Tool validated in Currier production facility and is currently in production

**Product is a success!! Currently sold through Williams-Sonoma**

## 1. Opportunity:

Currier Plastics was approached to help develop a new product that would be used in the flavor infused liquid market. The product uses a pressure infusion process that squeezes the natural flavors of real ingredients into your beverage. The taste of those real ingredients then are sparkled & infused and sealed in the bottle with no CO2 tank.



## 2. Evaluation:

The challenge was to develop a container that would meet all of the stringent requirements of a real pressure vessel and maintain the aesthetic crystal clear qualities of glass only in plastic. Also, the pressure vessel needed to be decorated and identified with the customers brand / logo. Currier Plastics worked with our customer to define the baseline or requirements and conditions that this vessel would be put through.

## 3. Process:

Currier Plastics conducted Finite Element Analysis (FEA). An evaluation of current deco embossing analysis indicated stress risers in the vessel caused by this process. Design created to UL Specs and twice normal product operating system was presented. Simulation test of wall thicknesses were done as well as a new plastics material selected & new deco process.

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CUSTOM DESIGN / INJECTION MOLDING / BLOW MOLDING  
**CURRIER PLASTICS**  
V<sup>2</sup>

V<sup>2</sup> = VALUE x VELOCITY

Currier Plastics is driven to provide two elements of outstanding capabilities to our customers; speed or true **velocity** in everything we do multiplied by superior **value** that incorporates total quality, operational efficiency and established organizational core values.