

Tech Mold Case Study #3

The Project: R&D for a 4-part Assembly

The Challenge: The customer contacted Tech Mold pre-production molds, for a four-part assembly, one of those parts being a 2-shot component. They also needed 300 parts delivered in six weeks that met all dimensional and quality criteria so the customer could perform a marketing study on the new product.

The Solution: Rather than manufacturing separate Prototype and Production molds, which would result in longer times and higher costs, Tech Mold R&D offered a quick, short-term solution with a long-range approach. Knowing their customer's needs would not require multiple tools in multiple presses, Tech Mold R&D's approach was to design and build a custom mold with five molding stacks into one mold base in order to be aggressive in lead time and cost, while giving the customer the advantage of being able to scale up to a production mold when required.

"We designed and built a high-quality prototype mold that provided parts meeting all the dimensional and quality criteria," said Brad Bollech, Tech Mold R&D Manager. "Manufacturing custom molding stacks to be interchangeable in a single mold base for the pre-production mold allowed us to maintain greater precision and flexibility of design as well as the ability to change out molding stacks in the press in 10-15 minutes."

The advantage of Tech Mold's dedicated R&D facility to customers is having the ability to design and build dimensionally correct pre-production molds, quickly and cost-effectively, while taking the lessons learned in the design and development stages to the multi-cavity production mold when the customer is ready. "Developmental prototype molds offer the customer greater opportunity to have true-to-spec, dimensionally-correct parts in hand, while at the same time laying the groundwork of critical manufacturing information for the multi-cavity production mold to reduce mold-build time and costs," said Bollech.

The Result:

“This hybrid approach of manufacturing quality prototypes that deliver production quantities means reduced capital expenditure for our customer’s entire program,” Bollech said.

Tech Mold depends on its 35+ years of innovative expertise in mold development and design, mold manufacturing, and manufacturing cell design and development to provide total manufacturing solutions for its customers.

Tech Mold – Technology for Total Solutions