

## CASE STUDY

### DEEP DRAW STAMPING: HOW A QUALITY PRECISION METAL STAMPING SUPPLIER DELIVERS

By Brad L. Hankin, Customer Service Manager

#### ABSTRACT

A fortune 100 company reached out to Larson Tool & Stamping Company for help in transitioning a product line from Europe back to the U.S. The product line had been handled for years in Europe at multiple vendors. Due to logistics, language barriers, and crumbling lead times, this fortune 100 company needed help to complete the project. Among the challenges in this project were changing forecasts, print tolerance issues, legacy machinery upkeep, and coordination of shipment schedules. The lead time for completion of the project began with an anticipated five-month window, which, due to a deadly pandemic, was dramatically condensed into a three-week delivery.

#### LARSON TOOL

For almost 100 years, Larson Tool & Stamping Company has been a valued supplier of precision metal stampings and assemblies to hundreds of U.S. companies. Larson offers a wide range of capabilities—including forming, stamping, deep drawing, assembly, brazing, painting, coining, and more. Larson delivers high-quality, cost-effective solutions and does so from design inception through building, testing, and producing parts—guaranteeing them for the life of the product.

## CASE PRESENTATION

Larson Tool & Stamping Company provided a massive initiative for a fortune 100 company, which involved transitioning a product line from Europe back to the U.S. Due to logistics, language barriers, and crumbling lead times, this fortune 100 company needed help to complete the project. Years prior to this, Larson had designed a tool for a division of this company. Larson guarantees its built tools for the life cycle of the product and contacted this company to offer it the tool; the company subsequently reached out to Larson regarding this project. This customer had previously enjoyed a fruitful relationship with Larson and felt confident that Larson would deliver on the challenging facets of this endeavor.



## THE SPECIFICS

In its simplest elements, Larson was asked to manufacture components for a personal protection device. The overarching project included:

- Taking existing tools from Europe without full information regarding their considerable wear and tear
- Helping the customer keep inventory costs down by buying their existing raw material
- Transferring a customer-owned production machine to Larson's Attleboro, MA location
- Meeting a reasonable production schedule, which unpredictably accelerated



**Larson originally had approximately five months to receive and set up the tools and produce the components. Due to a deadly pandemic, production numbers accelerated unexpectedly and dramatically. Necessity dictated that Larson get up and running within three weeks—which it did.**

## A NIMBLE APPROACH

These elements were well within Larson's capabilities. Larson is uniquely equipped to offer "one-stop shopping" for precision metal stamping and assemblies. It designs, builds, tests, produces parts, and guarantees its built tools for the life cycle of the product—which means Larson will service and adapt modifications as needed. As this project got underway, a number of considerable challenges popped up.

The open dialogue that Larson employs with all projects allowed them to keep ahead of challenges and considerations, such as learning new regulations that were particular to this project, and offer suggestions to the customer about product cleaning and shipping, among other contingencies. Because the blueprint of Larson's culture includes a nimble, responsive, and accessible approach, the entire Larson team—from sales and engineering and the production floor to shipping—was prepared for the challenges that this project presented—some anticipated, some unexpected.

## CHANGING FORECAST

The unpredictably shifting production forecast was, by far, the most daunting challenge. The Ebola epidemic coincided with the timeframe within which Larson received the tools. (Though not meant for protection against Ebola, organizations were ordering the finished device for peripheral protection in affected areas.) Larson originally had approximately nine months to receive and set up the tools and produce the components. The initial EAU was 30,000 (7,500 per quarter). In the first six months, Larson produced over 45,000 parts—with immediate shipments the day they were ready. Necessity dictated that Larson get up and running within three weeks—which it did.

## PRINT TOLERANCES

Coming from Europe, and having been handled by multiple vendors, specifications were not consistent. Tools supplied were not able to hold to the print tolerances provided. The quality requirements of these items changed as Larson was making parts, requiring Larson to utilize its in-house tool-making abilities and alter or replace tool stations on-the-fly.

To eliminate deviations, Larson designed new tooling that entailed altering two manual tools, running one process on an automatic press, integrating three steps into one, ultimately creating a new progressive tool for the customer. This streamlining removed a quality defect that the print tolerance delta was causing, and created a process that eliminated the need for additional labor, drove down costs, and increased quality.

### LEGACY MACHINE UPKEEP

This production machine provided a critical step in making these parts. It was a legacy machine and did not have present-day safety or improvement features. Larson made it safe to run and diagnosed any issues while making parts—meeting every quality requirement.

### COORDINATE SHIPMENTS

Due to the volume increase, Larson kept up with and coordinated numerous shipments from a European mill source. This product's material is obtainable only in Europe, requiring Larson to air freight and ship via ocean carrier to stay on schedule.

### GOALS REACHED, SATISFACTION DELIVERED

This was a mature product line with a well-established company that did not foresee the inherent transition challenges or forecasting shifts. Larson was steadfast and agile in its ability to handle multiple contingencies not originally anticipated in the scope of work. Larson helped this company get through a massive transition, consolidate manufacturing back to the U.S., and meet the needs of this customer base that was growing exponentially. Larson and its customer continue to work together—and this customer continues to be very satisfied.



**Because the blueprint of Larson's culture includes a nimble, responsive, and accessible approach, the entire Larson team—from sales and engineering and the production floor to shipping—was prepared for the challenges that this project presented—some anticipated, some unexpected.**

---



## ABOUT LARSON TOOL & STAMPING COMPANY

---

For almost 100 years, Larson Tool & Stamping Company has been a valued supplier of precision metal stampings and assemblies to hundreds of U.S. companies. We offer a wide range of capabilities—including forming, stamping, deep drawing, assembly, brazing, painting, coining, and more. Larson delivers high-quality, cost-effective solutions.

Larson Tool works with our customers from the earliest stages of design to optimize your part design for the metal stamping process and determine the best materials, tooling, and process solutions for your product. We'll leverage our years of experience as a valued supplier of metal stampings and assemblies to help you with all your metal stamping needs. Download our [Stamping Design Guide](#) to get started with your next successful part production.

---

**Larson Tool &  
Stamping Company**

**90 Olive Street  
Attleboro, MA 02703-3802**

**(508) 222-0897  
[www.larsontool.com](http://www.larsontool.com)**