

DIAPHRAM ASSEMBLY AND HOT FORGE REDESIGN

ENGINEERING REVIEW AND PART REDESIGN YIELDS \$75,390 PIECE PRICE SAVINGS

CHALLENGE

During a technical line review at a prospective customer's facility, the Field engineering team observed a cumbersome and time consuming assembly process to a three component diaphragm. Upon further evaluation of the part, the Field team discovered that the manufacturing process to make these components was costly due to the scrap and time involved with machining the parts.

SOLUTION

The Field engineering team eliminated the challenges associated with assembly by redesigning the three piece assembly to a single component by recommending a hot forging process. The near net shape forming minimized the machining and wasted material. This process, coupled with Field's design input, yielded a part with a stronger metal, decreased assembly time, and provided significant piece price savings.

RESULTS

The Field Team redesigned the parts for hot forging which required some slight changes in the tolerances without requiring any changes to the mating parts, installation process, or assembly tools. The redesign led to a cost savings based on a 71,800 piece EAU.

- SKU Reduction
- Stronger Components
- Improved Design
- Original Product Design Cost: \$212,528
- Field Redesign Cost: \$137,138

Piece Price Savings: \$75,390

FIELD RESULTS

- Original Product Design Cost: \$212,528
 - Field Redesign Cost: \$137,138
- Piece Price Savings: \$75,390**

FIELD SERVICE PROVIDED

- Engineering line review
- Product Redesign
- Strength Testing
- Specification Development



More than parts, Field is a full-service, data-driven, on-demand engineering partner with a unique technical approach to inventory management of, and supply chain solutions for, fasteners and other Class "C" items—contractually guaranteeing to lower your total cost of fastening.