

GEAR BOX PINION NUT REDESIGN

FIELD REDESIGN AND PROCUREMENT YIELDED \$32,700 IN TOTAL SAVINGS

CHALLENGE

The Field team initiated an engineering review of a customer's product that revealed a problem they were having with a specific part. The machined part was subject to occasional cracking, due to the notch-sensitive nature of parts produced by the screw machining process. Part dimensions needed to be largely maintained due to the plan to install an automated parts feeding system at assembly.

SOLUTION

The Field team evaluated the part and developed a new design and suggested an alternative manufacturing process, with only limited machining required. The cold forming process, coupled with Field's design input, yielded a part that was work hardened and had increased performance and a decrease in quality issues.

RESULTS

The Field Team redesigned the part for cold heading. This required some slight changes in the tolerances and radii of the part but no changes to any of the mating parts, installation process, or tools. The slight modification led to a cost savings based on a 35,000 piece EAU

- Reduced Warranty Claim...\$25,000
- Original Product Design to Customer \$55,300
- Less the Field Redesign Cost of the Product \$47,600

Total Cost Savings with Field: \$32,700

FIELD RESULTS

- Reduced warranty claim
- Original Product Design Cost: \$55,300
- Field Redesign Cost: \$47,600

**Total Part Cost Savings with Field:
\$7,700**

FIELD SERVICES PROVIDED

- Product Redesign
- Application Problem Solving
- Process Development
- 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.