Reducing Fabrication Costs For Better ROI: A Case Study

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****The skilled engineering team at A&E Manufacturing always exercise a lean approach to each new sheet metal design and fabrication project. This ensures that a sustainable and cost effective method of fabrication will be used to fabricate your sheet metal piece. Whenever you have a new design and are preparing to start fabrication, we highly recommend engaging A&E’s prototyping services. This step in production allows our engineers to uncover design and fabrication efficiencies before your sheet metal product goes into full production. The following case study will show the value of this process.

**Step 1: The Original Sheet Metal Product**

A customer came to us with an over-engineered oil tank reservoir design. The original specifications would require a multi-step build process, followed by a costly plating operation in order to complete the part.

A&E moved the piece into the prototyping process following the client’s specifications. During the process we made some discoveries regarding the product fabrication.

**Step 2: After Prototyping, A & E’s Solution**

After developing and prototyping the piece as requested, A & E’s engineering team advised our customer that process improvements to the existing part design would not only reduce the fabrication requirements but also reduce the *cost of fabrication*.

Our engineering team switched the production material to stainless steel sheet metal. This allowed us to remove the oil tank reservoir’s plating requirements. A&E also eliminated the welding requirements by removing the mating parts and replacing them with a single-piece construction. This simplification reduced the amount of work necessary and eliminated a potential failure point while also allowing for a more streamlined build process.

**Step 3: Fabrication and ROI**

Due to the design changes that were recommended by A & E’s engineering team our customer was able to bring down the overall cost of their part, produce a more streamlined design, and bring this project to fruition on time and under budget.

**Fabricating Your Product**

A&E Manufacturing always operates with the best interests of our customers in mind. We take advantage of every possible fabrication or design efficiency to make sure your sheet metal manufactured product is of the highest-quality, while remaining price conscious. Contact us today to start the process for your own products.