Fabrication of a Complex, Custom Metal Bracket in Under Five Weeks

An OEM of computer equipment subcontracted to EVS the fabrication of custom support brackets. These brackets were to be used by the U.S. government in an add-on security module for tablet computers. The program was brought to EVS with various challenges after the original vendor was unable to complete the project at the eleventh hour, but each hurdle was overcome, even within exceptionally tight time constraints.

Besides the need to have the finished product available quickly, the project required the use of custom tooling due to an especially thin-gauge stainless steel material that included exceptionally short bends and a miniature emboss in the design. It was also discovered that specific types of welding equipment not currently available at EVS would be needed to support several short-term requirements. Additionally, during the prototyping process, complications involving special forming were brought to light and circumvented due to the hard work and keen eye for detail of our highly-trained engineering and fabrication staff. All of these factors added levels of complexity to an already unique situation.

The EVS team was responsible for most major aspects of the project, beginning with design for manufacturability and materials sourcing, and continuing through fabrication, tooling and forming. Throughout the process, specialists from various areas across the company were brought in to give valuable input regarding best practices. This lead to the manufacturing of a finished product that incorporated the most efficient use of our cutting-edge equipment, including lasers, press brakes, custom tooling, spot welding machines and a special passivation finish to help prevent corrosion or other surface deterioration.
As has come to be expected from EVS, product integrity was ensured throughout the process via the use of frequent check-ins by our quality team. For instance, our Amada FabriVision scanner allowed team members to scan and accurately inspect flat parts as they were fabricated, therefore ensuring hold tolerances after laser cuts, and our computerized quality records provided traceability and accountability, as well as transparency for the customer all the way through project completion. In order to keep the process running smoothly, EVS utilized Meet Minutes and MieTrack MRP to keep track of data including orders, production, scheduling and logistics. The result of this precise level of project coordination was on-time delivery of product, a pending re-order and extremely high customer satisfaction.

When asked what the key to success was for this project, the customer stated that excellent communication made all the difference. “Brent [Sales Engineer, EVS] went out of his way to give us daily updates that included both the current project status and what was next on deck; in fact, he even drove down from New Jersey to personally deliver early samples to us so he could keep the project moving.”

Once the product was delivered, we were honored to receive the following notes from the client:

“Thank you for your diligence and perseverance. I appreciate what it takes to do what you have done in this short time. I wish all my vendors grasped their craft the way you and your team do.”
-- N.H., Senior Mechanical Engineer

“If all my vendors responded in such a timely and efficient way, my job would be easy. I was ridiculously happy with how EVS handled this extremely complex project, within a very tight time frame”
-- T.S., Chief Product Development Officer

To sum up: EVS successfully responded to the customer’s product needs, including an ultra-fast turnaround. Within three weeks of project inception, the company was able to take the product from CAD drawings to a working sample, then to prototype samples only two weeks later. This means that in just five weeks, EVS was able to produce a highly-complex, custom metal fabrication -- something practically unheard of in the industry.

To learn more about this project, or the processes used to complete it, contact EVS Metal or call (973) 839-4432