



CASE STUDY

BUSINESS INITIATIVES:

Condux International has been manufacturing cable installation tools and equipment for over 30 years. Working directly with the electrical contracting, electrical utility, telecom and CATV industries, Condux offers the highest quality tools, engineered to reduce installation time and increase safety. Engineering Manager Josh Siebert and his team of 5 engineers are committed to innovation by continual research and development of new tools for aerial and underground cable installation.



BUSINESS CHALLENGES:

Condux manufactures equipment needed for installing fiber optic cables. Increased data traffic has resulted in high demand for new cables to be installed worldwide and as the demand for these cables increases so does the demand for the equipment to install them. Facing a dramatic increase in demand, Condux needed to do one of two things. They could either expand their organization by hiring engineers or find a reliable source to provide engineering services. The ultimate goal was to find a way to prevent backlog and keep up with client demand.

In the past, Condux had attempted to outsource an engineering and design project. The work they received back was virtually unusable and had to be completely redrawn and redeveloped. Because of this past experience, many Condux employees felt that outsourcing engineering and design projects would waste valuable time and money. One of their primary challenges has been trying to instill faith in their partnering engineering resources.

With every project, Condux is dedicated to finding the best solution possible to improve overall functionality, profit margins, as well as the quality of the engineering & manufacturing deliverables. Insuring this tenet was transferred to an external resource proved to be a continual challenge.

SOLUTIONS:

Condux received a project request from one of their largest clients. At the time, they simply did not have the engineering manpower to bring the product to market within the desired timeframe. They had two choices: bring on new engineers, or outsource their engineering needs.

Hiring new employees can be time consuming and requires training and new employee adoption of the organization's processes. After weighing the options, the Condux team decided to outsource some of their engineering backlog to a trusted partner, EAC Product Development Solutions. Condux had a previous relationship with EAC, which involved software support and finite element analysis services. EAC's Extensioneering™ Services Team provided expert CAD design and engineering services.

PRODUCT FEATURE: FIBER OPTIC GUIDE PULLEY AND HANGING FIXTURE

Condux provided EAC with basic project requirements and detailed expectations. During the first on-site meeting, the two teams discussed the project specifications and objectives at length to alleviate any uncertainty the Condux team may have had in moving forward with an external engineering resource.

Project Objectives:

EAC was to take an existing fiber optic guide pulley, (which weighed 20 pounds and had a load capacity of 1500 pounds) reduce its load capacity and make it lighter in weight. Another goal for the project included reducing the amount of machining required to manufacture the hanging fixture.

EAC tackled the project head on and met all of its requirements. They were able to reduce the load capacity to 600 pounds and in the process decreased the weight by nearly half. Siebert notes, "EAC also simplified the hanging fixture and dramatically reduced the amount of machining needed. They did a very nice job coming up with some innovative solutions to make that happen." Minnetronix is able to cut down on material costs, increase time-to-market, and provide quicker turn-around for customers. Beddoe replies, "Ultimately we want to make life better for our patients and customers." And so, they have.



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-Josh S

“We got a project done which otherwise wouldn't have fit into our schedule. We were able to get the product to the customer 6-9 months faster. Most importantly, the positive relationship with our client has remained intact. We were able to overcome our negative thoughts about outsourcing and look forward to working with EAC on various parts of the product development process in the future,” said Siebert.