

Metal Essence Achieves Lean Manufacturing Model with SYSPRO Software

... a precision metals and plastics fabricator that today specializes in high-quality, close-tolerance machining for the electronics, automotive, telecommunications, medical and aerospace industries.



■ The Company

Metal Essence, based in Sanford, Fla., is proof that the entrepreneurial spirit is alive and flourishing in America. The company began operations in a residential garage in 1986, much like Hewlett-Packard, another renowned high technology company that also had similar origins. At the time, founder Al Stimac was an executive for a leading Florida-based electronics manufacturer. In his post, he witnessed the huge volume of high technology business being purchased from other states, so he established a personal goal of making his adopted state, Florida, a high-technology resource. Consequently, he formed Metal Essence, a precision metals and plastics fabricator that today specializes in high-quality, close-tolerance machining for the electronics, automotive, telecommunications, medical and aerospace industries.

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- Yvonne Stimac
 Operations Manager, Metal Essence

As with many individuals starting new ventures, Stimac was unsure that his fledging company would get “off-the-ground.” Initially, Metal Essence had no open lines of credit nor investors, so Stimac treated the new venture as more or less of a hobby and chose to retain his full-time executive post. Knowing the value of quality in business, his first purchase for the new endeavor was a state-of-the-art CNC turning machine. It wasn’t until 1992 that a rising sales curve at Metal Essence convinced Stimac that his “hobby” was a viable concern and one that required his undivided managerial expertise to achieve new levels of growth. Stimac’s “hobby” had now become a full-time venture, and he assumed the role of Metal Essence President.

■ The Challenge

Stimac’s initial efforts were devoted to growing sales, and within two years, the company had outgrown its 1,500 sq. ft. bay and relocated to a 5,000 sq. ft. facility equipped with multiple rows of precision CNC equipment. A second shift was added in 1994, and a third shift established in 1995. The close of 1995 saw the move to a new 11,000 sq. ft. facility and the addition of much-needed office personnel. What had started out as a part-time hobby now required a much larger staff and the need for better information in order to secure repeat orders. As Yvonne Stimac, Metal Essence Operations Manager, explains, “As far as technology goes, the shop floor was always state-of-the-art. We just had to update the office side to keep up with customer requirements. We had started doing some production for the automotive industry and became aware of the need for documentation and traceability to secure repeat business.”

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■ AT A GLANCE ■

COMPANY

Metal Essence

INDUSTRY

Metal Fabrication



M Metal Essence, Inc.



■ The Solution

The company called in John Edgar, now CEO of an Orlando-based software consultancy. Edgar assessed the needs of Metal Essence and suggested the firm take a look at SYSPRO enterprise software, a modular, integrated Enterprise Resource Planning solution.

After seeing a demonstration of the SYSPRO solution, the Stimacs were convinced that it would fill their current needs, and, equally as important, also had the scalability to accommodate future growth. The latter was a significant consideration in the firm's justification of such a major purchase. Another strong selling point was the software's ability to support EDI (Electronic Data Integration), a growing requirement of the company's expanding automotive customer base. The EDI module gives companies the capability to rapidly exchange large batches of business transactions automatically and electronically in the traditional standardized formats between trading partners to support JIT (Just-in-Time) ordering objectives.

■ The Result

Almost immediately after installing the SYSPRO software, Metal Essence experienced notable improvements. The first two areas to show bursts of efficiency were job scheduling and purchasing. Explains Mrs. Stimac, "I could look at a process and know the breakdown costs in order to assess the profitability of the operation. I could determine the cycle times and where reductions had to be made." In fact, she says, it was the ability to add these operational efficiencies that helped the company gain repeat as well as new business. "We simply passed on the savings to the customer," she says.

At the same time, with a detailed history of purchases, she was able to streamline the firm's purchasing operations, making more efficient and timely buys and securing volume discounts where possible.

Perhaps the greatest contribution that the SYSPRO software has made to the growth of Metal Essence is the ability it gave the company to better leverage the lean manufacturing model. The real-time nature of the SYSPRO software provided the operational infrastructure by which Metal

Essence could establish strategic guidelines throughout the company's supply chain and access the most current data for more effective and efficient decision-making. The software also gave the company the ability to maximize existing resources and eliminate non value-added activities, enabling Metal Essence to improve profits by producing to customer demand rather than tying up large sums in raw materials inventories.

In fact, today Metal Essence could be a "poster child" for the lean manufacturing model. The precise alignment of inventory with orders is the very essence of the lean manufacturing concept, and according to Mrs. Stimac, the SYSPRO software negates the need for the company to carry any inventory at all. "Through exact scheduling, we are able to order materials for same day delivery," she says, adding, "There would have been no way we would have been able to coordinate production schedules with raw materials needs without the SYSPRO software."

Another factor in the company's rapid growth has been the user-friendly nature of the SYSPRO software and the ease with which new employees could become proficient on the software with a minimum of training.

Mrs. Stimac refers to her own personal experience. "Although I had no computer background and little time nor money for support, I found it very easy to set up the SYSPRO software and get started with a minimum of help except for an occasional phone call. I did not have a technical background but a lot of common sense, and that's what the software is all about – its use is almost intuitive."

Today, Metal Essence is using the latest version of SYSPRO running on Window NT. The wisdom of the Stimacs' choice of SYSPRO has been consistently reinforced over the years. Says Mrs. Stimac, "Actually, we didn't have the money, nor time to do much training of the staff, but, thankfully, we found we didn't have to. While other systems need a full-time IT person on staff, SYSPRO software doesn't require one, because it's so easy to use and maintain."



Today, Metal Essence now employs 75 people and is approaching global revenues in excess of \$10 million dollars, a huge contrast to the mere \$300,000 the firm was doing at the time it implemented the SYSPRO solution. During the interim period to the present day, the company has twice moved to larger facilities, now occupying a 35,000 sq. ft. plant in Sanford, Fla.

“Without a doubt, we could never have managed the growth without SYSPRO,” says Al Stimac. “Through efficient job scheduling, it has dramatically improved throughput and shortened lead times. It issues clear and concise bills of material that not only indicate parts and routing, but also special care instructions that the machine operators can easily follow....it’s also enabled us to get control of purchasing.”

Metal Essence’s rapid growth is clearly due to a highly efficient operation and the attainment of economies, which the company passes on to a growing customer base. Says Al Stimac, “We compete on price and quality,” proudly referencing the company’s ISO 9001:200 and QS 9000:98 certifications. The firm’s dedication to quality is also reflected in state-of-the-art machinery that is able to achieve the most crucial specifications at rapid speeds. In fact, some CNC machines can turn out parts in as little as 2.8 seconds using eight different tools. The high technology equipment enables Metal Essence to produce an astounding 8,000 to 9,000 pieces per shift and accommodate about 150 in-process jobs at any one time.

Though Al Stimac sits at the helm of Metal Essence, he has not lost sight of one of his original goals, that of promoting high technology business in Florida. Towards this end, he has served as the president of Manufacturers of Central Florida and works diligently on the following committees: Workforce of Central Florida; National Association of Manufacturers; and Florida Manufactures Extension Partnership. He is a firm believer in keeping manufacturing in America by leveraging technology and has even worked with his competitors to help them enhance their individual manufacturing operations. In fact, he has even advised Florida Governor Jeb Bush on ways to expand the manufacturing base in Florida.

Al Stimac, a true visionary, seems to have an affinity for surrounding himself with other visionaries. Accordingly, he says of SYSPRO, “It is a visionary company that has helped to keep Metal Essence at the forefront.”

Not only is Metal Essence a testament to one man’s dream, but it also exemplifies how forward thinking management, leading-edge equipment and innovative enterprise software can successfully execute the lean manufacturing model.

What does the future hold for Metal Essence? Mrs. Stimac says candidly, “We will continue to leverage the technology base of the company and empower our employees so that one day they can buy us out.”