

Tachi-S Mexico Fulfills Growth Potential with Lectra

THE CHALLENGE

Tachi-S Mexico was looking to improve production capacity, reduce operational costs and quality defects in order to take advantage of expected growth.

LECTRA'S RESPONSE

Lectra worked closely with Tachi-S teams to determine the underlying causes of the high running costs and low performance, and understand the company's main challenges.

RESULTS

After the completion of two phases of this consulting project, Tachi-S Mexico's equipment efficiency rose from 56% to 72%, production volumes increased from 550 to 1,000 car seat sets per day, and the company obtained a 50%, 120%, and 137% improvement on three different materials.

LECTRA SOLUTIONS

Vector

This leading automotive seating supplier partners with Lectra consultants to optimize the cutting process, reduce fabric consumption and improve work flow to meet growing demand.



HOW TO BOOST MANUFACTURING PERFORMANCE AND PRODUCTIVITY?

With car makers from around the world opening plants in Mexico, business is booming for Tachi-S Mexico. Starting in 2013, the automotive supply company expected production to double over the course of the next two years. However, they were having difficulty achieving their growth objectives because of an equipment base that was not optimized. "Low efficiency, high fabric consumption and quality issues were the main challenges we were facing in the cutting room," explains Ian Donalds, Manager of Tachi-S' Calvillo plant.

To address these challenges, the Tachi-S team was looking into acquiring new cutting equipment. However, Lectra experts were confident that performing in-depth analyses of the company's current production processes would allow them to identify areas for improvement and draw up a customized action plan that would enable Tachi-S Mexico to reduce operational costs, and improve process efficiency and performance without buying additional equipment.

RE-ENGINEER PROCESSES WITH A CUSTOMIZED CONSULTING PROJECT

“Because of Lectra’s expertise in the cutting process, experience in advising automotive companies on process optimization and its recognition within the automotive industry, we were confident that Lectra would help us resolve our production issues,” recalls Magdalena Regalado, Deputy Engineering Manager at Tachi-S Mexico.

“In addition to a reduction in costs per set, this project has helped us improve the quality of our products and delivery times in the development of new platforms required by our customers.”

Luis Soria
Senior Corporate
Purchasing Manager

Lectra’s expertise in delivering tailored performance optimization and continuous improvement projects augments the value of its advanced technology. By following Lectra’s recommendations on refining their processes, Tachi-S Mexico could eliminate non-value-added activities, increase production capacity, and improve product quality. These improvements were possible by applying lean principles and using assessment methods, such as DILLO (Day in the Life Of) studies, Value Stream Mapping, and analysis of overall equipment efficiency.

IMPROVED PROCESSES BRING IMPRESSIVE RESULTS

Two of the three phases of the Lean Project have been completed with impressive results. After the conclusion of the first phase, a better understanding of parameters, spreading methods, preventive maintenance routines, and operational best practices enabled Tachi-S to produce 275 more car seat sets per day, reduce costs per set by \$0.38, and increase equipment efficiency by 16 %.

By using Overall Equipment Effectiveness data as a yardstick to measure improvement, the consultants demonstrated the importance of accurately evaluating and following quality, availability and performance ratios.

After implementation of two new Vectors and the completion of the second phase, availability of the new equipment was determined to be 70% and car seat sets production rose to 1,000 sets per day, with an average 109% increase in the number of plies.

CONTINUING IMPROVEMENT FOR CONTINUED SUCCESS

Preparation for the third phase of the consulting project has already begun. A diagnostic on improving fabric consumption has been performed. Lectra consultants have demonstrated that reducing the gap between pieces by 3 mm will allow Tachi-S to reduce fabric consumption by over 3%; reducing fabric consumption by even 1% could save the company more than \$100,000 per year.

The project will have enduring effects on Tachi-S Mexico’s production capabilities and the relationship between the two companies. “Our long-standing relationship with Lectra has been strengthened through these types of activities. They work with us to meet our needs and, moreover, they offer extraordinary services which help us to maintain our leadership position as an automotive company,” states Magdalena Regalado.

About Tachi-S

Tachi-S has a 50-year history as a company that creates inspiration. Tachi-S works with major automakers as an independent seat maker, delivering 2.4 million seats to the global market each year. Through its seats, Tachi-S has inspired customers around the world. Seats are becoming more important as a key inspirational element in the presentation of a car. As a seat manufacturing company, Tachi-S hopes to continue delivering an inspiring experience for its customers.



About Lectra

Lectra is the world leader in integrated technology solutions that automate, streamline and accelerate product design, development and manufacturing processes for industries using soft materials. Lectra develops the most advanced specialized software and cutting systems and provides associated services to a broad array of markets including fashion (apparel, accessories, footwear), automotive (car seats and interiors, airbags), furniture, as well as a wide variety of other market sectors, such as aeronautical and marine industries, wind power and personal protective equipment. Lectra serves 23,000 customers in more than 100 countries with 1,500 employees. The company is listed on Euronext.

lectra.com