

# Leadtec Case Study



**Leadtec Empowers “Made in America”  
Strategy at Joseph Abboud**



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*“We are very proud to be Made-in-the-USA and are committed to staying here. By turning the challenges of domestic manufacturing into strategic advantages, we can remain competitive and relevant in a global industry.”*

**Anthony Sapienza, President and CEO, JA Apparel Corp.**

As one of the most recognized men’s wear brands in the world, Joseph Abboud produces finely tailored suits, sport coats, and trousers that are sold through better department stores and specialty shops. The 250-year old brand produces its high-end JA Collection as well as Personal Style System made-to-order clothing in its 400,000 square foot New Bedford, Massachusetts factory.

For 25 years, the company has leveraged a strong commitment to “Made in the USA” to deliver the highest quality products while providing U.S.-based retail partners with an unparalleled record of customer service and rapid deliveries.

## Overview

**Company:** JA Apparel Corp

**Industry:** Fashion Apparel

**Company Profile:** Joseph Abboud is a leading men’s fashion brand that markets tailored collections and unique sportswear through some of the largest and most successful department and specialty stores around the world.

**Business Situation:** JA Apparel has long been considered a leader in manufacturing innovation. While most U.S. clothing manufacturers joined in the industry’s massive shift to low labor cost regions, the company has taken a contrarian approach by positioning itself as an innovator in domestic manufacturing.

**Solution:** To meet intensifying cost, speed, and production management challenges, Joseph Abboud turned to CGS and its Leadtec Real-Time Shop Floor Control Solution. Since implementing its first system in 1996, JA Apparel has continued to add Leadtec solutions in other parts of its business as it addresses the constantly evolving challenges of the fashion business.

- Benefits:**
- Increased Productivity
  - Cycle Time Reductions
  - Labor and Inventory Cost Savings
  - Streamlined Training Times
  - Improved Process Visibility
  - Enhanced Competitiveness

Combining European elegance with classic American tailoring, Joseph Abboud is one of the most recognized men's wear brands in the world. Ever since the prolific designer and GFT International B.V. (GFT) formed the JA Apparel Corp. joint venture in 1987, the maker of finely tailored suits, sport coats, and trousers has been committed to manufacturing trend-setting men's fashions in the United States. While much has changed over the past quarter-century, including ownership of the brand and company, the domestic manufacturing strategy remains. Even though Joseph Abboud licensed goods are sourced elsewhere, the company's high-end JA Collection line is entirely produced in its 400,000 square foot facility in New Bedford, Massachusetts.

According to President and CEO Anthony Sapienza, *"We are very proud to be Made-in-the-USA and are committed to staying here. We continue to make investments in our workforce and the beautiful clothing that we manufacture. By turning the challenges of domestic manufacturing into strategic advantages, we can remain competitive and relevant in what has become a global industry."*

While the company manages sales and administrative functions at its New York headquarters, it's the New Bedford plant that most consider the heart and soul of the Joseph Abboud brand. In this once thriving fashion and textile center 50 miles south of Boston, JA Apparel stands as the only remaining clothing manufacturer. From an operational perspective, the plant comprises a fabric cutting room and separate coat and pant sewing shops that each includes a component parts construction and final assembly line components. A pressing and finishing department prepares retail-ready and made-to-order products for warehousing and distribution, which are also managed at the location.

Although down somewhat from pre-recession peaks, the business still employs 450 people and produces more than 900 suits per day; including coat, pant, and vest.

## **Situation**

Originally patterned after the parent GFT plant in Italy, Joseph Abboud has long been considered a leader in sewing room innovation. But producing high quality suits, each with more than 200 minutes of raw labor content, requires a highly skilled workforce and presents continual challenges. During the strong business cycle of the late 1990's, one of the biggest challenges the company faced was reducing the time required to train and advance employees to efficient levels of productivity. Indeed, maintaining high levels of worker efficiency continues to be critical in this highly competitive industry.

Like most players in the increasingly time-sensitive business of fashion, JA Apparel faces constant pressure to minimize delivery cycles. To move beyond incremental improvements, executives and managers must rethink the way production flow and work-in-process inventories are managed. To address waning interest in formal attire and increased consumer demand for greater style choices, tailored clothing and other producers must also find ways to more manage the smaller quantity and custom orders that are today's norm.

Clearly, this company is not immune to the economic and competitive pressures that have driven most fashion producers offshore in recent years. Manufacturing any sort of clothing profitably in the United States is a formidable challenge; especially so considering the high needle content and skills that go into the JA Collection. While most U.S. clothing manufacturers joined in the industry's massive shift to lower labor cost regions of the world in the past decade, JA Apparel has taken a contrarian approach by positioning itself as an innovator in domestic manufacturing.

## **Solution**

To meet these cost, speed, and production management challenges, Joseph Abboud turned to CGS and its Leadtec Real-Time Shop Floor Control (SFC) Solution. Prompted by the need to increase productivity and reduce new operator training curves, the company implemented its first Leadtec system in its sewing department in 1996. Since then, JA Apparel has continued to add Leadtec solutions in other parts of its business as it addresses the constantly evolving challenges of the fashion business.

The Leadtec SFC solution utilizes individual and group work terminals to gather information on plant-wide production activities precisely as they occur. The terminals reduce non-productive time for sewing operators and other workers as it collects and automatically generates detailed and up-to-the-minute production and work-in-process visibility. The terminals also provide individual performance feedback to motivate and support workers to achieve higher performance and earnings.

To help managers solve and even avoid potential production problems, the real-time system proactively warns of potential bottlenecks and recommends work-around solutions before problems and excess costs can escalate. It also helps identify and isolate quality problems and automatically generates incentive payroll calculations. Leadtec provides the timely and accurate information workers and managers need to proactively make faster and better informed business decisions on every aspect of production.

*“Leadtec plays an important role in our success as a domestic manufacturer”, noted Richard Motta, Director of Engineering and 15-year employee of JA Apparel. “By implementing their shop floor control throughout our facility, we have been able to achieve wall-to-wall best practices.”*

## **Sewing Room Improvements**

The initial SFC deployment replaced the traditional manual work ticket system, which required operators to peel and stick a coupon for each bundle of work completed on a daily production sheet, with 350 Leadtec terminals in the coat and pant sewing shops. The conversion was accomplished in 2 to 3 months through a phased approach that introduced the new system on a section-by-section basis. A dedicated training center was setup for operators that, along with the system’s ability to display messages in Portuguese and other languages for the operators, resulted in a very positive reaction from employees and fast adoption of the system.

## **Cutting Room Innovation**

After converting the coat and pant shops, JA Apparel called on Leadtec in 1999 to help reengineer its cutting room. Unlike the sewing department, the fabric spreading, cutting, shade marking, fitting, and special plaid and stripe handling jobs in this department had always been paid on a simple hourly basis.

The challenge was to develop an individual incentive system in an environment that has tremendous variables. To achieve this, the company had to consider various work measurements for these jobs; including monitoring the number of fabric rolls, the amount of yardage used, the size ranges, and a large number and combination of variables. Ranging from a single made-to-measure suit up to 1000 units for more basic products, wide-ranging cut order sizes also added to the challenge.

JA Apparel developed a mix of flexible standards to cover all cutting room activities. Using 50 shared terminals in this area, Leadtec provided the means to effectively manage the individual incentive system and calculate final rates for the unique jobs in the cutting room. The combination of the new incentive program and Leadtec handling reductions and management visibility resulted in tremendous improvements in the department.

## Coat Assembly Advancements

After spending considerable time and effort trying to implement lean manufacturing in the sewing room, the company could not reach an acceptable level of efficiency needed to sustain the initiative. Clearly, the unique mix of labor content, advanced sewing skills, and specialized equipment presented significant obstacles to the cross-training, reserve equipment, and other requirements of cell-based manufacturing. Perhaps most importantly, the shift to group incentives was not well received by a workforce that thrived for many years with a culture of individual incentive pay.

Looking to further reduce throughput time and increase efficiencies, JA Apparel once again turned to Leadtec for solutions. CGS provided an innovative solution that included integration of the Leadtec SFC system with a business partner conveyerized handling solution that would convert the suit assembly operations from bundle (batch) to single-piece or unit processing.

In 2010, the company installed the Eton unit production system. The 123-workstation system enabled the business to achieve the advantages it had sought from lean manufacturing without losing the benefits of individual incentives. By automatically transporting and ergonomically positioning the parts for a single unit through the final coat assembly operations, non-productive operator handling time and sewing room work-in-process levels were dramatically reduced. Where lean manufacturing had failed, Eton had provided the means to achieve more competitive costs and industry-best throughput times.

CGS integrated the Leadtec system with the new conveyor system to provide JA Apparel with a seamless flow of information across the entire operation. The SFC system provided all operation sequence and piece rate incentive data to Eton. It also managed the conversion of information from batch to unit production. By integrating all Leadtec functionality into the Eton terminal, the joint solution maintains continuity for workers and supervisors that had already embraced the shop floor system as their means of managing performance, production flow, and incentive payroll.

## Tracking Finishing Steps

Most recently, JA Apparel has implemented a 50-station, RFID-enabled Leadtec system that continues the single-unit pay and production flow through the pressing and finishing operations. To accomplish this, the system generates a RFID card complete with all the product and pay information. Once sewing is completed on the Eton system, the RFID tag is placed in the coat pocket for payroll and tracking purposes through the final 20 operations. As coats are pressed and prepared for warehousing and distribution, RFID readers connected to Leadtec terminals track production and provide operator feedback in the same manner as in the rest of the plant.

## Looking Forward

With all of the improvements realized through Leadtec, JA Apparel looks forward to potential future shop floor control projects in the finishing and warehousing areas. The company is currently considering replacement of the manual rail transport system in the pressing department with more Leadtec-integrated Eton stations. In the distribution center, it is considering options to install Leadtec to manage a flexible incentive pay system similar to the one in the cutting room to track and manage order picking, bagging, and other warehousing jobs.

## Benefits

*“Made in USA has become our niche”, added Motta. “Leadtec, along with other improvements, enables us to efficiently manage the small orders while providing the high quality and fast deliveries that our U.S.-based retailer partners need in today’s challenging market.”*

## Productivity Improvements

Leveraging the handling reductions and performance feedback benefits of Leadtec throughout its operation, JA Apparel has achieved massive improvements in sewing room performance; lifting overall efficiency from 80% to over 110%. In the cutting room, the shift to individual incentives and the addition of Leadtec combined to boost productivity more than 40%.

## Cycle Time Reductions

To strengthen its fast delivery advantages, Joseph Abboud utilizes Leadtec to streamline production flow and improve consistency of production line balance. Since first installing Leadtec, order-to-shipment lead times have been reduced from 12 weeks to less than 4 for most products. Delivery of Personal Style System made-to-measure products is accomplished in just 7 to 10 days.

A key contributing factor in these impressive turn-time capabilities is the significantly leaner work-in-process (WIP) inventories in New Bedford. The production management tools in Leadtec enable production managers to maintain efficient flow with lower inventories. In most areas of the plant, Leadtec has enabled the company to reduce WIP from 16-day levels to 10. In the assembly line, where the Eton system manages single-unit flow rather than bundles, inventory levels have been reduced from 5000 units to less than 1500, which is the equivalent of less than 2 days of production. In addition to the obvious cost savings these reductions deliver, the leaner inventories allow the company to achieve far more strategic benefits through faster replenishment of goods at retail.

## Cost Savings

JA Apparel worked closely with union engineers to calculate an average 5% reduction in labor standards due to the elimination of ticket handling with Leadtec. With the addition of Eton to the coat assembly line, the joint engineering effort realized an average 12% reduction in rates due to the further reduction of operator handling. Additional labor cost savings were realized from the opportunities provided by Leadtec to reengineer specific jobs and processes.

Because Leadtec automates the payroll calculation, administrative costs are also reduced. End-of-week payroll calculation is accomplished with the click of a mouse. The system also supports electronic transfer of gross payroll data to ADP, JA Apparel's choice for net payroll services. With this level of automation, the business requires only a single employee to manage all payroll needs during peak employment levels.

## Shorter Training Times

In achieving the initial goal of the Leadtec initiative, the company reduced new operator training time by 30% (training time was reduced from 12 to nearly 8 weeks) through effective use of the new real-time performance feedback for operators. The management information provided by the system allowed supervisors, for the first time, to track the progress and review the learning curve with each trainee. Armed with this information, managers and operators could identify meaningful feedback and targets for each phase of the training.

## Improved Process Visibility

Before Leadtec, supervisors managed production flow based primarily on their visual observations. With Leadtec, they have a wealth of up-to-the-minute information on productivity, efficiency, and load balancing throughout the day. This new level of visibility and support enables more timely, better informed decisions that support the aforementioned inventory reductions, line balancing improvements, improved quality, and other production improvements.

## Enhanced Competitiveness

With the wall-to-wall best practices that Leadtec has brought to Joseph Abboud, the firm has clearly improved its competitive positioning in the fashion market.

According to Motta, *"The bottom line is that Leadtec has enabled us to continue manufacturing clothing profitably in New Bedford, Massachusetts."*



## **Leadtec**

Leadtec is a comprehensive, state-of-the-art computerized data collection, incentive payroll, and production management solution designed to capture production events in real-time or batch data collection mode. The information and visibility provided by Leadtec empowers operators to monitor and increase productivity, while also enabling managers to prevent and resolve production issues before they escalate. Leadtec benefits manufacturers through improved profitability, reduced production costs, accelerated throughput time, and improved product quality. More than 500 companies worldwide have achieved a 100% return on their Leadtec investment in 12 to 18 months.

## **Computer Generated Solutions, Inc.**

For more than twenty-seven years, CGS has enabled global enterprises, regional companies and government agencies to drive breakthrough performance through technology. With global delivery capabilities, expertise across leading platforms and deep experience in multiple industries, CGS has become the IT partner of choice for thousands of organizations worldwide.

## **JA Apparel Corp.**

Joseph Abboud is a leading men's fashion brand, with clothing and accessories that can outfit a man in style throughout his entire life. The Joseph Abboud Brand embodies sophisticated American style for modern menswear through tailored collections and unique sportswear that are crafted from the world's finest fabrics and defined by superior fit, exceptional quality and luxurious style.

## **For More Information**

For more information about CGS products and services, call 800-247-0684 or visit [www.cgsinc.com](http://www.cgsinc.com).

For more information about Leadtec solutions, call (800) 882-3675 or visit [www.leadtec.com](http://www.leadtec.com).

For more information about JA Apparel, visit [www.josephabboud.com](http://www.josephabboud.com).

