



MARKET

Custom-made bags and accessories

LOCATION

Chicago, USA

CHALLENGE

Automate and streamline the production process from pattern creation all the way through to off-loading of cut pieces

BENEFITS

Improved quality and precision of patterns and cut pieces, material savings, greater cost control, elimination of tedious and labor-intensive tasks, and reduction of production costs

LECTRA SOLUTIONS

Modaris Mode, part of the Modaris® range, DiaminoFashion Expert of the Diamino® range, Optiplan Expert from the Optiplan®, range, and TopSpin with Mosaic and Postprint® options

1154 LILL STUDIO AUTOMATES THE PRODUCTION PROCESS AND MAKES MATERIAL SAVINGS OF 30% WITH LECTRA'S INTEGRATED TECHNOLOGY OFFER



The story of 1154 LILL Studio is the classic American dream: one person with a great idea and the dedication to make it work. In 1998, unfulfilled in her job as a corporate interior designer, Jennifer Velarde started sketching and making creative handbag designs as gifts for friends and family. In 1999 she took a booth on an artisan street fair and launched her first range of bags named after her first studio apartment on 1154 West Lill Street, Chicago. The night before the fair, fearing a shortage of stock, Jennifer decided to keep her sewn bags as samples and take swatches of fabric to the fair to allow people to custom-design their own bags by choosing their own style and fabric. Thus was the LILL custom-order concept born. The street fair was a huge success and requests for home and office parties began to flood in, allowing Jen to leave her job and focus on her own, rapidly growing business full time.

Over the last ten years, LILL has gone from strength to strength and now boasts a team of 75 people in its Chicago store/headquarters, 60 independent sales representatives, and three more boutiques in Boston, Kansas City and Philadelphia as well as an online store. The company has added purses, accessories and pillows to its product range and continues to organize events such as bridal, Mother's Day and birthday parties where groups can get together and create their own products. 1154 LILL Studio's revenues hit €6 million in 2007, and the company has witnessed steady growth every year, throughout its history. It was in response to this peak and anticipation of further growth that LILL's teams started looking around for technology solutions to support the company's expansion. Looking to prepare for an increase in demand before it hit, LILL turned to Lectra for the flexibility, productivity and precision it needed to stay ahead of the game.

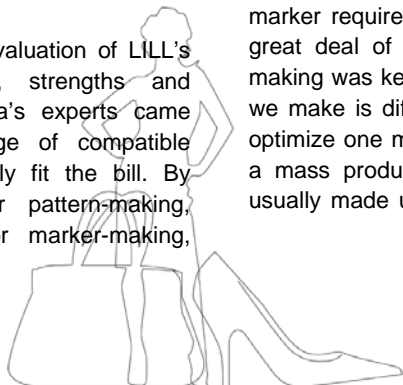


Anticipate Demand and Be Prepared—the Keys to Success

When the company was first founded, every LILL bag was created by hand. Pattern pieces were initially cut by hand and then later by die-cutters, but this level of mechanization allowed for a production of just a few 100 orders per week. However, in 2007 LILL experienced a level of demand that exceeded expectations, and they realized that their processes just could not cope with this kind of growth. “We realized that we needed to find a way to speed up our production in order to remain competitive,” said Jennifer Velarde. “We wanted to give ourselves the possibility of welcoming this kind of rapid expansion—we never wanted to have to turn an order down because we just couldn’t cope. While we were dealing with our turnover, we really wanted to unleash our full potential and make sure we were ready for the next growth spurt when it came.”

To prepare for a bright future, LILL decided they needed an integrated technology solution that was as modern and innovative as their own unique products. “We approached Lectra because I had worked with them in the past and knew they were the people to give us the kind of support you need when implementing advanced technology,” said Mike Bartnik, Manufacturing Director. “We approached Lectra and set them a challenge. We asked them to totally automate our processes—from the creation of patterns, through to marker-making, cutting, off-loading and fabric matching. We wanted to do away with a lot of tedious and labor-intensive tasks.”

After a thorough evaluation of LILL’s needs, processes, strengths and weaknesses, Lectra’s experts came up with a package of compatible solutions that totally fit the bill. By using Modaris for pattern-making, DiaminoFashion for marker-making,



TopSpin for cutting (with the Mosaic option for matching patterned fabrics and Postprint to ease the off-load process), and Optiplan for cut order planning and management, LILL would be able to automate their manufacturing process, boost productivity, unleash creativity, and improve quality.

As part of the testing process when they implemented Modaris, Lectra digitized LILL’s entire existing pattern base so that none of their creative assets were lost in the change. “We have been able to integrate our existing, favorite models into the new process,” said Bartnik. “What’s more, with Modaris, we have seen an improvement in the quality of our patterns—each piece is perfect, and we can easily create size variants of a basic bag model, scaling it up or down and reviewing its proportions and aesthetic appeal in different sizes. We can make changes on the fly and don’t need to worry about incurring costs.” LILL have also been able to use the reporting functions in Modaris, enabling them to take costing into account at a very early stage in the process. They can now use data produced in the software to more accurately estimate selling price during the prototyping phase, making sure that every style launched is profitable.

Material Savings of 30%: “Phenomenal”

When it comes to marker-making, LILL’s original business concept creates some very complex challenges. LILL creates between eight and 10 new styles every year, and because every bag custom-made, the company has some very specific marker requirements. They needed a great deal of flexibility, and marker-making was key to that. “Each marker we make is different so we can’t just optimize one marker then use that on a mass production model. A bag is usually made up of between two and

Optiplan Expert

The nerve center of the intelligent cutting room!

Optiplan is Lectra’s cut order planning and optimization solution that enables users to integrate several independent planning steps into one unique process while optimizing material consumption and increasing productivity. Optiplan gives an accurate and comprehensive display of all the costs involved in manufacturing an order. Fabric requirements are rapidly estimated for purchasing or allocation purposes. The cutting room is thus easier to organize and both fabric and labor costs can be optimized.

Jennifer Velarde

Founder and President

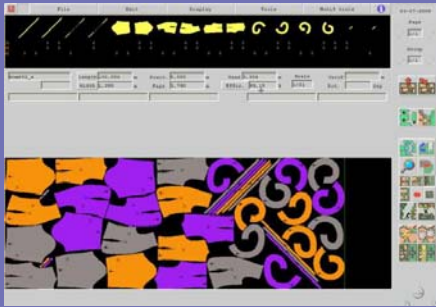
1154 LILL Studio (USA)



“We chose Lectra because it offered us a fully automated, integrated and supported solution that was developed specifically for the fashion sector. We wanted to cut out tedious and labor-intensive tasks, and Lectra’s technology has done exactly what we wanted it to do. We have reduced our costs and material consumption and ensured that LILL has sufficient production capacity to face future growth and development with confidence.”

DiaminoFashion Expert

The most powerful marker-making software on the market



Optimized marker-making for guaranteed material savings and high productivity. DiaminoFashion, Lectra's solution for interactive and automatic marker-making on plain and matched fabrics is a high-technology tool used by more than 10,000 professionals around the world. It offers state-of-the-art fabric optimization technology and functions and concepts for marker creation and nesting at a high level of productivity, based on Lectra's 35 years of experience in providing marker-making solutions. DiaminoFashion combines easy, fast and effective interactive marker-making for prototyping, costing and production and fully automatic marker-making based on the latest technologies, respecting fabric and model constraints.

four different fabrics. Each customer can choose the fabric for various parts of the bag so we rarely use very large amounts of any one fabric. We wanted to find a way to continue offering the wide range of fabrics we have while reducing material consumption and becoming more efficient."

Implementing DiaminoFashion has revolutionized LILL's marker-making activities. "Before, our cutting teams were creating our markers. We didn't

really have a system. Now, we are using Lectra's solutions to create markers that are as near-perfect as you can get. This has resulted in a direct reduction in production costs—we're making material savings of 30%. That's truly phenomenal and way beyond our expectations."

Using DiaminoFashion in conjunction with Optiplan makes for a particularly powerful automated combination. So much so that Mike Bartnik is lost for words when asked to comment on the software. "With Optiplan, there's not much I can say," he remarked. "The marker-making and cut order management process is so fully automated that we barely have anything to do—which is exactly what we wanted!"

Greater Control for LILL Means Greater Control for the Customer

LILL's custom-order bag system puts the customer in charge of almost every aspect of the chosen product. After choosing the style, the customer chooses the external fabrics, the lining, and even the placement of pattern motifs. Many of LILL's fabrics have intricate patterns and bright colors, and customers often ask for specific parts of motifs to be visible on certain parts of their bag. "We give our customers a great degree of control over their bag—that's our unique selling point," said Velarde. "For example, if a woman wants a specific pink flower from the patterned fabric she has chosen to be placed on a pocket, or to be positioned right in the middle of the bag, we'll do that for her."

Taking into account these very particular fabric requirements of their products, DiaminoFashion and Optiplan produce excellent markers that optimize consumption of raw materials. "The kind of markers it creates would be very costly and time-consuming to produce manually, but Optiplan takes care of it for us. It generates excellent, efficient markers

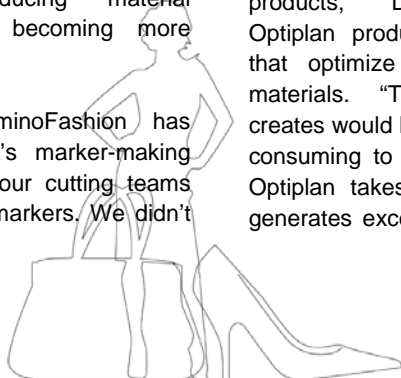
which have resulted in significant fabric savings. Without the level of precision and control offered by Lectra systems, we wouldn't be able to provide that kind of extreme personalization," added Bartnik.

To boost productivity and further streamline the cut order process, Lectra's consultants advised LILL to install the TopSpin cutter, with Mosaic and Postprint options, perfect for companies that need high levels of accuracy on small to medium-sized runs.

TopSpin is Lectra's single-ply cutter that offers both speed and flexibility for companies operating a just-in-time system of production. Before working with Lectra, LILL had been using die-cutters which yielded inconsistent results in terms of quality. "Die-cutting had a tendency to distort fabrics and we can't guarantee that each piece will be the same every time. Plus, working with die-cutters means that once a pattern is created, it can't be changed, or at least, not easily. You either have to incur costs by sending out for a new die with a piece modified or live with the pattern you already have," said Bartnik. With automated cutters, however and the winning combination of Modaris, DiaminoFashion and Optiplan, LILL can make a change to a pattern, have that modification reflected in the marker and be cutting the new piece in just a few hours. Bartnik is also impressed by the quality that automated cutters offer. "The cut is accurate, and notches and holes are perfectly positioned. We know that every cut piece will be exactly the same, day in, day out—we can really rely on that."

LILL triples its productivity

Automated cutters have also significantly increased productivity—with die cutters, LILL was able to cut around 100 orders a day, a total of about 1,000 pieces. Now, with Lectra's TopSpin equipment, LILL can



cut between 300 and 500 orders per day.

The Mosaic feature, available as an option on the TopSpin, has been specially developed for companies that work with printed fabrics. A digital camera analyzes the actual position of motifs on the cutting surface. The fabric's motif is automatically detected, its distortion is analyzed, and the piece markers and geometry are corrected in real time based on the fabric's physical characteristics. It allows printed fabrics to be nested with extraordinary precision and consistency and enables users to position even the smallest pattern pieces on very specific parts of the fabric. Thus Lectra technologies enable LILL to guarantee the high quality standards and levels of customization their customers expect, while remaining cost-effective and productive.

As for Postprint, Lectra's off-loading cut piece identification solution, "Nothing would work without it!" says Bartnik. Postprint simplifies the sorting of cut pieces and eliminates the risk of errors when it comes to piece recognition. This option prints labels displaying all required user information (text and barcodes) and positions them on each cut piece. "You have to imagine a blizzard of cut pieces coming out of the machine, each one could be for a different bag order. It's vital that we can easily and correctly identify each part and where it goes—Postprint is essential to let us do that."

Integrated solutions with outstanding support services ensure minimal downtime

A major factor in LILL's decision to choose Lectra's integrated technology solutions was the support services that accompany every Lectra project. "When we entered into this partnership, we really felt comfortable from a technical support standpoint," said Velarde. "All the people in our

cutting room have a background in fashion design or textiles—none of them are technicians or mechanics! But the system is so reliable and the support services so comprehensive that we can keep it running without any problem." The few times LILL have required telephone support from Lectra's experts, they have been completed satisfied with the response received. They are particularly pleased that since the implementation of these solutions, they have not once missed an order due to machine malfunction. "Lectra's teams are really outstanding. Not only are they always happy to help, they do so very quickly. Cooperative and positive, they help minimize our machine downtime and keep the equipment running productively," said Bartnik.

Bartnik is convinced that an integrated solution package from a single technology supplier is the only choice for companies like 1154 LILL Studio. "Lectra knows our market well and has solutions that are specifically developed with the fashion industry in mind," he said. "Having solutions that are all totally compatible with each other and knowing that we have just one number to call if we have an issue with any one of them is invaluable."

Complete Customer Satisfaction

Proving that the American dream can come true, in just ten years, 1154 LILL Studio has gone from being a small, artisanal venture to a company with a fully automated production process. Velarde is clear about the impact the decision to implement Lectra's solutions will have for the next ten years. "This technology has done exactly what we wanted it to do: reduced our costs and material consumption and ensured that LILL has sufficient production capacity to face future growth and development with confidence."



LILL's online store allows customers to choose the various fabrics that make up each bag and visualize the final product before confirming their order.

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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 the aeronautical and marine industries, wind power, personal protective equipment. Lectra serves 23,000 customers in more than 100 countries with 1,500 employees. The company is listed on Euronext Paris. For more information, please visit www.lectra.com.