VERSALIS®

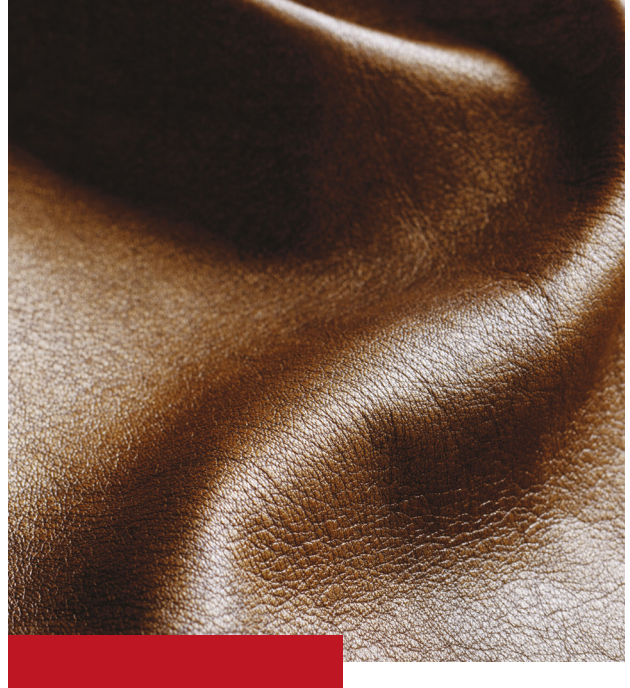## 4.0-ready digital leather cutting solution

LECTRA®

Count on greater market unpredictability

Fluctuating demand and high material costs

Today, one out of every three sofas produced in the world is made from genuine leather. Even so, **emerging trends like a newfound appreciation for affordable synthetic materials or growing interest in vegan upholstery alternatives** make it challenging to accurately predict future market demand for leather furnishings. What's more, the sustained popularity of furniture customization means manufacturing complexity will continue to increase with the expansion of upholstery and finish options.

THE NEED TO OPTIMIZE YIELD

The high cost of natural leather makes it crucial to optimize yield. Leather hides account for 60% of raw material costs to make a single piece of furniture. As competition and price pressures intensify, cost control at each stage of production is key to profitability.

FASTER MARKET TURNAROUND TIME

Consumer activity continues to move toward digital channels with ever-shorter delivery lead-times. To preserve their margins in the face of unforeseen leather supply and the increasing complexity of growing demand for customized pieces, furniture manufacturers must reduce their time to market.

ENHANCED WORKFORCE PRODUCTIVITY

The current shortage of skilled workers and rising wages require a reassessment of labor-intensive processes. Shifting to a more capital-intensive production model can enhance both worker skills and efficiency, raising workforce productivity.

INCREASED MANUFACTURING EFFICIENCY

Key to advancing the underlying goals of improved yield and reduced lead-time is the necessity of producing furniture designs without wasting materials, time or labor.

Stay competitive, no matter what the future holds

What does it take to please today's discerning furniture customers? How can I optimize cost per piece to overcome current and upcoming challenges in upholstered furniture manufacturing?

With the flexibility and reliability of a fully automated, connected and integrated digital leather-cutting solution, you can generate and leverage data to keep your operations running smoothly.

From hide digitization to offloading, Lectra's Versalis all-in-one cutting solution brings value, speed and precision to your leather cutting room. **Whatever your production type, process organization and the leather you use, the complete Versalis range will help you increase material efficiency while being sustainable, deliver consistent quality and cope with skilled labor shortages.**

Maximize your performance, keep delivery times under control and remain competitive with Versalis 4.0 ready digital leather cutting solution.

DIGITAL

What is **VERSALIS**?

Staying apace of emerging furniture trends is critical to remain competitive on today's continually changing market. That's why finding fast, efficient, cost-effective ways to satisfy the latest consumer expectations is essential.

From hide digitization to offloading, Lectra's Versalis all-in-one cutting line **brings value, speed and precision to your leather cutting room**. Combined with a full suite of furniture development, industrialization and pre-production solutions, Versalis helps you boost productivity and deliver furniture to market quickly and profitably.

When used in association with DesignConcept 2D or Formaris, you can simplify pattern-making with pre-production software applications that allow you **to control costs, minimize waste and shorten production cycles**.

INDUSTRIALIZE	PRODUCE	OPTIMIZE
FORMARIS **DESIGNCONCEPT 2D**	**VERSALIS**	**LEATHER REPORTING** **LEATHER SIMULATION**
Pattern-making software	Leather cutting	Data consolidation

Services 4.0

Your success is our priority

We provide all the support and guidance our customers need to make the most of their Lectra solutions and equipment. Our training and technical support programs were developed based on our 40 years of experience working with renowned furniture companies around the world.

With advanced services, expertise, data analysis, and comprehensive technical support, we ensure that our solutions are fully adopted and used in an optimal way to help our customers achieve their objectives, with the best possible experience.

"Poltrona Frau's relationship with Lectra is built on exchanging information and ideas to find innovative ways of complementing our manufacturing expertise with Lectra's technological know-how. The successful results give us confidence that we will continue our business and technology partnership over time."

Nicola Coropulis
CEO, Poltrona Frau

IN-DEPTH KNOWLEDGE

Digital resources and face-to-face training sessions enable you to set and accomplish your learning goals at every stage of the Versalis implementation and deployment process. Our training methodology was designed to guide you through quick wins and practical application, which helps you gain independence quickly.

CONTINUOUS INNOVATION

We give our customers immediate access to the latest functionalities of Versalis and key information to help them get familiar with the latest features quickly. Continuously create value by working with us to establish an optimal mode of operation based on best practices.

EQUIPMENT AVAILABILITY AND QUALITY

Sensors in the Versalis cutting solution help us anticipate technical issues and take pre-emptive measures remotely to minimize machine downtime. Preventive maintenance and regular audits ensure consistent cutting quality, which helps you reduce waste and cost.

EQUIPMENT PERFORMANCE ANALYSIS

Benefit from easy access to centralized data through Leather Reporting. Define and track your production Key Performance Indicators to quickly identify areas for improvement.

Bring value, speed and precision to your leather cutting room

Maximize hide yield

- **Improve leather yield up to 10%.** Automatic advanced nesting features increase material savings by up to 10% compared to a manual process

- **Reduce errors.** Augmented Reality assistance and improved ergonomics ease defects detection, nesting and offloading.

- **Lower your cost per cut part.** Cut with 0 mm between parts to reduce leather consumption

- **Reduce material wastage.** Maximized hide yield and ensured hide to cut parts traceability to be more environmentally sustainable

Boost productivity

- **Cut up to 20 hides per hour.** All-in-one cutting line, from hide digitalization to offloading, improves overall cutting room performance

- **Benefit from uninterrupted throughput.** Automated production flow standardizes operator performance

- **Generate additional production capacity.** Enhanced production capacity compared to manual cutting

- **Shorten your lead-time.** Constant throughput to take products to market faster and more efficiently

Standardize product quality

- **Precision-cut leather parts.** Advanced cutting head, vibrating cutting tool, wide range of blades and drills for perfectly cut leather parts—even for the most intricate furniture shape at 0mm buffer between parts

- **Standardize quality.** Great capability and repeatability (CPK/CMK) reaching the highest standard of the industry for the best quality standardization

- **Digitally map defects.** Up to 5 defect qualification grades recognized by the scanning system to automate leather marking

- **Ensure optimal cutting quality.** Automatic optimization of cutting parameters depending of material type

Generate and leverage data

- **Allow for greater interoperability.** Seamless connection and integration with several ERP, MES, CAD and other systems through standards protocols (RestAPI, XML files exchanges)

- **Achieve continuous improvement.** Software monitoring for continually optimized cutting processes

- **Benefit from smart service technology.** 250 embedded sensors allow predictive maintenance to keep your operations running

- **Get peace of mind with support services.** Answers are just a phone call away with worldwide remote support experts

VERSALIS® range

Choose the best Versalis configuration for your needs

FLAW IDENTIFICATION

- **Scanner:** for semi-aniline, corrected leather or leather that can be physically marked
- **Digitizer:** for aniline, semi-aniline or natural leather that cannot be physically marked

CONVEYOR

- **Mono-conveyor:** for pre-marked, corrected or semi-aniline leathers
- **Multi-conveyor:** independent modules for more versatility and flexibility

PROCESS

- **Online:** integrated production process on a single cutting line
- **Offline:** independent digitization, nesting and cutting stations for process optimization at each stage of production
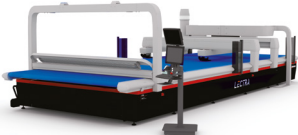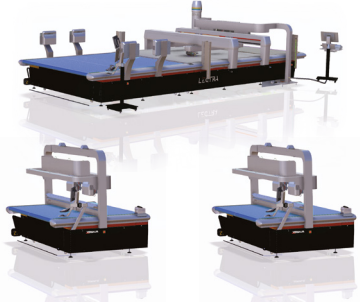
NESTING

- **Automatic nesting:** maximizes yield while minimizing cutting time
- **Manual nesting:** for high-grade leather requiring special handling
- **Interactive nesting:** Combination of the two previous methods

CUTTING HEADS

- **Single-head cutter:** for large pieces, such as those used in traditional and contemporary sofas
- **Dual-head cutter:** for medium-sized pieces, such as those used in cushions

Six different configurations to meet your individual needs

With six different configurations to choose from, Versalis meets key **performance, productivity and flexibility** needs whatever the production method, hide type and leather quality.
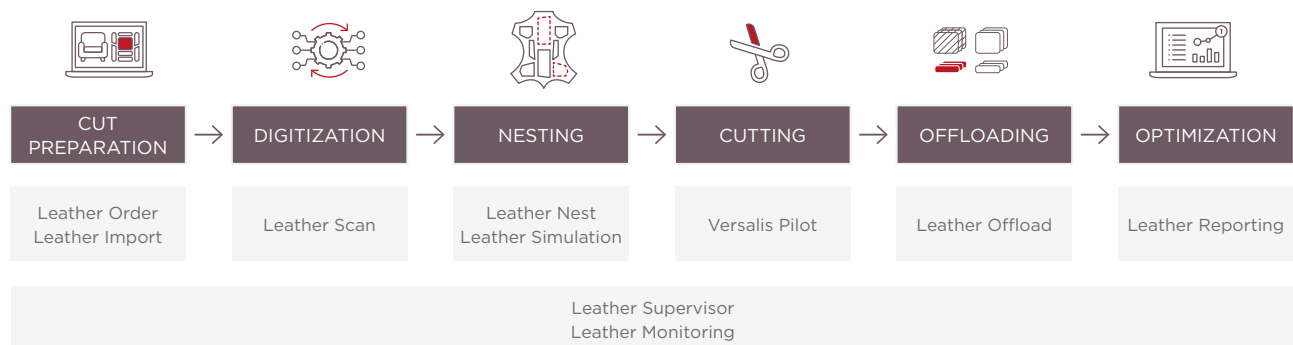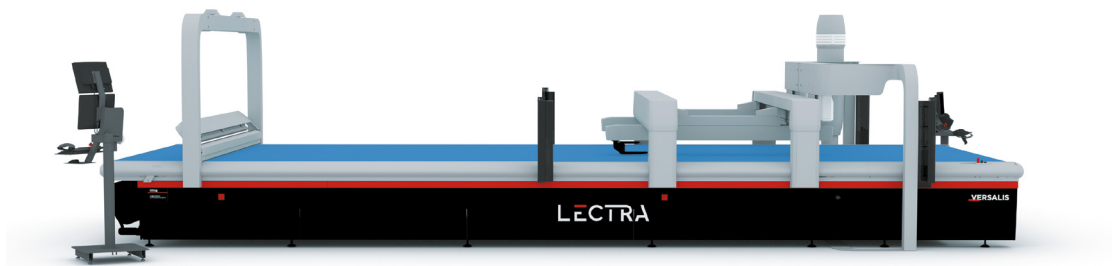
ESSENTIAL		ADVANCE		EXPERT	

ONLINE MONO-CONVEYOR WITH LEATHERSUITE		ONLINE MULTI-CONVEYOR WITH LEATHERSUITE		OFFLINE MULTI-CONVEYOR WITH LEATHERSUITE	
VERSALIS 1HS	**VERSALIS 2HS**	**VERSALIS 1HD**	**VERSALIS 2HD**	**VERSALIS 1HO + NESTING STATION + DIGIT**	**VERSALIS 2HO + NESTING STATION + DIGIT**
Single-head Versalis 1HS is perfect for cutting large corrected-leather parts at a steady pace	Dual-head Versalis 2HS offers additional maneuverability to cut medium and small corrected-leather parts	Single-head Versalis 1HD is designed for cutting large corrected- and natural-leather parts at an expedited rate	Dual-head Versalis 2HD combines faster guidance and optimized cutting movement for medium corrected- and natural-leather parts	Single-head Versalis 1HO with nesting station and digitizer separates tasks to optimize the processing of large corrected- and natural-leather cut parts	Dual-head Versalis 2HO with separate nesting and digitizing stations accelerates the complete process for large corrected- and natural-leather cut parts
SCANNER		DIGITIZER			
MONO-CONVEYOR		MULTI-CONVEYOR			
ONLINE PROCESS				OFFLINE PROCESS	
AUTOMATIC NESTING		AUTOMATIC NESTING (option: manual and interactive nesting)		AUTOMATIC, MANUAL, INTERACTIVE NESTING	
SINGLE-HEAD CUTTER	DUAL-HEAD CUTTER	SINGLE-HEAD CUTTER	DUAL-HEAD CUTTER	SINGLE-HEAD CUTTER	DUAL-HEAD CUTTER

VERSALIS. Leather Suite

Versalis and LeatherSuite combine to form the most advanced digital leather cutting solution powered by data intelligence. LeatherSuite offers enriched data for process optimization and streamlined execution, enabling manufacturers to achieve performance objectives and monitor production output.

Depending on the options selected, Versalis LeatherSuite comprises standard and optional modules:

- **Leather Order:** work order creation software

- **Leather Import:** connector to import work orders directly from an ERP

- **Leather Scan:** hide scanning and flaw identification software

- **Leather Nest:** automatic leather nesting software

- **Leather Simulation:** production simulation and nesting optimization software

- **Versalis Pilot:** automatic cutting software

- **Leather Offload:** bundling and sorting software

- **Leather Reporting:** production data analytics and system integration with RestAPI connection

- **Leather Supervisor:** end-to-end process supervision software

- **Leather Monitoring:** exchange connector for XML files and real-time production process planning

CUT PREPARATION	DIGITIZATION	NESTING	CUTTING	OFFLOADING	OPTIMIZATION
Leather Order Leather Import	Leather Scan	Leather Nest Leather Simulation	Versalis Pilot	Leather Offload	Leather Reporting

Leather Supervisor
Leather Monitoring

Consumables and maintenance kits

Improve the performance of your leather cutting room with consumables and maintenance kits developed by Lectra's R&D department to ensure uninterrupted long-term operation of your Versalis solution.
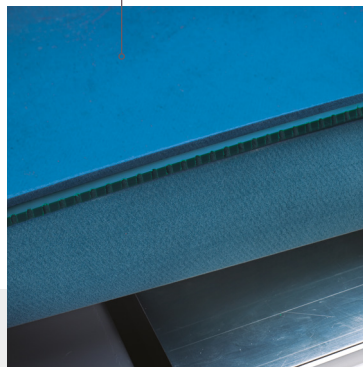
MAINTENANCE KITS

- A complete kit of all parts scheduled to be changed at each machine usage cycle
- Contains only genuine Lectra parts
- Designed to guarantee system performance

CONVEYOR BELT

- Precision of movement: Lectra conveyor belt is specially designed to hold the leather firmly in place
- Blue color belt for better scanning accuracy
- Automatic vacuum

MARKING PENS AND LABELS

- Marking pens to identify defects and ease scanner detection
- Labels to correct hide position for precise cutting

BLADES

- High Speed Blade (HSB), for thick leather at high speed
- High Quality Blade (HQB), for complex shapes
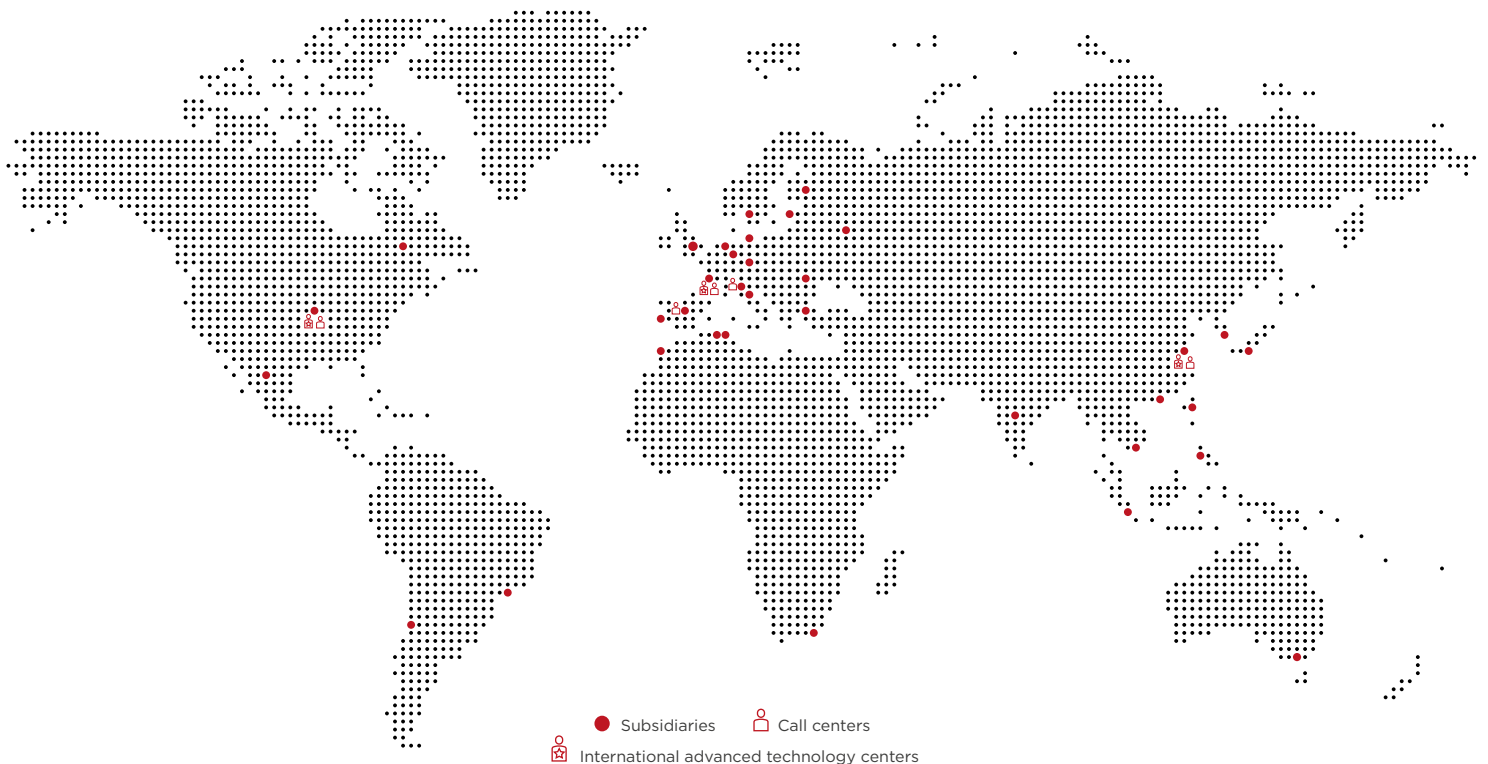- High Quality Blade 15 (HQB 15), for complex shapes on soft leather up to 2mm

DRILLS AND NEEDLES

- Wide range of drills 1mm to 6mm
- Perfect hole quality
- Penetration of any type of material
- Automatic vacuum

LECTRA

Drawing on over 40 years of expertise, Lectra helps furniture companies around the world improve their performance and productivity. Lectra provides a comprehensive range of software, equipment and professional services for leather furniture manufacturing. By harnessing the power of data intelligence, Lectra's experts can optimize the complete production process to boost efficiency and ensure reliability in the cutting room.

Empowering customers through industrial intelligence

● Subsidiaries   Call centers
International advanced technology centers

About Lectra
For companies that breathe life into our wardrobes, car interiors, furniture and more, Lectra is crafting the premium technologies that facilitate the digital transformation of their industry. Lectra's offer empowers brands and manufacturers from design to production, providing them with the market respect and peace of mind they deserve.

For more information, please visit **lectra.com**

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