

# OPTITEX

## BUILT FOR THE ROAD AHEAD

How robust digital design, marker & nesting tools accelerate efficiency in the automotive seating & interior industry



### AT A GLANCE

**COMPANY:** FAURECIA

**LOCATION:** NANTERRE, FRANCE

**www.faurecia.com**

A leading global provider of automotive technology solutions, Faurecia serves the world's most prominent brands, including Volkswagen Group, PSA Peugeot Citroën, Renault-Nissan, Ford, General Motors, BMW, and Daimler. Employing close to 9,000 engineers and technicians worldwide, the company manages over 240 production sites and 37 R&D centers in 37 countries around the globe, delivering superior quality vehicle seating, electronics clean mobility solutions and interior systems.

### "AT THE STARTING GATE" - THE MAKINGS OF A WORLD-CLASS LEADER

Faurecia is the world's 6th largest international automotive parts manufacturer, and ranks #1 in vehicle interiors production, and emission reduction technology. Today, one in every three cars is equipped by Faurecia, whose expertise include the design and manufacture of vehicle seating, electronics, exhaust systems and interior systems – dashboards, center consoles, door panels, acoustic modules, and other decorative trims, including aluminum, and wood.

Faurecia has four strategic business units, Faurecia Seating, 39% of its main activity, Faurecia Interiors, Faurecia Clarion Electronics, and Faurecia Clean Mobility. Since 2015, guided by Industry 4.0 initiatives, the company emerged as an industry pioneer in digital transformation. Faurecia's digital operations have entered mass deployment mode, with their breakthrough collaborative robots, 'cobots' – Autonomous Guided Vehicles (AGVs), digital dashboards linked to real-time information, helping to accelerate decision-making, improve quality, and ensure smooth running of production lines. In 2019, Faurecia Group's revenues were nearly € 18B, with close to 50% of sales generated in markets outside the EU.



### SERGIO CASTRO / PROCESSING ENGINEER AND ACQUISITION MANUFACTURING LEADER

*"Optitex was the only vendor to offer a high-performance, 100% automatic Marker solution that came in first place in fabric consumption. We wanted a powerful and reliable product that would save on man hours, and hands down, it was Optitex Marker."*



## MOVING CREATIVITY, PRECISION AND PRODUCTION – INTO THE FAST LANE

For Faurecia, developing a new generation of standardized seat frames now used by leading automobile manufacturers the world over, was no easy feat. Luxury brands trust Faurecia to deliver a winning combination of superior seating comfort and new materials, matched with autonomous technologies. But with fierce competition and increased customer demands, Faurecia had to hone their digital expertise, and consistently enhance their production workflows. “In the automotive industry, time waits for no one,” said Jean Francois Lapetite, Manufacturing & Engineering Director at Faurecia. “We work around the clock, to make our automotive seating better, safer, and smarter, but a successful process starts with precision design and cutting of fabrics, first.”

Achieving high fabric efficiency is key in the automotive interiors and seating industry, saving valuable time, costly fabrics, and reducing waste. Faurecia understood the many benefits of digital design software, and over a decade ago, implemented Optitex (PDS) 2D, an advanced patternmaking solution to create pieces from scratch, and edit and finalize highly-accurate, fully functional digital patterns with powerful editing tools.



“PDS 2D enabled our teams to dramatically speed up the design process, create digital patterns, and eliminate hundreds of manual steps along the way. Optitex gives our technical designers the tools they need to create exceptional seating systems that are stylish, comfortable and safe, all with a few simple clicks,” said Lapetite. “With Optitex, we save time, resources, and fabric usage. More important, we also reduce material waste, in keeping with Faurecia’s mission to lower the global footprint, and consistently support environmentally-friendly and sustainable processes.”

## HOW OPTITEX “MADE ITS MARK” AT FAURECIA

To better plan and optimize fabric use, Optitex PDS 2D was complemented by Optitex Marker, an innovative nesting tool, replacing Faurecia’s current solution. The decision to replace their Marker tool was prompted by Faurecia’s review and assessment of its hardware installations, specifically low-level hardware that was deemed inefficient. It was important for Faurecia management to understand the critical effects of inadequate hardware on its software design applications. Once Faurecia replaced their legacy computers with faster, more robust models, they witnessed moderate improvement in their fabric design software.



“We still weren’t achieving the quality and precision we wanted,” said Sergio Castro, Processing Engineer and Acquisition Manufacturing Leader at Faurecia. “Following a series of benchmark tests with Optitex Marker and two other software vendors, even under the best possible conditions, now running on new high-level hardware, Optitex Marker consistently delivered accurate results in record time, every time!” Castro added, “Optitex was the only vendor to offer a high-performing, 100% automatic marker solution that outranked the competition in fabric consumption. We wanted a powerful and reliable product that would save on man hours, and hands down, it was Optitex Marker.” Without hesitation, Faurecia decided to implement Optitex Marker at all of their production facilities, with the latest Marker module that includes Optitex valued-added nesting engine, Nest ++PRO.

Today, Faurecia teams around the world benefit from Optitex Marker. The Marker tool streamlines workflows, saves valuable time by aggregating multiple PDS files for marking and nesting, and increases productivity by running multiple nesting processes. Delivering significantly greater efficiency than traditional processes, Optitex Marker, now combined with Nest ++PRO, enables Faurecia



engineers to define Marker orders, and place and manipulate pieces. Powered by an advanced nesting algorithm and optimal use of multiple processor cores, Optitex's automated nesting tools place pieces intelligently and efficiently on the Marker table. Easily applied, nesting constraints manage the marker layout, such as piece order and orientation. The process is completed by generating customized reports to determine material consumption and cost analysis.

board. Optitex is now the standard in-house solution for the team at Faurecia, with plans to implement Optitex's newest version at all of their global sites as quickly as possible.

"It's not just the software," added Lapetite, in closing, "It's Optitex's unmatched customer service and support team, always responsive, quick to answer our questions, and work with us to continuously improve our workflows. With Optitex, not only have we ramped up our efficiency and productivity today, we know that we have a trusted long-term partner, tomorrow. That's not just good business – that's great business!"



**JEAN FRANCOIS LAPETITE / MANUFACTURING & ENGINEERING DIRECTOR**

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**BECAUSE SO MUCH IS RIDING ON SUCCESS**

When it comes to driving innovation forward, no one does it better, safer, or faster than Faurecia. As a global leader in automotive seating system design and manufacturing, material consumption and efficiency have put Faurecia in the driver's seat – every time. "Our decision to partner with Optitex was because of their smooth and seamless integration into our design and development processes, and more important, the software's compatibility with all cutting machine manufacturers," added Sergio Ribeiro, Manufacturing Engineer at Faurecia. "We were able to quickly and easily integrate Optitex Marker with the various cutting machines at our sites around the world, and deliver quality output. With Optitex, we knew we had a winning solution from the start."

Today, after upgrading to the latest Optitex version, Faurecia reports significant improvements in overall system efficiency and productivity, with even more measurable fabric savings across the



**ABOUT OPTITEX**

Optitex is a global software provider of integrated 2D-3D computer-aided design (CAD) solutions for fashion & apparel, automotive, upholstery and industrial fabrics. Our solutions digitally streamline design, development and production throughout the supply chain, enabling efficient workflows and quick response to market demands. Optitex offer brands, retailers and manufacturers a one-vendor solution for delivering high-quality products on demand and on budget. Backed by over three decades of experience and a growing base of 30,000 users, our innovative solutions are highly accurate, sustainable and cost-effective. To learn more about Optitex, visit [www.optitex.com](http://www.optitex.com).