

# CASE STUDY

### TRANSFORMING AUTOMOTIVE ASSEMBLY: FORVIA FAURECIA'S JOURNEY WITH THE DESOUTTER ECOSYSTEM

# HIGHLIGHTS

### Industry

Automotive assembly - Tiers

## Country

International

## Challenges

- Quicker market churn
- Increased competition
- ⊙ Skills gaps
- Stringent quality and safety targets

## Products

- CONNECT
- ⊙ nexonar
- EABS
- Virtual Cable
- TU Essential
- EFBC
- DeMeter
- RAPID

### Solutions

Desoutter ECOSYSTEM

#### Background

aurecia, a FORVIA Group company, is a Tier 1 supplier at the forefront of automotive seating manufacture. Supplying its products to many premium automotive OEMs. The group has 257 sites across 33 countries and employs more than 111,000 people.

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faurecia

Desoutter has been a preferred supplier of automated assembly solutions to the group for several years. The relationship began with Desoutter helping FORVIA Faurecia to implement:

- wireless tooling in 2017
- nexonar RTLS in 2018 (real time location systems)
- and more recently, robot tooling and DeMeter data analytics

Over time, the two companies have developed a partnership whereby Desoutter not only supports with new assembly technology, but also contributes its expertise and resources: working seamlessly alongside FORVIA Faurecia's internal specialists to develop the versatility, flexibility and scalability the company needs to succeed in a rapidly changing market.



## THE CHALLENGE

uring the last five years, FORVIA Faurecia has faced several challenges to its position as a market leader that will be familiar to many businesses:

Constant changes due to quicker market churn

Increased competition driving a need for continuous investment in technology

Concerns about skills gaps and workforce retention

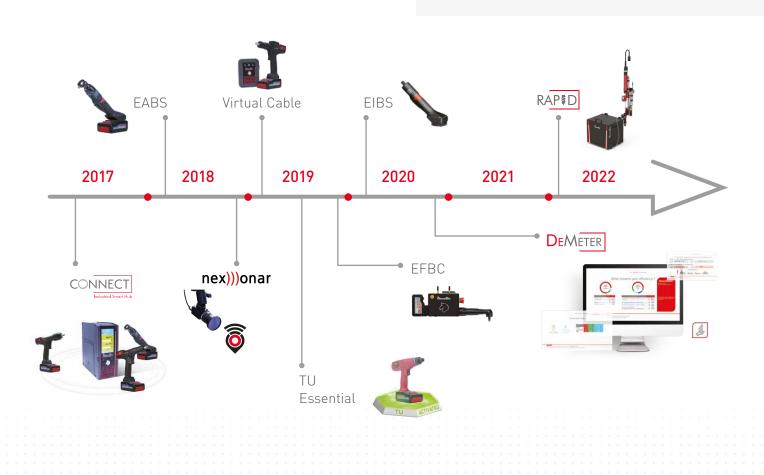
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Demands to meet ever more stringent quality and safety criteria

To continue to grow, FORVIA Faurecia needed to develop a better way of responding to the commercial challenges it faced. The group needed scalable solutions that they could adopt and implement at **their own pace**. These solutions needed to be **universal and simple** to implement, so they could be adopted across all their locations without the need for extensive retraining. They also needed to be **flexible and future-proof**, giving confidence that the company could continue to innovate now and in the future.

> Just because you can hit targets today, doesn't mean you will hit them tomorrow."

#### Joel Dias, Operations Specialist -**FORVIA** Faurecia





# THE SOLUTION

#### A collaborative solution

ECOSYSTEM from Desoutter delivered the approach that FORVIA Faurecia was looking for. ECOSYSTEM is based on collaborative working between Desoutter and experts within the customer's own company. It connects people as well as technology to deliver the right solution at the right time.

"Being a preferred supplier means adding value for the customer," says Yohan Verdon, Vice President of Desoutter Tools. "With ECOSYSTEM we are not selling products; we're bringing ideas and finding solutions."



The ECOSYSTEM approach brings people together who may not previously have been involved in decision-making. Now customer representatives from (for example) IT, Quality and Maintenance alongside those from Production and Automation can foster new ideas and drive innovation. It means that all **the aspects of a new solution can be explored in advance**, so there are no unexpected hurdles to overcome during execution. It can also reduce time to implementation by encouraging early buy-in from all the interested parties.

#### An open solution

This inclusive way of working is supported by Desoutter's use of open solution in its automation and assembly products, which allows customers to use the best assembly solutions for their needs regardless of the manufacturer. Compatibility between hardware and software products further supports quicker adoption and greater versatility, **making it easy to replicate or transfer assembly solutions from one location to another**.

With ECOSYSTEM we are not selling products; we're bringing ideas and finding solutions."

Yohan Verdon, Vice President -Desoutter Tools

## BENEFITS

- Desoutter ECOSYSTEM delivers the following benefits:
  - Collaborative working between internal specialists and Desoutter specialists
  - Multi-team approach encourages buy-in at early stages
  - Quicker adoption of new technologies and solutions
  - Universal solutions that are easily replicated across the business
  - Standardised documentation



# ECOSYSTEM

ne example of ECOSYSTEM in action is the proposal Desoutter made to improve seat assembly production using a digital approach. At the time, FORVIA Faurecia was using a basic controller per corded fastening tool and was experiencing a **high incidence of red alerts**.



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Desoutter ECOSYSTEM solution it would reduce capex by 10%

They invited Desoutter to one of their internal technical meetings, where several customer plant managers were present, to propose a solution. Having listened to the issues they were facing, Desoutter suggested they should consider an assembly solution based on **CONNECT, which can** 

## pair with up to 20 cordless battery tools from a single controller.

The customer compared the Desoutter solution with its existing assembly line and calculated that it would:

- Reduce capex by 10%
- Halve installation time
- Deliver a rebalancing time of one hour per tool
- Dramatically improve uptime

The CONNECT system also supported a **secure fastening sequence to decrease errors** and offered **data storage for full traceability**.

The partnership and trust between the two companies, meant that FORVIA Faurecia was able to **reach a decision more quickly, speeding up implementation** and **improving agility**.

## CONTINUOUS IMPROVEMENT

aving embraced the benefits of Desoutter's advice regarding tooling solutions, FORVIA Faurecia is now focusing on continuous improvement across its global operations.

On Desoutter's recommendation, they are now trialling **DeMeter: a platform that will present the performance data from tightening activities** in all their global assembly plants in dashboard format. This visual guide makes it easier to see where



there is production capacity or spot pinch points, for example. It also makes them more responsive to tool breakdowns or operator error.



BoostLab data analysis has already delivered benefits for FORVIA Faurecia when it realized that it was losing time each day because the manufacturing process was not being respected. Desoutter customised the dashboard to demonstrate to people how this deviation from due process was affecting efficiency. Educating their workforce about the impacts using simple, compelling data has eliminated this issue for FORVIA Faurecia.



The DeMeter platform uses robust analytics to process and transform raw data into meaningful results. It offers FORVIA Faurecia a number of ways to interact with their data to derive optimum value and gain a competitive edge.

A dashboard updated in real time, presents key performance indicators (KPIs) in a visual, easily digestible format. The Dashboard can be customised for different functions such as quality, maintenance and engineering to deliver tailored, relevant results at a glance.

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DeMeter notifications show FORVIA Faurecia

current production status and can be set to alert users to key issues, such as an unexpected rise in NOK indications. These notifications can be sent to a workstation or smartphone.

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The third feature, **BoostLab, provides analysis of** production trends and offers recommendations. which can be used to improve efficiency, focus on guality and drive down cost over time.

Desoutter keeps us up-to-date " with automatic assembly developments and offers suggestions on where and how new solutions can benefit our business."

#### Joel Dias, Operations Specialist -FORVIA Faurecia

# NEXT STEPS



he collaboration and trust that ECOSYSTEM fosters between FORVIA Faurecia and Desoutter continues to grow. The automation solutions suggested by Desoutter are based on their assembly expertise and in-depth knowledge of their customer's operations. New solutions are still subject to rigorous trial and validation, but the process to adoption is far more agile and saves a lot of time compared to the traditional way of spotting an issue and then developing a solution.

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ECOSYSTEM gives FORVIA Faurecia the framework to:

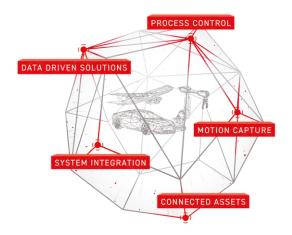
 Continue deployment of wireless seat assembly solutions

- Meet regularly to discuss automation and digitalisation trends
- Identify disruptive solutions that will benefit their operations by improving competitiveness and efficiency

Desoutter ECOSYSTEM gives us access to human expertise and delivers the versatility, flexibility and scalability that our business needs to grow."

> Joel Dias, Operations Specialist -FORVIA Faurecia

#### Desoutter ec@system



Thanks to Desoutter ECOSYSTEM, FORVIA Faurecia is spending less time firefighting production issues and more time focusing on their core business of developing innovative seat assembly solutions. They are also developing a much better understanding of what they can achieve using automated assembly.

One such example is Faurecia's **new modular and sustainable seat**, which makes it easy to exchange or replace parts such as covers and cushions, or upgrade with innovative new features like massage, lumbar support, sensing, immersive sound experience and other comfort modules over the seat's lifetime. The new seat design drastically reduces the number of components used in a regular seat from around 120 components to 10 modules which can be assembled in a wide variety of configurations close to the car manufacturer.



Speak to our team to discuss your options

CONTACT US

