

# Grupo Antolin

# **CASE STUDY**

Assembly stations

#### THE CUSTOMER

Grupo Antolin is one of the largest companies in the development, design and manufacture of **automotive interiors** (overhead, doors, seating, lighting, cockpits and interior trim)



#### **REQUIREMENTS**

Guided assembly with parts verification and traceability for a new Jaguar Instrument Panel and Console facility

### **RESULTS**

- Assembly stations built to meet demanding production targets of 4,000 assemblies per week
- Top quality assembly processes
- Full traceability of parts using the Orion<sup>™</sup> database

#### THE CHALLENGE

The project involved designing, building and installing **60+ Assembly Stations for a new Instrument Panel facility** and **12 Assembly Stations for a new Console facility**. These assemblies are used in the production of the following Jaguar models: X760 - XE, X260 - XF and X761 - F-Pace.



Assembly Stations at Antolin Interiors

#### **BACKGROUND**

Grupo Antolin has sales of more than €4 billion and a workforce of around 28,000.

Sorion has worked with Grupo Antolin (previously Magna Interiors) supplying build control facilities and electrical test systems since the late 1990s starting with R50 (the first of the new generation BMW Minis).

The project was won by competitive tender, based upon the proposal Sorion submitted and the minimised risk of working with a company who has a proven track record.

The Instrument Panels are are built and dispatched in sequence from one production line to match the Jaguar Land Rover (JLR) build at two plants. This sequence had to be replicated through to all sub-assembly lines, including the Instrument Panel and Console Facilities.

In order to achieve the correct sequence, JLR supply the specification of each vehicle four days in advance of production and the Target Launch Sequence (TLS) is allocated at an early build stage.

## THE SOLUTION

Sorion designed a solution that accesses the Target Launch Sequence (TLS) from the JLR portal and retrieves the exact specification of each Instrument Panel and Console. Throughout the manufacturing process there is a transfer of data between this build control system and the customer's SAP system.

The build control system is used to ensure that sub-assemblies are prepared in advance and supplied to the production line in sequence. At the start of the facility a Launch Station provides the first set of instructions and an Order label. At subsequent stations the Order barcode is scanned and the Orion™ history database is checked to ensure that the previous station process has been completed successfully, providing a no faults forward capability. The operator is then presented with the list of required components and any instructions with written/ pictorial prompts. The instructions may include barcode scanning to ensure correct parts are selected and to record unique serial numbers, performing of fixings with data feed (DC tool) or manual feedback.

The guided assembly is controlled by **Sorion's Sextans software** with the production output of 4,000 assemblies per week. At the end of each assembly facility the Instrument Panel and Console are transported to one of the **Sorion electrical test stations**. (Please see our separate case study on the electrical test station element of the project). For traceability purposes, production information, such as serial numbers and tooling results are communicated back to our **Orion™ database** which, via a web browser, allows for bespoke quality assurance and performance reports to be produced.

Through careful project planning and control we enabled our customer to meet their early build phases by staged installation and capability upgrades as information became available for process validation.

#### **ABOUT SORION**

Founded in 1990 and with equipment installed and operated by major OEMs and Tier 1 suppliers around the globe, Sorion Electronics has an established reputation for innovation, quality, and reliability.

#### Your Partner for:

- Guided Assembly Process Control
- End of Line Test Systems
- Autonomous Mobile Robot Systems
- Ruggedised Electrical Connectors and Harnesses
- Quality and Traceability Reporting
- Electronic Product Design and Development

#### THE SORION SOLUTION



Sextans guides the assembly process



Jaguar Cockpit Station



**End of Line Test Stations** 



Orion<sup>™</sup> Traceability and Reporting



