Jifeng Automotive Interior

CASE STUDY

End of line test equipment for rear armrest

THE CUSTOMER

Jifeng Automotive Interior is a supplier of premium quality headrests and central armrests to automotive manufacturers around the world

REQUIREMENTS

To design, manufacture and supply a bespoke test unit capable of testing a rear armrest

RESULTS

- Reliable test equipment based on established Sorion technologies
- Optimised, fully automated test process to ensure the shortest cycle time
- Bespoke quality assurance and performance reports produced

DISCOVER MORE

Watch the video at www.sorion-group.com/case-studies/jifeng

THE CHALLENGE

Sorion were tasked to design, manufacture and supply a bespoke test unit capable of **testing two variants of the new Range Rover rear armrest.**

The equipment was to verify:

- The functionality of the armrest's heater mat, movement mechanism and the motors employed
- That all accessories were connected correctly

Overall traceability was also part of the brief.

The scope of delivery given to the Sorion team involved project management, hardware & software design, cabinet manufacture, site installation, commissioning, start-up support and training.

Self contained test equipment built for Jifeng

THE APPROACH

Sorion has many years of experience in the development of Electrical Test Systems, with hundreds of systems in operation around the world.

The reliability of Sorion's equipment and the ability to manage the complex requirements of different end of line tests enables us to become the supplier of choice for leading manufacturers.

Working closely with the Jifeng team from the planning phase through to completion, we have built a **bespoke, line integrated end of line test unit based on established Sorion technologies**. The test system mechanics have been designed to achieve the best performance in terms of reliability, small space requirements and speed, giving the fastest cycle time possible.

THE SOLUTION

The Jifeng equipment was made up of a **standard Sorion Electrical Test System connected to a bespoke fixture** in a soundproof enclosure.

The test rig was designed to run through the various individual checks with as few operator interactions as possible.

The armrest and headrest motors are actuated in both directions and the performance is measured including maximum and average motor current, distance travelled and time taken to determine that the motors are functioning correctly and the armrest & headrest move throughout their intended range at the correct speed.

During these tests, the signals from microphones are enabled so the operator can assess the sound of the movement using headphones and will respond with an OK / NOK verdict.

The functionality of the armrest switch illumination is tested automatically by the test rig by switching the illumination on and measuring the current drawn.

The tester is configured from a central editing system, using test scripts to interpret data recipes from configuration tables. All scripts were developed in English and the operator prompts were translated to the end user language.

Sorion's **Sextans software manages the test process** and guides the operator step by step through connecting the armrest and performing the test.

A pass or fail label is generated including the armrest ID and date and time of the test.

All results are stored in **Orion™**, our powerful web based database, allowing for bespoke **quality assurance and performance reports** to be produced.

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:

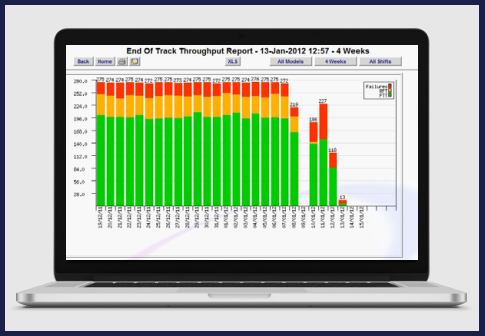
- Guided Assembly Process Control
- End of Line Test Systems
- Autonomous Mobile Robot Systems
- Ruggedised Electrical Connectors & Harnesses
- Quality and Traceability Reporting
- Electronic Product Design and Development

THE SORION SOLUTION

Test system installed at Jifeng

Sextans controls the test process

The operator assesses the sound of the movement



Orion™ Traceability and Reporting

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