

# ELECTRICAL TEST SYSTEMS

Bespoke end-of-line test equipment



#### **FEATURES**

Tailor-made test systems

Highly flexible

Fast, accurate tests

Central management and distribution

## **BENEFITS**



Equipment designed for true 24/7 operation



Optimised, fully automated test systems



Data storage for post-test analysis and statistics

#### **APPLICATIONS**

Testing of components

EOL testing of sub-assemblies

EOL testing of complete products

Quality assurance

Sorion has many years of experience in the development of Electrical Test Systems that are used in the testing of automotive sub-assemblies and non-automotive products.

With over 100 systems in operation around the world, Sorion test equipment has a proven track record of flexibility coupled with reliability in the tough 24/7 manufacturing environment.

#### Sorion Electrical Test Systems are currently used on:

- Automotive and Commercial Seating
- Aircraft Seats
- Vehicle Fascias and Cockpits
- Robot Vacuum Cleaners
- Vehicle Centre Consoles
- HVAC Modules and Assemblies
- Switch Packs
- Doors and Trim Panels



Cockpit test stations

## **TEST SYSTEM MECHANICS**

Bench mechanics are designed to achieve the best performance in terms of reliability, small space requirements and speed, giving the fastest cycle time possible.

## **AUTOMATION AND CONTROL**

Sorion's test systems are powered by Sextans-RT, which controls the test run, data acquisition and result management.

#### SYSTEM INTEGRATION AND SUPPORT

Our customers benefit from Sorion's professional service throughout: project management, hardware & software design, manufacture, site installation, commissioning, support and training.

# **ELECTRICAL TEST FUNCTIONS**

- Digital Inputs and Outputs for direct control and feedback
- Analogue Inputs and Outputs for direct control and feedback
- Controllable supply voltage and current measurements
- Controller Area Network (CAN) for diagnostics and control via control units
- Local Interconnect Network (LIN) for control of intelligent components
- Servo and Stepper Motor Control
- Counter and Frequency Measurements and FFT Analysis

## **INTEGRATED FIXTURES**

Sorion offers customised fixturing solutions to ensure a fixed environment in which tests are run so that results are repeatable.

Test fixtures can be either automatic or manual in operation to suit the application and can incorporate the following:

- Location, measurements and gauging functions
- Poka Yoke tools to ensure correct part alignment/fitment
- Integration of barcode scanners and RFID readers
- Electrical / Mechanical systems providing interface to the unit being tested.

All fixtures are designed in 3D CAD using models supplied to ensure correct fit and operation in the virtual space prior to machining parts.

#### **INTEGRATION**

The test process is fully controlled by Sextans-RT software with all results being forwarded to an Orion<sup>™</sup> database to provide traceability of all processes

Data is seamlessly transferred to our traceability database Orion<sup>™</sup> to provide **quality assurance and performance statistics** geared to manufacturing requirements.



Sextans-RT



Orion<sup>TM</sup>

#### THE SORION SOLUTION



Automotive cockpit end of line test stystem



Robotic vacuum cleaner test and calibration



Automotive seat electrical test



Vehicle air distribution unit (ADU) end-of-line test



## **Sorion Electronics Ltd**

