

# **CASE STUDY**

Pick to light, guided assembly and EOL testing

#### THE CUSTOMER

**KAB Seating** specialises in the manufacture and supply of practical work seats for the commercial, construction, agricultural, industrial, mining, coach and mobility sectors.

# KAB//Seating

#### **REQUIREMENTS**

Operator guidance for error free parts kitting, assembly and electrical testing of seats on the customer's Genesis production line

#### **RESULTS**

- Efficiency Easy to follow operator guidance simplifies processes, expedites build times
- Error reduction
- Longevity The solid design of the Sorion components ensures many years of reliable performance

## **DISCOVER MORE**

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



#### THE CHALLENGE

Sorion were tasked with the design and supply of **assembly process control & electrical test equipment** for 3 kitting stations, 20 process stations and 3 electrical test stations on their new Genesis production line.

The equipment had to be designed to minimise errors and improve productivity on the new production line with rigorous quality standards and demanding production targets.

Overall traceability of the assembled product was also part of the brief.



Kitting stations with Pick-to-Light at KAB Seating

## THE SOLUTION

Following an in-depth market consultation, KAB Seating concluded that Sorion was the best supplier to move forward with based on previous good experience of working with the company.

The parts kitting process is visually managed by Pick-to-Light colour coded system, integrated into the kitting stations with a capacity of 336 bins. The system guides the operator to retrieve the right components and quantities at the right time, maximising efficiency, while being flexible enough to adapt to constant changes in production systems.

The **assembly process** is designed to be repeatable at the highest standard with built-in error proofing techniques at each stage of the process – only quality products passed forward.

Each station is controlled by **Sextans** software, running on a touch screen PC with visual prompts for the operator to precisely follow each step of the build sequence.

If there is any deviation from the specification the system will simply not let the seat pass forward.

Once the assembly is complete, the seat is fed via the conveyor system to the **end of line inspection stations** for full seat functionality tests to be undertaken.

Photographs are taken of each completed seat and all build communicated back to our **Orion™ database** which, via a web browser, allows for bespoke quality assurance and performance reports to be produced.

The analysis and reporting functions of Orion<sup>™</sup> allow location and assembly based views of the stored data. The system shows latest and all results for a specific assembly, the most common failures by station / zone and provides parameter access to examine the historic trend of value data (e.g. DC tooling fastening torque).



The Genesis production line

#### **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



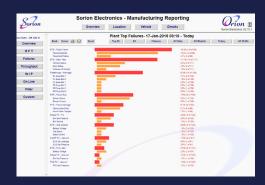
Pick-to-light modules



Assembly station



End of line test



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



# **Sorion Electronics Ltd**

