

# EQUIPMENT MONITORING AND AVAILABILITY

**Orion EMA** 



# FEATURES

Overview reporting and in-depth analysis accessible via web

Flags up urgent problems for immediate action

Captures vital data for analysis including uptime, downtime, rejects and scheduled stoppages

### BENEFITS

Greater visibility of production line performance

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Improves resource utilisation

Highlights the principle causes of inefficiency

# APPLICATIONS

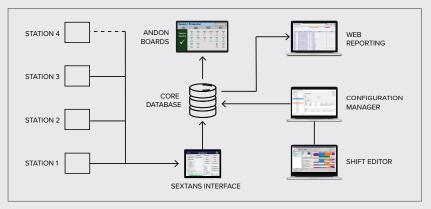
Equipment monitoring

OEE (Overall Equipment Effectiveness) reporting

Real-time visualisation of machine status and production efficiency

Orion EMA provides centralised monitoring, availability and event tracking that allows Andon display and web based reporting of production line performance, including:

- Current Status
- Equipment Availability & OEE (Overall Equipment Effectiveness)
- Downtime Cause Analysis



Orion EMA system components

Visibility of **real-time performance metrics** and **drill-down analytics** empowers manufacturers with actionable information to reduce equipment downtime and increase operating efficiency and profitability.

Running with a Sextans installation Orion EMA allows for the centralised capture of station performance and deployment of cycle time or shift targets.

## SYSTEM COMPONENTS

### CORE DATABASE

The back-end database provides data storage, configuration and import processing. It collects data from each station and machine operator for the entire production floor.

### WEB REPORTING

The collected data is integrated into a comprehensive analytics and reporting tool with a similar look and feel to Sorion's Orion Quality and Traceability database that customers are already familiar with.

Reports include:

- Station status overview
- Events report
- Availability

## ANDON DISPLAY

Andon boards allow **real-time visualisation** of production status and events. Simple colour-coding highlights possible issues and provides an at-a-glance indication of station performance against Parts Goal or OEE metrics.

## DATA MANAGEMENT TOOL

#### Orion EMA systems are managed centrally.

The data management tool is used for initial setup and ongoing Takt/OEE value adjustment on a station by station basis.

It allows configuring the following:

- Database connection
- Line Rate / Shift Targets / Cycle Time
- Location Data & Rate Adjustments
- Shifts
- Failures & Causes
- Scheduled Jobs & Global Config Data

## SEXTANS INTERFACE

The data interface from Sextans to the database enables the seamless transfer of Takt and Andon data to Orion-EMA. It also allows for operators to add human context to machine data (assign cause data to failures and enter additional information).



Initial event selection list (multiple select)



Cause assignment

# **ABOUT SORION**

With over 32 years of industry experience, Sorion designs and manufactures bespoke guided assembly, collaborative robotics and end of line test systems to a range of industry sectors: automotive, aerospace, warehousing and manufacturing.

## 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



Station status overview

87		Orion E	IMA - P	roductio	n Rep	orting						$\mathcal{O}$	EMA
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SORDEE WLD4 SORDEE ASY1													

#### Equipment availability reporting



### Events / Cause report

System 1	09:49:02						
171		229		0.7	Shift Taroet		
System Healthy	<b>TS001</b> 74 46 100.0%	TS002 74 46 100.0%	<b>TS003A</b> 74 46 87.0%	<b>TS004A</b> 74 46 87.0%	<b>TS005</b> 74 46 97.8%	TS006 74 45 64.4%	
	TS007 74 45 100.0%	TS008 74 41 85.4%	<b>TS009</b> 74 41 85.4%	TS010 74 32 90.6%	TS011 74 39 94.9%	<b>TS012</b> 74 39 94.9%	
V	TS013 74 39 94.9%	TS014 74 39 94.9%			DS.1 337 229 70.7%	DS.2 337 127 100.0%	

Andon screen - colour coded to highlight possible issues



Sorion Electronics Ltd Magreal Industrial Estate

Magreal Industrial Estate Freeth Street, Ladywood Birmingham, B16 0QZ Tel: **0121 454 8966** Email: sales@sorion.co.uk www.**sorion**.co.uk

