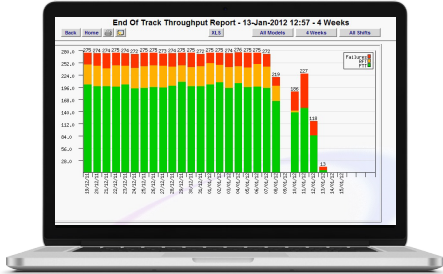# ORION™

QTR – Quality and traceability reporting database

FEATURES

Central point of storage for all production data

Powerful quality assurance and performance reporting

Access data via any web browser

Scalable - from single station to plant wide

BENEFITS

Full data audit trail of all processes

Use data to improve quality and assist in seamless manufacturing
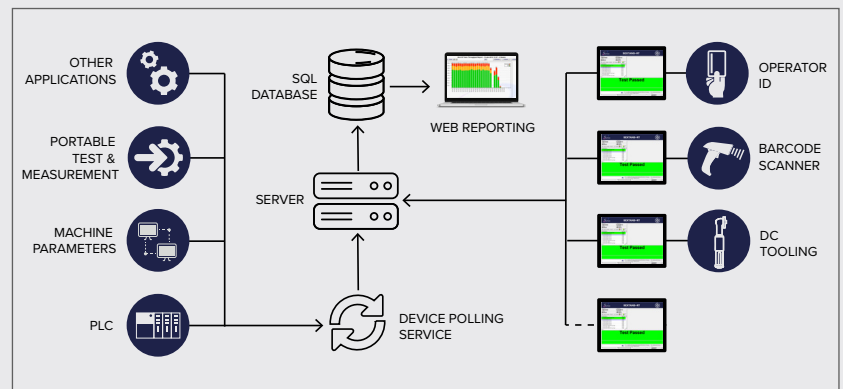
Process cycle time analysis

APPLICATIONS

Mechanical Assembly - Images, Measurements, Weld & Filling data

Traceability - Part ID, Batch & Serial number, Date & Time, Location

Critical Fastenings - Torque & Angle, Tool ID, Re-work management

Electrical Test - V, I, & R, Part ID, Control Module Data & DTC's

Orion™ QTR (Quality & Traceability Reporting) is a poweful storage and reporting system specifically designed for deployment within the automotive and manufacturing industries.

Orion™ captures data from a variety of sources in a manufacturing environment, including items such as station, shift, time, build no., component serial numbers, measured values and visual inspection data.

This data is identified against a unique ID (often VIN) along with time and location and stored within the database.

Typical Orion™ Data Collection & Reporting Infrastructure

Once in the Orion™ database, data can be queried (via a web browser interface from anywhere within your organisation) in a number of ways to provide **quality assurance and performance statistics** geared to manufacturing requirements.

The storage used is highly flexible, effectively learning the shop floor client data structures as they are passed in. Orion™ may therefore be used with a range of input sources: provided by Sorion or as a reporting front end to third party systems.

THE ORION™ DATABASE

All of the data collected by Orion™ is stored in a **MS SQL database** held on a central server. To ensure the robustness of the system, a separate process handles communications with the shop floor stations via HTTP XML transport providing transaction logging and good firewall performance.

The database schema is based on many years' experience in the manufacturing arena and is optimised for **efficient storage with rapid indexing and presentation of data.**

KEY BENEFITS

TRACEABILITY – the primary aim is to provide traceability of all processes on product assemblies. This data is used to guide the rectification processes, to allow buy off of assemblies and to provide short-term traceability history and manufacturing performance statistics.

ANALYSIS – standard reports provide an insight into the performance of your manufacturing process. Whether it is Throughput, Right-First-Time or trends on a specific parameter, the data is always available and up to date.

ACCESS – user access to monitoring and reporting systems is via secure web interfaces, enabling users from all parts of the company to access the system.

INTEGRATION – providing a central repository for the storage of all critical data that can be used by other company systems to improve quality and assist in seamless manufacturing.

DATA MANAGEMENT – providing services for distribution and storage of data associated with the system including archive.

SUPPORT – allowing a centralised view of the whole system's current and past performance.

INTEGRATION

The Orion™ database is fully compatible with the requirements of **interfacing to other factory systems**. Buy-off, Traceability or other data transfer between Orion™ and your system is configured to occur automatically, usually by XML or FTP transfers negating the need for knowledge of the database / server configuration.
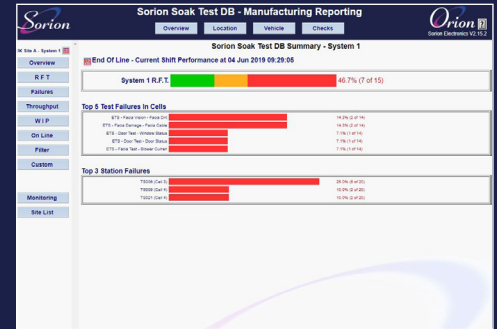
REPORTING

The results analysis and reporting functions of Orion™ allow **location and assembly based views of the stored data via a web browser** interface from anywhere within your organisation.

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).
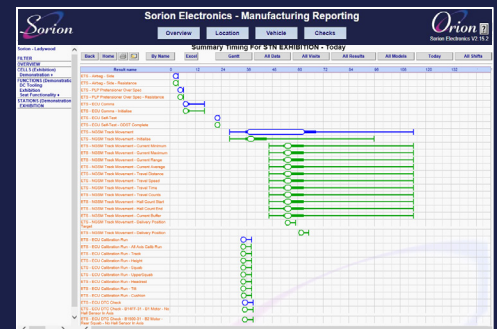
A wide variety of standard reports allows evaluation of the process on a machine / track area basis. These reports allow recovery of a **complete history of the finished assembly or real-time monitoring of current failures.**

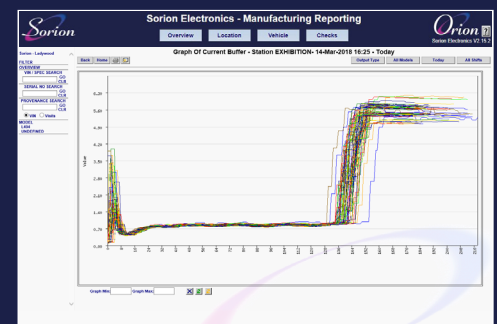Custom reports may be created (or output to Excel) to deliver specific data analysis requirements.

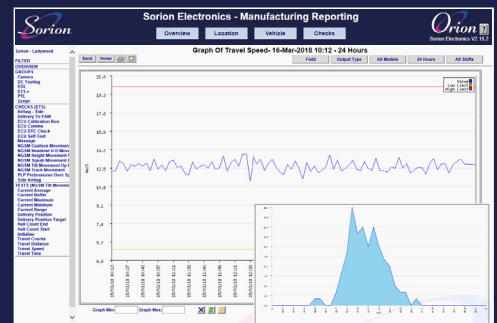## THE SORION SOLUTION

Orion™ Summary Page

Process Cycle Time Analysis

Array Data Analysis

Results Value Analysis

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