

# Sextans

In today's increasingly competitive, quality-driven manufacturing world, correct assembly, traceability and testing is playing a continuously growing part in allowing manufacturers to deliver a quality assured product, on time and on budget.

**Sextans** - is Sorion's shopfloor process control and testing application. Sextans runs on a Windows PC and connects to the range of Sorion peripherals (including, Pyxis PSC - Power supply, Pyxis P16IO - Digital I/O, Rigel VCI3 - Vehicle/ECU communications, Rigel USBIO - rack based analogue and digital I/O), to provide connectivity.

The assembly serial number and specification are entered into Sextans (RFID, Barcode, Network) to initialise the process. The operator is guided through the assembly process via plain text and pictures. If a DC Tool is used to perform a fastening, Sextans can automatically select the appropriate job on the DC tool controller and will store the fastening results against the assembly serial number.

Communications with Electronic Control Units (ECU) found in many automotive sub-assemblies is readily achieved using a Rigel VCI3 for CAN, LIN and K. These ECU's can have their installation tested or can be configured to suit the application prior to testing.

Data is seamlessly transferred to our traceability database Orion™. Once in Orion, 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.



## PROCESS GUIDANCE

Operator process and part specifications

## CRITICAL FASTENINGS

Guidance and fastening traceability

## ELECTRICAL TEST

Assembly test, ECU Communications, component test

## TRACEABILITY

Collect traceable data

## STORAGE

Fully integrated with Sorion's Traceability reporting system

## YOUR PROCESS

Scalable to match your assembly and test needs



# Electronic & Software Test Solutions

## Sextans - Test Sequences

The Sextans engine processes a series of steps to perform the overall operation. These steps can be either a simple step type (e.g. screen prompt, DC Tool fastening, etc.) or a script based step that is a complex process (e.g. ECU diagnostics, machine control, etc.).

As the sequence is executed the current step (and its outcome OK/NOK) is displayed in the step window of the main operator display. Script steps are shown in the step window as a single entry, however if the script needs to be monitored in operation a second script debug window is available that shows in detail the current execution of the script.

The Sextans system takes input information (i.e. RFID built ticket) to configure the exact sequence. The format and applicability of this data input is fully configurable by means of masks and filters. From this data Sextans sets up a series of flags that can be used within the step list to ensure correct process for a given assembly derivative.

All results generated by Sextans are made available for storage with Orion. Subsequent stations have access to these results and they can be used to interlock rework functionality and control product release.

Any exception events that occur are logged by Sextans and are stored, and again these are available through the Orion reporting system.

## Sextans - Management

Sextans systems are managed centrally. An editor is available that supports the "view" of the entire manufacturing process (i.e. many stations). Steps that are generated can be moved between stations, when line re-balancing operations are required.

Any changes to the sequences do not require a application restart, changes are picked up automatically between assemblies.

All of the sequence data and configuration can be held on a server, therefore should station PC require replacing / rebuilding all that it requires is a standard Sextans installation and then the configuration is automatically downloaded from the server.

## Key benefits

**Process** - with assemblies being manufactured with a very high level of specification variability, it is vitally important to ensure that the assembly is manufactured to match the specification.

**Test** - performs the test schedules required to carry out end-of-line functional inspections on built up assemblies.

**Traceability** - provides traceability of all processes and test on the finished assemblies.

**Re-work** - data from previous stations is available at re-work stations (either in-line or off-line) to quickly allow rectification and assembly retesting.

**Integration** - to factory assembly tracks, assembly equipment and facilities. Feeds are available from production control systems and assembly ON/NOK status sent to buy-off systems.

**Management** - provides the editors and tools for distribution and storage of test sequences required across the system. Process steps and tests can be easily moved between stations.

**Support** - inbuilt tools to monitor and control all I/O points and log or graph data. Also a centralised view of the whole system's current status is available.



Start-up screen



Script Debug



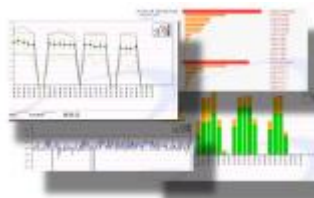
I/O Status & Logging



Step Applicability



Sequence Editing



Orion™ Reporting

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