

Seiki Analysis

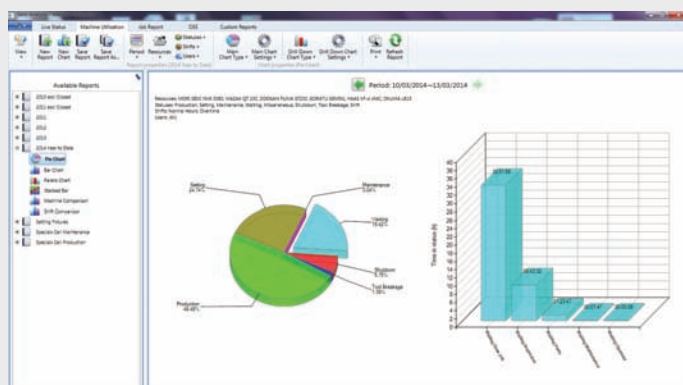
Seiki Systems has over 20 years experience in the development and provision of real time manufacturing execution and production control systems that provide an immediate, visual and dynamic picture of the 'plan to make' production process - your strategic and operational manufacturing management solution. We specialise in software that is designed to maximise the efficiency of production equipment and plant resources by addressing the complete works order lifecycle, from top floor to shop floor. The Seiki solution comprises of a suite of modular software including real-time scheduling, DNC and paperless manufacturing, SFDC and machine performance monitoring, W.I.P tracking, performance analysis and reporting and industrial touch screen PCs.



Manufacturing Intelligence Software

Manufacturing intelligence software is designed to retrieve, analyse and report critical production data in order to help your organisation make informed data-driven business decisions. Today manufacturing organisations need to be agile, robust and customer-centric. This means that the ability to have a visual real time, dynamic and integrated view of production information can provide a significant competitive advantage.

One of the biggest challenges organisations face is making sense of all the data that has been collected, and organising and presenting it in a meaningful format that can actually be used to improve performance. Seiki Analysis software provides a clear, consistent, easy to use set of performance reporting tools that support data driven lean and continuous improvement strategies. It can help manufacturing organisations to reduce waste, monitor trends, forecast business opportunities and optimise the utilisation of existing resources.



Performance Analysis Reporting

Seiki Analysis software acts upon a central data repository, providing an easy method of accessing, viewing and summarising the real time manufacturing performance data collected from the shop floor. The drive towards operational excellence starts with a better understanding of your data and making it available to the right people as they need it to ensure that they can be more responsive and make informed decisions. Seiki Analysis increases visibility of the activities associated with every works order and shop floor resource through performance analysis charts and graphs. These simple yet powerful graphical views of critical data such as productive time, resource utilisation and efficiency make it easier to interrogate reliable, actionable data from the shop floor in order to quickly identify problems and highlight areas for improvement. This data can then also be exported in a number of formats for internal distribution.

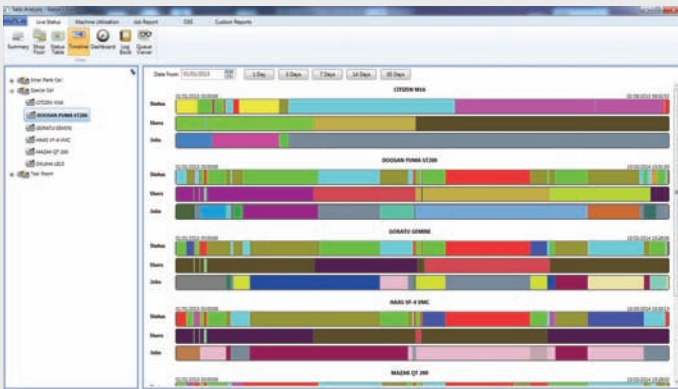
Seiki Analysis benefits include:

- Highlight where non value added processes and waste are eroding profitability
- Visual performance metrics to make informed commercial decisions
- Easily identify trends and take immediate action
- An immediate, dynamic and accurate view of your business
- Supports continuous improvement strategies with real and accurate data
- Become more agile enabling you to be more responsive to customer demands
- Gain insights into your business



Machine Utilisation Analysis

Extending access to live production information outside of the physical environment can really help users to stay connected to the shop floor activity. The Seiki Monitoring module automatically and/or manually records the live status of each connected resource, capturing all productive and non-productive events as they occur. Using the Machine Utilisation Analysis feature, this data can then be used to inform strategies to optimise machine uptime, throughput and ROI. The system provides a breakdown of the productivity of each resource in pie chart, bar chart and text table formats. The information includes accumulative % and total hours for each event that has occurred during the period defined. Should you require a more detailed view, an event listing displays each works order in sequence and duration, which can be made available through Seiki SFDC. Individual events or groups of events can also be displayed chronologically and analysed for trends in production to enable corrective action to be taken or to provide evidence of productivity improvements. Machine Utilisation information can help you to actively work to resolve or prevent known causes for lost productivity.



Overall Equipment Effectiveness

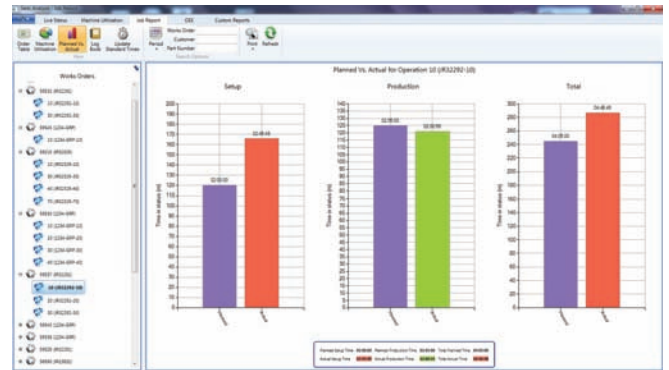
Generating a standard measurement that can be used for benchmarking and analysis is an essential tool for any business. The OEE feature provides a key performance indicator (KPI) metric enabling companies to monitor their success at optimising performance and reducing waste. An OEE figure combines measurements of machine availability, productivity and the quality of parts produced to quantify how effectively a workplace, cell or plant is operating. Specifically it uses the data collected from the Seiki Monitoring and SFDC modules to calculate the percentage of scheduled time that a workplace is available to operate (uptime); the time taken to produce the parts as a percentage of the total planned time; and finally the number of good parts produced as a percentage of the total number of parts planned. Each of these components identify an aspect of the manufacturing process that can be targeted for improvement.

$$OEE = Availability \times Performance \times Quality$$



Works Order Performance Analysis

Having access to critical business intelligence from works orders and operations, whilst they are in progress or completed, can provide a significant advantage for companies looking to reduce costs. The Seiki SFDC module is a robust, real time works order data collection solution, supporting more transparent, effective and efficient works order processing. It provides a realistic view of the current status of all (W.I.P) work in progress.



Using the Job Report feature, this data can then be used to produce a live graphical report and detailed historical analysis of the progress and times of works orders and works order operations, including a comparison of planned vs actual times. Each individual report displays the part number, works order number, start time, total duration and quantity produced. The results can be presented in a pie chart, displaying an accumulation of the various activities that each operation involves between the start and completion of the job, together with an event sequence bar chart to show the individual job timeline. Within this graphical display the accumulative totals of the various actions on the job, e.g. setting, production and waiting, can also be made available through Seiki Monitoring. The information is shown as actual time spent on a given activity, with a percentage of total job time and the frequency with which the activity occurred. If the estimated or planned time for the job has been allocated it can subsequently be compared with the actual time that the job took (batch and per part) based on the data collected, and to further support accurate analysis, the system also enables you to allocate hourly costs for each machine. As well as detailed job analysis the software displays trends on repeating jobs in the form of a bar chart with activity lists.

The modularity of Seiki software provides you with a flexible solution and progressive upgrade path. Our aim is to work with you to secure your return on investment and support your business as it grows. We offer a complete service including planning, installation, implementation, customisation, training and after sales support.



For more information about any of our manufacturing software solutions contact us: **01273 666999** or email sales@seikisystems.co.uk

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