Save Load Print Scheduling Info Window Special

Production Order List | Timeline | Planning Board | Netplan | Analysis | Resource Info | Workload View | Collision List | Snapshots | Workflows

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SEIKI SYSTEMS

Seiki Core Scheduler

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.

A Real Time Solution

Finding a balance between the demands of meeting target delivery dates and managing workflow efficiently and economically can be difficult when relying upon manual methods, such as multiple uncontrolled spreadsheets to manage highly complex planning and interwoven scheduling procedures. To achieve a high level of visibility and control, a real-time management system that can relate to resources and operations provides a far more accurate picture of the current state of production on the shop floor on which to base key planning decisions.
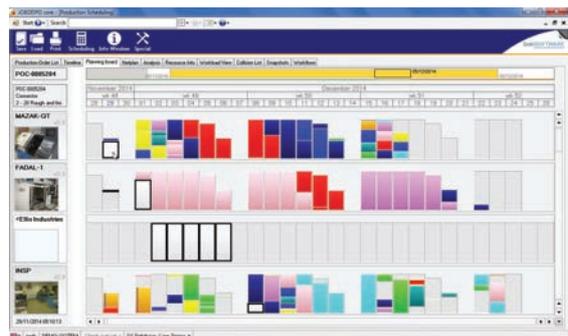

Seiki Core benefits include:

- Reduces outsourcing by maximising the utilisation of your existing resources
- Predict delivery dates with confidence
- Reduce inventory and stock
- Achieve greater manufacturing flexibility
- Identify untapped production capacity
- Manage your production effectively and efficiently with minimal user input
- Increase visibility of your manufacturing process
- Avoid bottlenecks in production

Finite Capacity Scheduling

In order to maintain an optimal work schedule, defining accurate workplace information is essential. Finite capacity planning is based on the real capacity of your facility and ensures that stock levels are reduced as materials are only ordered when required, corrective action can be taken to prevent late deliveries and operations are only scheduled when resources are available, reducing work in progress and avoiding bottlenecks in production. The Seiki Core scheduling software enables you to administer workplaces, individual workplace efficiency and shift start times; creating a realistic model of your available capacity.

Seiki Core contains all active orders and displays essential production information specific to individual component parts, such as works order number, drawing number, quantity and due date. The routing information required for scheduling, e.g. operation numbers, resource(s) to be used, setting and cycle time, are also available. Scheduling rules are operationally constrained, which means that it is possible to set rules such as no overlap, free overlap, percentage overlap, earliest start and latest end dates against individual operations as opposed to having a rule which applies to all operations. This level of configurability means that schedules can be optimised to a greater degree than when using manual methods to plan your workload. It also provides a dynamic solution to a typically complex management procedure.

www.seikisystems.co.uk

Production Planning

Seiki Core scheduler maintains the appearance and functionality of a traditional planning board, making it easy to use and simple to learn. The system offers a number of viewing options from which to plan your workload. Within the planning board view, individual work centres are displayed with their capacity against their availability in hours per day. The daily capacity for each resource can be dynamically changed to reflect actual availability, which is essential when reacting to unexpected events, such as machine breakdowns or staff absence.

Simple drag and drop technology enables 'what-if' planning to be undertaken within the context of your configured scheduling rules. By selecting the operation you wish to move and dragging it into the desired position within the schedule or to a different resource, the system automatically re-schedules the workload for the affected resource and all the operations across the entire shop floor. A number of automated scheduling algorithms are available to use in order to obtain an optimal schedule. 'What-if' changes can be previewed using a traffic light system to visualise the potential impact to the to the delivery dates on all jobs.

These 'what if' scenarios do not affect the master schedule until saved. The traffic light system provides you with a clear visual indication of the effects and impact of planned changes, any operations or orders that are delayed as a consequence can be re-scheduled in order to prevent late deliveries. A graphical appreciation of the work load across your facility can be a significant advantage in a competitive market that demands flexibility. Maintaining manufacturing control and visibility ensures that the investments you have made in production resources are maximised.

Increased Visibility

The combination of live production information and increased visibility enables you to maintain a controlled and flexible approach to the manufacturing process. Seiki Core scheduler can be used in conjunction with a number of optional modules that are designed specifically to manage the dissemination of information to the shop floor and collection of data for subsequent analysis. The ability to interrogate data that has been collected in real time directly from the shop floor is an enormous benefit as it provides a direct link between shop floor activities and top floor production driven business processes.

Delivering all manufacturing data electronically and directly to the shop floor via Seiki Jobpack DNC reduces time wasted searching for documentation, it also gives the engineer on the machine the confidence that the machine tool is set up correctly and that the process will cut the material right first time. The manufacturing data for each operation can be combined into a single job information pack, containing NC programs, routing cards, tool lists, set up sheets, photographs and NC simulation videos, and delivered directly to a terminal on the shop floor - a paperless environment.

The SFDC module is used by the operator to advise when jobs are being started or complete, with the data being fed back directly to the Scheduler, automatically updating the schedule. The job ID can be selected from the work queue, input manually or read in via a barcode scanner. Part count of good and scrap quantities can be either incremented per part or totalled as the job is finished. The software also incorporates a facility to configure scrap codes and allocate reasons. Seiki Core scheduler driven real time work queues for each resource can also be displayed on the shop floor as a work to list for the operator. The work queues have bi-directional synchronisation with Seiki Core and consequently any changes made to the schedule are visible on the work queue. Similarly, if the decision is made to start a job out of sequence on the shop floor queue, the Scheduler is updated accordingly.

Seiki Core features include:

- Appearance and functionality of a traditional planning board
- Drag and drop technology for 'what-if' planning
- Forward sequential loading of all jobs
- Create a realistic model of your available capacity
- Automated scheduling algorithms
- Simple traffic light indicators to preview consequences of changes to the schedule
- Interfaces to your existing ERP/MRP system or is fully integrated with the JobDISPO ERP

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.

Continuous Improvement

Having access to, and the analysis of, critical business intelligence from finished jobs and operations to support the decision making process can provide a significant advantage for companies looking to reduce costs. Seiki Core Scheduler contains analysis and reporting functions that are designed to interrogate the data held within the database, simplifying the analysis process by condensing the information into single graphical displays for live reporting. This real time information can provide a real understanding of the utilisation and performance of your production resources, such as planned versus actual job times. In the drive to become more competitive, now more than ever the pressure is on to reduce the ratio of non-value added to value adding activities. By planning and scheduling more accurately it is possible to reduce waste, maximise the utilisation of critical production resources and gain the visibility needed to respond positively to new sales opportunities.