SEIKI SYSTEMS

Manufacturing Solutions

The Big Four mistakes manufacturers can make today and how you may avoid them

Are they myths, urban legends, bad habits or judgement errors? Whatever they are, the common mistakes that many manufacturers make may be adding cost, wasting resources and labour, and frustrating customers.

Mistake Number One

Thinking that a spreadsheet is an effective way of predicting delivery dates

A spreadsheet of production orders is like a newspaper...by the time you get it, the information is out of date.

Spreadsheets are a great way to maintain lists of information but a spreadsheet can't react to changes to the production schedule that occur every day when new orders arrive, orders are cancelled or when the customer-requested delivery dates and quantities change. With the frequent changes that occur in manufacturing organisations today, a spreadsheet can't respond quickly enough. Spreadsheets also present a "flat" view of the order information, so you can't see the effect that a change to one operation will have on the downstream operations. If the machine used for Operation 10 is out of service, how do you immediately know what effect the downtime will have on Operations 20-50? If you can increase the machine capacity for one operation can the spreadsheet move the order forward in the subsequent operations?

How much manual effort is used to maintain the spreadsheet? The Seiki Scheduler is a real-time graphical planning system that can be integrated to your ERP software to provide an optimal work schedule based on the real capacity of your facility. The ability to simulate multiple scenarios to resolve constraints caused by overloaded resources is simply not possible using spreadsheets. Can a spreadsheet support multiple scheduling methods such as forward scheduling, backward scheduling and just-in-time (JIT) scheduling? Our team has invested more than 100 developer years to build a real-time, finite capacity scheduling system that incorporates multiple scheduling techniques to support your scheduling challenges.

Seiki Systems Ltd

The Big Four mistakes manufacturers can often make:

- Thinking spreadsheets are an effective way of predicting delivery dates

- Accepting the times written on a paper job card as accurate

- Padding jobs with extra hours and giving customers padded delivery promises

- Working extra hours and overtime to create a cushion to be used for hot jobs

Online Demonstration

Why not request an online demonstration to see for yourself the core software functionality and system benefits that our solutions can provide.

How to contact us:
Email: sales@seikisystems.co.uk
Call: +44 (0)1273 666999

Alternatively you can visit the Seiki website where you will find a number of short demonstration videos on our product pages.

Creating a Closed Data Loop

In order to realise all the benefits that are to be gained from job data collection work queues (work-to-lists) may be used to support work in progress tracking. Seiki Work Queue Manager software is a module that enables scheduled works orders to be displayed directly on the shop floor for each workplace resource, providing the operator with forward visibility of the planned workload.

Mistake Number Two

Accepting the times written on a paper job card as accurate

If you are collecting hand-written production job completion cards from your operators at the end of their shift or at mid-shift, you are probably getting what the operator thinks you want

If you are collecting hand-written production job completion cards from your operators at the end of their shift or at mid-shift, you are receiving the information that the operator wants you to receive, not the actual performance. The operator will typically meet the standard and record the information according to the routing. The information will be delayed in updating the scheduling system, making the scheduling system ineffective as well. When the operator records the information on the job card, it may be illegible, incomplete or incorrect, making the entry of the information error-prone and historic. Time cards are easy to lose too.

Seiki SFDC is a robust real-time data collection solution, supporting more transparent, effective and efficient works order processing. The capture of accurate and reliable production data is key to a deriving a realistic view of the current status of all work in progress, which in turn enables you to have a view of your true capacity for planning and scheduling work throughput. The system can immediately capture the correct information from the machine or from the operator. This method gives every employee the most up-to-date and accurate production status. Once accepted the information is now visible to every authorised employee. There is no redundancy and no delay.

Manual data entry of job time information can often be inaccurate and delayed, consequently historical performance analysis can have limited benefits.
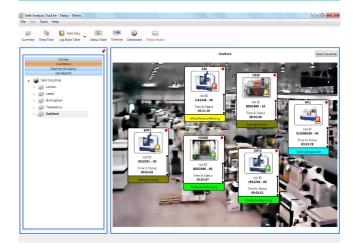
What is Seiki SFDC?

Seiki SFDC is a works order data collection solution, allowing shop floor operations to be started, finished or paused. Data entry is supported both manually and via barcode entry. This module can be operated in conjunction with work queues where applicable to support work in progress booking/tracking.

- Data collection solution designed specifically for the shop floor environment
- Improve visibility of works order status and material traceability
- Achieve greater data accuracy and on-time deliveries
- Optimise works order performance by improving output and reducing scrap levels
- Perform W.I.P tracking
- Eliminate non-value added activities
- Supports accurate job costing
- Integrate to your ERP system for automatic updating of inventory levels
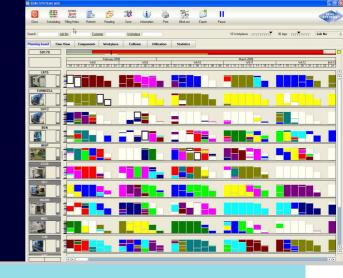
www.seikisystems.co.uk/sfdc

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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. The Seiki Scheduler contains analysis and reporting functions that are designed to interrogate the data held within the Scheduler database, simplifying the analysis process by condensing the information into single graphical displays for live reporting.

Mistake Number Three

Padding jobs with extra hours and giving customers padded delivery promises

If you have no confidence in your production schedules, a way to feel good is to deceive yourself by padding time standards or padding the delivery promise

Overtime labour is expensive. Not every employee wants to work overtime either. If you know that a large order is imminent and you want to clear your schedule to accommodate the order, then perhaps overtime makes sense but what if the order doesn't arrive when it is expected? What if the order requires manufacturing resources you didn't plan to deploy?

The Seiki Scheduler is a real-time finite capacity scheduling tool that loads production jobs to maximise the use of machines and other resources, and immediately identifies what resources will be overloaded. This allows you to adjust the production schedule to reduce the overloads and meet your customer delivery promises, add overtime if required or move jobs to other machines or work centres. With the Seiki Scheduler you can schedule jobs into the future as far as your lead times require.

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 Scheduler enables you to administer workplaces, define standard maximum and minimum hourly rates, individual workplace efficiency and shift start times; creating a realistic model of your available capacity.
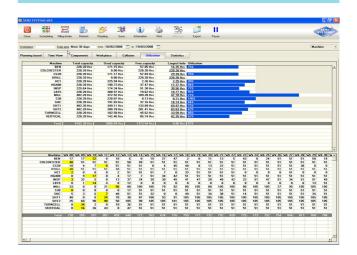
What is Seiki Scheduler?

Seiki Scheduler is a complete finite capacity planning solution designed to provide a high level of visibility and control of your manufacturing.

- **Reduce outsourcing by maximising the utilisation of your resources & increasing productivity**

- **Predict delivery dates with confidence**

- **Reduce inventory & stock**

- **Achieve greater manufacturing flexibility**

- **Get the most from your existing resources - your R.O.I**

- **Identify untapped production capacity**

- **Manage your production effectively and efficiently with minimal user input**

www.seikisystems.co.uk/scheduler

Mistake Number Four

Working extra hours and overtime to create a cushion to be used for hot jobs

Overtime labour is expensive. What if the order requires manufacturing resources you didn't plan to deploy?

When you have no faith in the accuracy of your production schedules, the way to cushion the schedule is to deceive yourself by padding the time standards or padding the delivery promise dates. Rather than just-in-time you now have just-in-case production management. Any time that you put inaccurate information into the system you make all of your answers incorrect. The problem then escalates as the inflation of rates and dates grows as employees become less confident about the information they receive.

With the Seiki Scheduler the accurate time standards and accurate machine/resource capacities deliver a reliable, achievable production schedule with reliable customer delivery dates.

As production jobs are completed and reported on, you capture the actual performance results which can then be used to fine tune the time standards for future production jobs. Gradually employees and customers can feel more confident in the accuracy of the production schedule. This reduces the amount of work-in-progress inventory, minimises expediting costs and improves overall customer satisfaction.

See how our customers have benefited from the Seiki Scheduler by reading the case studies on our Scheduler homepage:

www.seikisystems.co.uk/scheduler

About Seiki Systems

Seiki Systems is a leading UK supplier of manufacturing execution software. Established in 1992, the company specialises in developing manufacturing execution systems that are designed to maximise the efficiency of production equipment and plant resources.

The Seiki solution comprises of a suite of modular software, including Enterprise resource planning (ERP), real-time graphical work scheduling, shop floor communications – DNC and paperless manufacturing, shop floor data collection and machine performance monitoring, W.I.P tracking, performance related analysis and reporting and DLoG Industrial touch screen PCs.

One of the key advantages of the Seiki solution is the ability to address your most critical areas first with the option to expand the system as your business grows. All modules are supplied by and supported from the company headquarters in the UK, which means a single point of contact for your IT department.

We hope that this information proves to be of interest and will encourage you to consider Seiki Systems as a potential solution provider for your company. Please do not hesitate to contact us if you would like to discuss any emerging requirements.