

PRODUCTIVITY PARTNERSHIPS 04

Seiki Systems will be demonstrating real-time production management software at the forthcoming Productivity Partnerships Exhibition to be held at the 600 Centre in Shepshed, Leicester

During the three-day event, we shall be monitoring a production cell involving 600 Centre's two Fanuc Alpha vertical machining centres with robotic loading. This will not only provide a wireless communication link for CNC program management

but also enable 'real-time' production data acquisition and machine utilisation, together with automatic alarm generation via text message or email.

Some 20 of the UK's leading suppliers of machine tools and robotics, software, inspection, work-holding, tooling and

control systems will be involved with Productivity Partnerships 2004, which takes place between 19 and 21 October. Look out for your invitation, or for further details and to register your place at this event, visit

www.productivity-partnerships.co.uk



Free DNC

Seiki Systems Free of Charge DNC offer, which was running in conjunction with Production Engineering Solutions (PES) magazine, has now come to an end, with many happy new and existing customers signing up for the free offer.

We will be taking this offer 'on the road' at various Open Houses across the country, so if you are still planning to buy a new CNC machine tool, keep an eye on the industry press or contact us to see when you can next take advantage of this offer.

New Team Member



Following the recent transfer of Neil Saunders to Product Specialist for our new ERP suite of software, Seiki Systems are very pleased to announce the appointment of Ian K Rowbotham as Southern Area Manager.

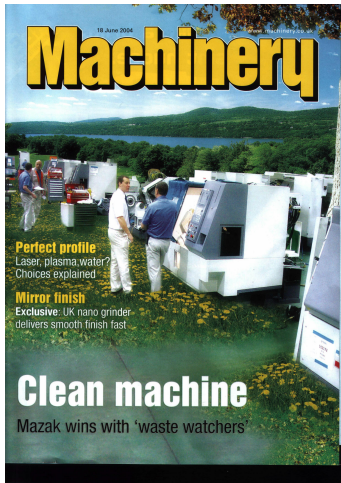
Ian joins us with many years of experience of selling both CNC machine tools and manufacturing software across the broad spectrum of UK manufacturing. He is therefore able to offer his

customers a true problem solving service for their various shopfloor and data management problems and significant efficiency improvements by drawing on the appropriate modules from the Seiki Systems "Complete and Fully Integrated Manufacturing Execution System".

What the papers say

End of the paper chase

A three-way software development, including Seiki Systems, aims to deliver totally integrated manufacturing control for SME's, helping to create the paperless plant. *Mike Nash of Machinery magazine reports*



David Trowell's sunny outlook for manufacturing software company Seiki Systems, is in keeping with it's location. He has a fantastic view of Brighton Pier and the sea from his office window. And on the day *Machinery* visited him there was a cloudless, blue horizon.

But it's not just the weather and the view. Part of his bonhomie is down to the fall-out from MACH. "Senior people were asking us searching questions because they were choking to death on paper," he says. "Companies realise they can't compete because they are not responding quickly enough to customer demand, or are not quoting accurately."

And Manufacturing Execution Systems (MES) offer an answer. These connect the shop floor to production management/planning software packages, such as Enterprise Resource Planning (ERP), providing a closed-loop information system. Seiki Systems has been delivering shopfloor-based information via its products for years, but now it has collaborated in the development of software that ties this together with ERP software.

Good Timing

This upturn in interest for integrated MES is good news for a software vendor in the machine tool business and vindication of the decision to invest in a product demonstration area, now dominating an entire floor of Seiki Systems' offices. Mr Trowell reckons that there's a huge potential market for true, integrated MES at the SME level.

And, on the face of it, Seiki Systems has come up with an answer in the form of an international partnership between itself, Munich-based Fauser AG and JobPack of Chicago in the US. Mr Trowell describes the tie-up as a meeting "of like-minded people". Indeed he claims that preliminary discussions on interfacing the companies' various systems "took just an hour".

The result is an iMES that can be configured to cater for the world's largest market of installed high-technology machine tools.

Graphical Scheduling

So what is iMES and what does it do? Workloads across CNC machines can be graphically scheduled, thanks to direct integration with an existing MRP system or, for SME's, by Seiki Systems providing an ERP capability within the software package. iMES enables real-time feedback and true, live dynamic predictions of machine workloads creating direct information, such as projected completion dates and performance reporting, in a paperless environment.

And of course it's configurable. iMES boasts complementary packages and modular software programs that can be fully integrated depending on the level of sophistication and the manufacturing solution required. This can be as diverse as the provision of a planning system to help with quotation costing, control of production, via a real-time scheduler, display of manufacturing data and DNC for operators, or shopfloor data collection through to final dispatch and management reporting.

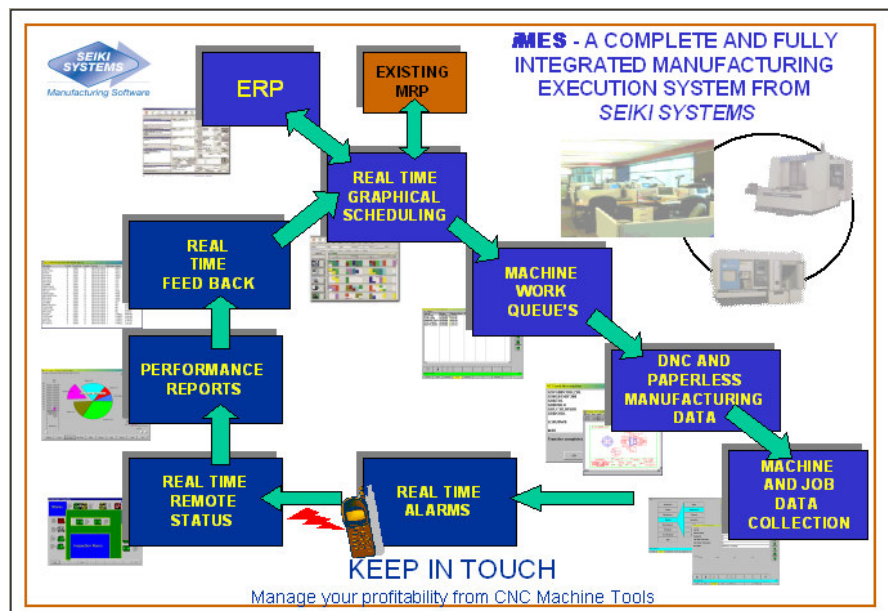
"In the past manufacturers lost sight of orders once they entered the shop floor," Mr Trowell says. So companies spent money on software peripherals, MRP and CAD for instance, but all this did was lead to islands of automation. "Previously it was a disjointed effort." What we had was only partial integration. And it's not real-time. He explains further, instancing the typical installation of a manufacturing resource planning system (MRP). "Larger companies use an MRP systems to load the machine shop with a 'requirements' list which generally has no concept of any machine loadings, capacity or working patterns. Often it assumes infinite capacity and does not operate in real-time.

Mr Trowell can wax lyrically and persuasively on the state on MES and MRP/ERP in typical job shop environments. "Production Managers complain all the time about MRP but data collection is even worse. In many shops, it is still manual," he says with exasperation, which leads to poor record keeping. "Updating and reporting is essentially corrupt" because job sheets are filled in at the end of the week.

In contrast, the iMES scheduler integrates to any existing MRP to provide a simple-to-understand, real-time graphical view of the work requirement set against the actual working capacity of the machine tools. For SMEs without MRP, iMES contains an ERP module, which provides control from estimating through to process planning and feeds the real-time scheduler with new work. It can also take information from the scheduler for progress reporting and dispatch information.

"Say a customer wants to delay component delivery," elaborates Mr Trowell. "You can make a change in ERP which automatically feeds through to a change in the scheduler and then work queues on the shop floor." And Fauser's ERP can support the entire order management process from quotation costing to work planning, scheduling, stock management, purchase dispatch and final costing.

In terms of applications, Trowell cites the example of gearboxes, requiring multiple components that could be made either in-house or outsourced. With OEMs increasingly demand that machine shops project manage in an effort to reduce their supplier bases, managing such a process could be drastically simplified with iMES.



This article is taken from a feature in *Machinery* magazine (Findlay Publications), June 2004.