Walker Precision Engineering
A forward looking technology led contract manufacturing company

Walker Precision Engineering (WPE Ltd) has grown into a cutting-edge contract manufacturing company serving a number of industry leading market sectors. The company has adopted Orchestrate, the planning and scheduling package that replaces multiple spread sheets and flowcharts with much more intuitive, real-time displays and ‘what if’ scenarios. Early results, using large screen displays and a wireless tablet device used for plant walk-arounds, have begun the momentum for change – although early days yet, as the system is being fully integrated into more of the business on-time delivery performance is already improving.

The Company

Walker Precision Engineering is a forward looking technology led contract manufacturing company.

Established in 1979 the company has risen to the challenges of changing market conditions. From small beginnings the company now employs over 150 skilled personnel over three sites.

The company services markets Worldwide, covering a diverse customer base in engineering cutting edge sectors.

The Challenge

WPE Ltd is a highly successful business that has forged a strong presence as a contract manufacturing company in a number of high-tech industry sectors. Their success has been built around innovation and the ability to provide quality products and services in a competitive market. With rapid growth, the challenge has been to meet customer expectations. The directors recognised a major potential issue with on-time delivery, customer communications and supply chain transparency.

The scheduling process is complex, involving three very different business units, an assembly area, painting and plating, offsite clean room facilities and a production plant in Poland.

• Business Unit One specialises in large, often complex projects offering high quality product to customers in a variety of energy markets including valve bearing and compressor manufacturer. Some parts may progress through as many as eight differing machines/ processes and elapsed process time can be measured in weeks.

• Business Unit Two is dedicated mainly to Aero & Defence – low volume, high integrity work, typically involving a single machine process on 5-Axis machine centres.

• Business Unit Three is dedicated to support a leading aero engine manufacturer. This business process includes repair & design work as well as manufacturing for the aero industry, involving exotic materials with rapid turnaround to support Aircraft On Ground (AOG) situations.

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Master Production Scheduler, WPE Ltd
Having invested heavily in advanced numerical control equipment and the latest twin & 5-Axis pallet multi-access machining centres, many machines run for the full 168 hours a week. Monday to Friday, most of BU2 operates a night shift and overtime working is necessary every weekend. The company is focused to meet demand, but until now this has been very much at the cost of on-time delivery. Credible information was not evident hence customer satisfaction was deteriorating.

The Solution

Management recognised the need to do something and recruited a Master Production Scheduler, who takes up the story:

“We looked at more than one potential solution, but very quickly came to the conclusion that Access Orchestrate offered a modern interface, was easy to use and provided flexibility within the planning process. The whole approach was reassuring. First, the demo. They took the time and trouble to make the demonstration meaningful. After completing a simple questionnaire, they gave us a model to play with for a week. It contained our machines. It looked familiar. Next, they took one of our Microsoft Project spread sheets and within a couple of hours we were working with real-live data. Rather than a dummy company, we were looking at our own jobs running on our own machines.”

A similar, pragmatic approach was taken to training, when the MPS visited Production Modelling’s offices. Using ‘out-of-the-box’ software, without any customisation, the MPS was able to populate the database himself over just two days, adding new orders, materials and so on. This methodology ensured that the MPS gained confidence very quickly, with a sense of ownership over the data and the assumptions in the database. In his own words, “We were able to walk away with something that we could use straight away off the shop floor.” It was also very cost effective, eliminating the need for consultants to spend time at the plant in Glasgow.

The Outcomes

“We also use a wireless tablet on the shop floor. It’s great having it to hand, entering data or making enquires in real-time, right there at the machines. Updates are instant, so by the time we get back to the office, everything is already up to date. In real life, engineers may schedule work differently to the plan, so that amendments can be captured there and then, with ‘What if’ scenarios if necessary.”

Last word: “We are making consistent progress as we integrate the scheduling detail within more of the business. Some jobs take an elapsed period of weeks, so it will be some time before we can state definitively what the improvements will be, but we now have momentum and are well on track for achieving high on-time delivery rates even for complex orders and the ever-changing demands of our customers.

Master Production Scheduler, WPE Ltd

The whole planning process has been transformed. We now have true visibility, with worktop access for account managers tracking customer orders, plus large screen displays in the Planning room and at Business Unit One, where the production manager can clearly see any potential materials shortages or capacity bottlenecks. Everything is so visible, with colour coding for, say, special projects, the ability to zoom into detail and then out again for a factory-wide view. Information without overload.