A 'WIN-win situation'

Wireless monitoring ensures uninterrupted flow of material at Höft & Wessel

Lean structures and processes present a challenge for every company and in order to optimise processes and reduce wastage and thereby improve its competitive position Höft & Wessel has installed a simple data collection system made by WERMA Signaltechnik and deployed as a wireless “call for action” system to optimise material shortages and give a complete overview of shopfloor activity.

“An optimised material flow without shortages or excess supply of material was the object of the exercise” comments Erhan Kaya, Logistics Manager at Höft & Wessel. “Wastage, poor communication, errors and rework needed to be reduced to a minimum” he continues, recognising however the enormous challenge being set. The Hanover based company rose to the challenge and within a short time an expert system called WIN developed by the signal technology manufacturer WERMA was brought in.

**WIN AS A MATERIAL FLOW OPTIMISATION TOOL**

The leading manufacturer of ticketing equipment uses the WIN system in its Service and Repair Centre. Originally the company was looking for a visual display system to indicate optimising workstation operations. A WERMA signal tower provides the basic interface and an additional slave transmitter is fitted quickly and simply to the existing signal tower to provide both electrical and mechanical connection in a matter of seconds. The WIN slave transmitter sends status change information to a receiver, the WIN master which is connected by a USB plug to a PC. An unlimited number of clients in the organisation can view the data collected and displayed on the system. The Horst & Wessel group has installed this equipment on several workstations.

**USING A SIGNAL TOWER AS AN INTERFACE**

WIN stands for “Wireless Information Network” and is in fact a very low cost easy to install wireless based system to monitor and optimise machinery and equipment efficiency and provide a complete visualisation of the work process.
The capacity utilisation of the workstation. It was hoped that material flow could be controlled better because our staff could hardly, if at all, estimate the work flow at any one station which led to over and under delivery of work and material all the time explained Erhan Kaya. Since the WIN system was installed at the beginning of the year the workflow has become much more transparent and now having a complete overview of the process work flow has improved dramatically. WIN has helped Höft & Wessel reduce process time and eliminate wastage.

**INFORMATION WORKFLOW PROVIDED QUICKLY**

Information on the workflow status is transmitted by WIN which signals changes in material flow – if a repair is finished a signal is sent by WIN to logistics. The logistics staff member uses the pull principle to supply the required material to the service Centre. In this way the “first in first out” principal is upheld and material flow optimised. The repair cells determine the rate of work and demand new repair jobs according to their available capacity. Using this methodology Höft & Wessel can evaluate productivity, secure the process and save time.

The combination of their reliable signal towers and the excellent customer service offered by the company puts WERMA right up front in the market.

**QUICK AND SIMPLE TO INSTALL**

Installation of the system is very simple and no expert knowledge of the software or programming required. This was a big “must” for Erhan Kaya who had acquired good knowledge of other available systems and was able therefore to value very quickly the user friendliness of the WIN system. “The combination of their reliable signal towers and the excellent customer service offered by the company puts WERMA right up front in the market” comments Kaya.

**LIMITLESS APPLICATION POSSIBILITIES**

Erhan Kaya can recommend highly WIN as a lean process improvement tool to any operator. Even though some employees may have viewed the installation of signal towers sceptically or even as unnecessary today nobody wants to be without them.

WIN Benefits:
- Improve transparency
- Increase productivity
- Strengthen flexibility
- Reduce downtime
- Save cost and time
- Can be retrofitted to older equipment
- Impartial monitoring system

Material flow information transmitted wirelessly allowing stores to replenish required material and deliver on a “first in first out” principal.

No wonder really as WIN can be installed in other applications, not just as a workstation call for action system. It is also a machine data collection system (MDC). In larger machine shops where there are many machine tools or pieces of equipment the WIN system will often be installed in order to identify machine breakdowns or disruption to production quickly. With the WIN slave transmitter permanently powered with a 24V feed machine status changes can be collected by the WIN software thus giving the machine shop operator a comprehensive overview of machine shop activity and efficiency. As a lean production tool WIN can help reduce wastage significantly and improve productivity not forgetting also the improvements in quality, stockholding and delivery performance which can be realised with the system deployed effectively.

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The manufacturer of ticketing systems have been able to improve the competitive edge and react even more quickly to changing market trends.

**WIN-WIN SITUATION**

The example illustrated here shows only too well how simple solutions can make a significant improvement to processes, improve use of resources reduce costs. This has been the experience of Höft & Wessel who have been able to improve the competitive edge and react even more quickly to changing market trends, so for both WERMA and Höft & Wessel a real WIN-win situation!

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Erhan Kaya is Logistics manager at Höft & Wessel. The logistics expert comments “The combination of their reliable signal towers and the excellent customer service offered by the company puts WERMA right up front in the market”.

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