



Making light work of tractor production

CHANCES ARE MANY OF THE TRACTORS you see working in local fields are made by Case New Holland (CNH) Industrial at its manufacturing site in Basildon, Essex. It is the UK's only volume tractor manufacturer and is one of the top 15 UK exporters, sending over 90% of its production to some 120 countries across the world. Idhammar OEE has enabled CNH Industrial to drill down and attack minor stoppages to increase overall production efficiency.



Proactive production

CNH Industrial (which is part of the world wide Fiat Group) required a system to improve capability in identifying losses in operational efficiency and to capture stoppage times automatically, as well as allowing operators to correctly identify reasons for significant stoppages. They also wanted a system where equipment specific downtime data could be displayed in an informative manner and reporting functionality could be analysed simply.

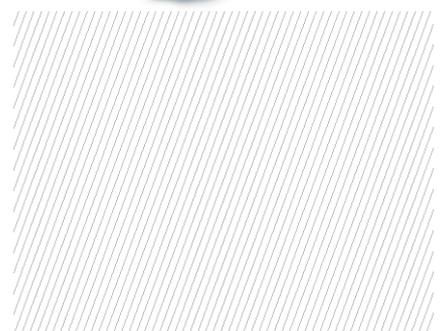
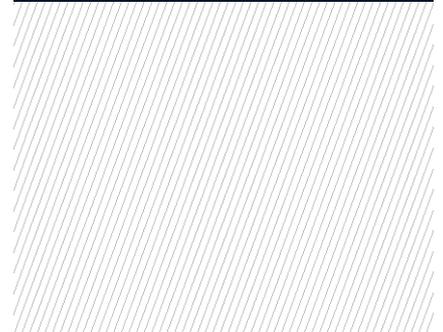
The company previously captured pertinent information via spreadsheets, which were only available at the end of each day.

Simon Tween, Maintenance Co-ordinator, explains;

“We were able to record line stoppages but required better recording and analysis of micro stops, of five minutes or less. Real time detailed recording of individual stops was imperative, in order to understand and react positively to production issues and to increase savings.”

Minute attention to detail

It takes 1.5 days for a tractor to pass through the entire production line, and a tractor rolls off the line every 4.5 minutes. The factory, although already extremely effective running at 97-98%, required the minute detail that the Idhammar OEE system was able to identify, and which lead to the production of one extra tractor per day. Considering that each tractor is worth between £90-£140,000, that represents a significant increase in profitability.



Idhammar OEE was able to provide CNH Industrial with real-time data capture, highlighting any improvement opportunities and therefore driving savings. In addition, the software was able to fulfil the following requirements that CNH Industrial stipulated of a robust OEE system:

- Recording of stop and start times automatically
- Improvement in data capture of both major and minor stops
- Product counts automatically captured in real-time
- Real-time performance dashboards via an Andon screen



- Andon screen that displayed user defined messages
- Reporting and analysis function to efficiently analyse and report on data collected
- A touch screen unit to input information regarding stoppages from a pre-defined list with the option for free text.

Unexpected Advantages

There have been other unexpected benefits such as being able to analyse stoppages caused by faulty parts. This data is sent to the supplier, meaning a faster turnaround in getting the production line back to optimal capacity.

To ensure buy-in from the people who would operate the system it had to be easy to use and, since its implementation in June 2014, team leaders and users from production and maintenance functions are operating Idhammar's OEE system to great effect. Indeed Production Team Leaders are saving up to half an hour per day since switching from a manual system to Idhammar OEE.

Support and Training

Since the factory was already operating at considerable efficiency, the implementation had to be a seamless integration into the other systems that CNH Industrial use commercially. Idhammar also provided full project management support and training.

"Through the VPN connection between our two companies the Idhammar Help Desk team was able to talk us through some of the finer aspects of the software so we could maximise the analysis of the collected data. The Help Desk also helped fine tune some of the reports to give us the exact information required." explains Simon.

World Class Manufacturing

The Basildon site was awarded the Bronze World Class Manufacturing (WCM) award in 2013. With the site employing more than 1,000 people, the Basildon facility's success is thanks in part to overcoming the challenges represented by labour, parts and the capacity of ageing equipment. The challenge is to deliver the correct parts to the production line in co-ordination with the production requirements and then to safely build a high quality tractor. The company hope to become a Silver WCM site in the coming year.

Having celebrated 50 years of tractor production in 2014, there are plans to roll out Idhammar OEE to two new lines, together with an additional production line in 2015. The future is certainly looking bright.

“ Post implementation support from Idhammar's Help Desk has been very good. ”

SIMON TWEEN
CASE NEW HOLLAND

