

EPIROC DRILLING SOLUTIONS IS A
LEADING MANUFACTURER OF MOBILE
DRILLING RIGS FOR OPEN PIT
BLASTHOLE MINES, WATER WELLS, OIL
AND GAS. THEY DESCRIBE THEIR
METHOD OF ASSEMBLY AS 'LOW
VOLUME, HIGH MIX', BUT THEIR PREVIOUS
PROCESS DIDN'T SUPPORT THIS.

Prior to NoMuda VisualFactory, operator Work Instructions consisted of a process book, a Bill of Materials (BoM) and a set of drawings. Instructions were written at a high level and made generic to cover all the options a rig requires.

This was confusing and time consuming for operators, as there was no link between the BoM and approximately 300 drawings.

Epiroc relied heavily on experienced operators to remember the routes.

Each operator followed their own sequence of steps, which resulted in an inconsistent process with varied quality.

The most experienced operators would then spend a lot of time sharing this inconsistent knowledge with new staff, further embedding variability into the process.

Epiroc's production team discovered that a Manufacturing Execution System (MES) could help them bring consistency to their process.

After extensive research into the market, NoMuda's Lean Manufacturing heritage caught their attention. NoMuda has over 20 years of experience in developing VisualFactory that became Epiroc's MES of choice.



**Epiroc** 

"NoMuda VisualFactory met our initial requirements but was able to offer us features that we didn't even know existed." says Industrial Engineer Lead, Dario Padilla.

VisualFactory has been integrated with Epiroc's ERP to export the Bill of Materials (BoM) and Work Orders.

This makes it easier for their skilled engineering team to create a set of standardized Work Instructions for their Operators.

The Work Instructions are now used on subassembly areas and the main flowline in the facility, which accounts for around 70% of their production volume.

"Our environment is now cloud based and we can use a superBoM to configure our low volume, high mix production" said Industrial Engineer Supervisor, Ryan Krueger.

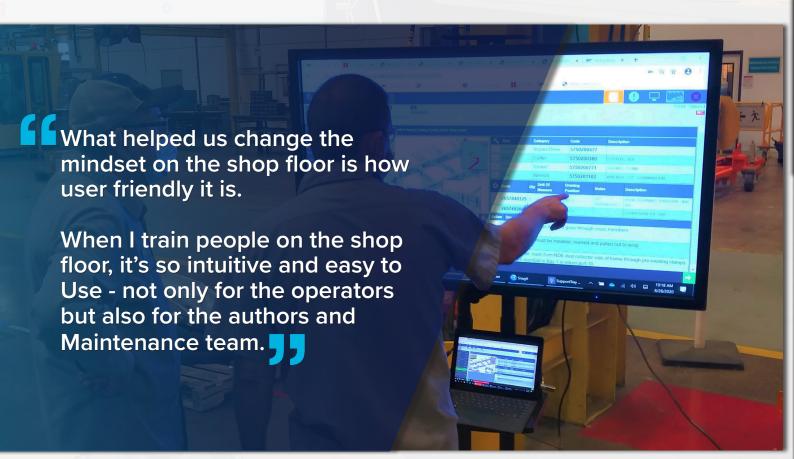
"Initially there was some pushback from the shop floor as they were used to the paper process, but the more they used VisualFactory they realized the benefits. It tells them exactly what needs to be done - there's no guessing."

Dario continued to explain, "what helped us change the mindset on the shop floor is how user friendly it is. When I train people on the shop floor, it's so intuitive and easy to use - not only for the operators but also for the authors and maintenance team."

Ryan added, "We have achieved a more consistent build sequence, with quality and time improvements."

"We have taken on some of the additional modules and functionality. For every Engineering Change Note released, we can create a corresponding Manufacturing Change Note to update the Work Instructions. We are able to assign responsibility to individuals and track the work being done."

"We currently have one type of production issue that makes it much easier for operators to communicate









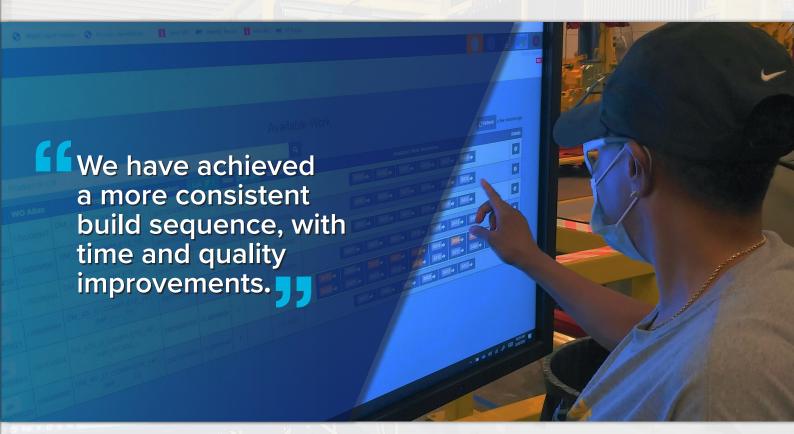
issues directly to the responsible department. We plan to add several others soon."

"Test values and data collection are easy to set up and provide flexibility for different types of data to be created. The reporting tool has allowed me to transfer data on production issues and manufacturing change notes from VisualFactory to Power Bl. I can now view and share our live data on a dashboard."

Epiroc are expecting at least a 10% reduction in man-hours as a result of VisualFactory.

VisualFactory has provided a consistent assembly sequence, presenting the required work instructions and tools used in the assembly process. This consistency has reduced the number of identified defects with the goal to eliminate all defects.

The local management team is very supportive and are pushing to have all product lines in VisualFactory. In future, they want to use more reporting capabilities to track metrics and KPIs in Production.



Discover the benefits of NoMuda VisualFactory in a free, one to one demonstration

## **Contact NoMuda**

www.NoMuda.com / VisualFactory@NoMuda.com

UK: +44(0)121-295-3995 / North America: +1 984-444-7415





