

Bridgestone Aircraft Tire Europe

Digitalisation of civil aviation tyre retreading processes

Bridgestone Aircraft Tire Europe s.a. (BAE) is a supplier of products (new and retreaded tyres) and sustainable mobility solutions for commercial aviation. Based in Frameries (Belgium), the company serves airlines and certified aircraft maintenance organisations. BAE is a model plant within the Japanese group, and is actively contributing to the environmental transformation of industry 4.0 in civil aviation.





Project to digitise the plant's processes, integrating infrastructure management, energy efficiency and traceability.

- Production: managing and maintaining an optimal process.
- Quality: facilitate tyre certification and reduce the number of rejects.
- Energy efficiency: controlling consumption and complying with the carbon convention.

Key figures

The factory:

- Production capacity of 400 tyres/day
- 200 workers
- Around 50 different tyre models on the market
- 7 Panorama HMI

The group:

- Present in 150 countries
- 145,000 employees









Implementation

- To control the production of civil aviation tyres a regulated high-tech product Bridgestone choose the Panorama SCADA platform to manage its plant and analyse energy consumption.
- The quality, maintenance, engineering and environment departments have access to Panorama HMIs. These
 provide real-time information that is both specific to each machine and global for all installations.
- Thanks to its interoperability, the Panorama platform makes it possible to integrate with IS (information systems)
 data, data from internal systems (display of trends, machine lists, etc.) and production operating data in a single
 application.



Centralised management

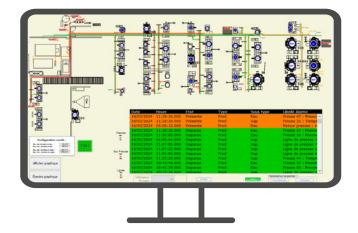
Thanks to the convergence of production data and third-party systems in a single tool, teams benefit from a centralised SCADA solution for:

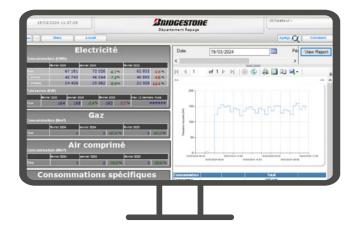
- Monitor machine data (temperature, pressure, time) to improve traceability,
- Detect variations in value thanks to trends and thus avoid scrap tyres,
- View the list of machine faults on all production lines for maintenance purposes,
- Before curing (vulcanising machine), check that all the parameters are green to avoid any production errors,
- Be alerted in real time to any need to intervene or to check a machine,
- Analyse building lighting and heating costs,
- Calculate the energy consumption of the various production tools.



Benefits

- Optimising production by digitising processes.
- Reduction in the number of tyres scrapped thanks to improved traceability.
- Controlling energy consumption and improving the EEI (energy efficiency index).







The Panorama control-command software is the ideal tool for ensuring the effective traceability required for high-tech tyres.

DECOT Henry

Production & Engineering Director

