



Case Study: Nissan (Globally)

Challenges

Nissan manufactures vehicles in 20 countries and areas around the world, including Japan, USA, Russia and the UK. Its global vehicle production volume exceeded 4.7 million in 2020, with products and services provided in more than 190 countries.

With an abundance of sensor data but insufficient skilled resources to perform manual analysis, Nissan were keen to expand the benefits of using data and machine learning to influence maintenance. In 2016, it decided to embark on a Predictive Maintenance programme to reduce production downtime by up to 50% across thousands of diverse machines. It was attracted to Senseye by its deep domain experience and ability to scale across their sites, underpinned by its patented Artificial Intelligence technology.

“Senseye is supporting our Predictive Maintenance programme across multiple production facilities and has helped us lower overall downtime and increase OEE.”

Damian Wheeler,
Nissan UK Engineering Director

Solution

For more than 5 years, with support from Senseye’s industry experts, Nissan has expanded its predictive maintenance capability across their global production sites where models such as the Qashqai, X-Trail, Leaf, and Rogue are produced.

Over time, Nissan has become autonomous in its adoption and scaling of their predictive maintenance journey. Together with Senseye PdM Omniverse to upskill their users, Nissan engineers can now on-board new machines and integrate with other enterprise software independent of Senseye.

Outcomes

Currently, more than 10,000 machines and 100 different machine types are remotely monitored using Senseye’s proprietary machine learning algorithms, including robots, conveyers, drop lifters, pumps, motor fans, and press/stamping machines. Over 500 concurrent users actively using Senseye to optimize maintenance activities and make repairs months before machine failure.

- Tens of millions in saved downtime
- Rapid Return on Investment of less than 3 months
- Up to 6 months advance warning of machine failure
- Reduction in preventative maintenance and secondary activities
- Year-on-year OEE improvements.