

CASE STUDY

DATA RULES THE ROOST

How RS Industria delivers eagle-eyed insight for leading poultry producer.



SEPTEMBER 2023
RS-INDUSTRIA.COM

CUSTOMER OVERVIEW

Dedicated to the delivery of high-quality products, underpinned by innovation and continuous improvement across every area of the business, the firm supplies branded and own-label organic, free-range and higher welfare chicken products to major retailers and foodservice providers. At the heart of the company and at the root of every objective is a commitment to animal welfare.



BENEFIS SUMARY



ENABLES TRANSPARENCY OF LEGACY AND NEW ASSETS

Delivers insight and analysis by continuously monitoring machinery.



TRIGGERS ALERTS FOR IMMEDIATE INVESTIGATION

Early warnings prevent lengthy downtime, which can impact bird welfare and drive up costs.



DIGITALLY CONNECTED ASSETS ENABLES INFORMED MAINTENANCE

Empowers manufacturers with knowledge as they head toward predictive maintenance.



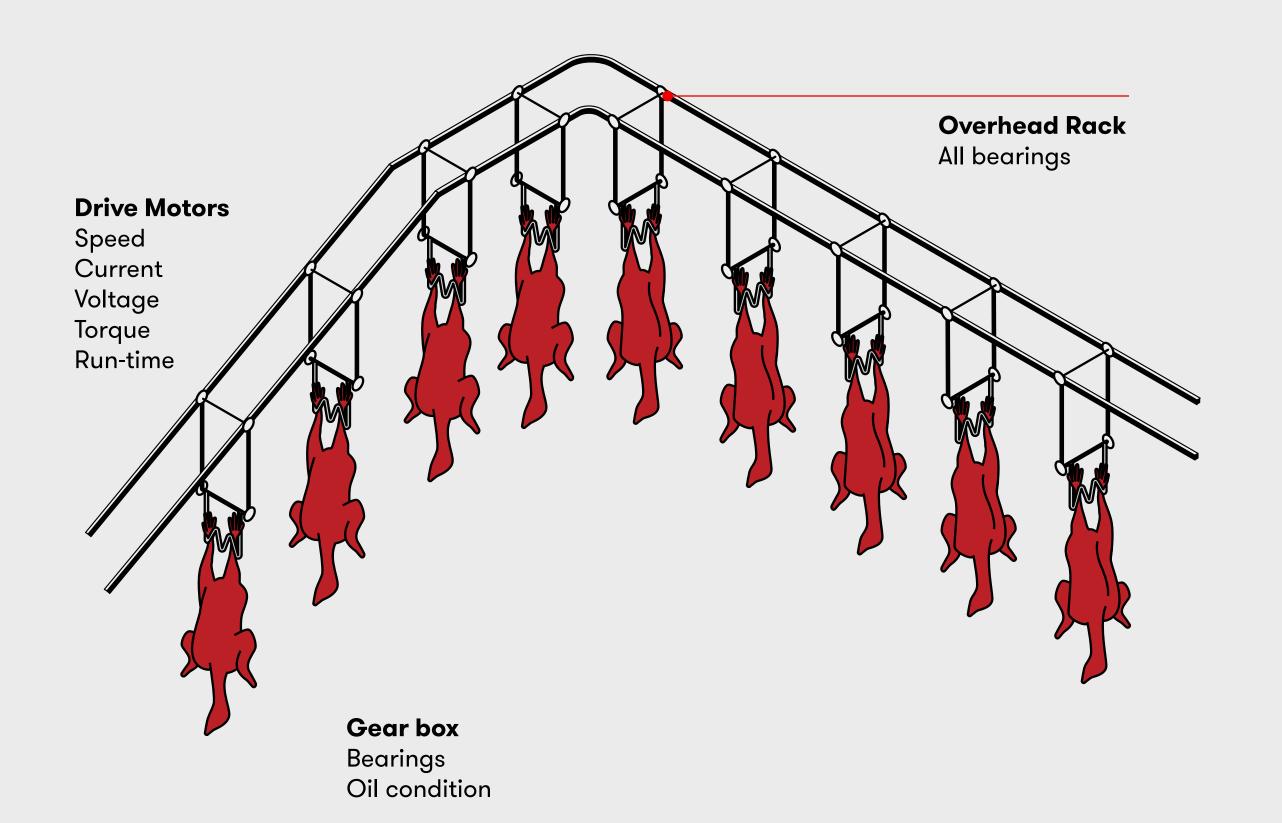
USER-FRIENDLY SYSTEM

Straightforward and easy-touse solution, with ongoing support from RS.

HAD A BROKEN INPUT PINION REMAINED UNSEEN, THE FAULT WOULD HAVE LED TO GEARBOX FAILURE AND A MINIMUM OF TWO HOURS OF DOWNTIME AT A COST OF £1000+ PLUS PARTS

R5 INDUSTRIA

WHAT WE MONITOR



THE PROBLEM

The customer is committed to providing the highest standards of animal husbandry, welfare and bio-security across the business.

Like all UK Food & Beverage manufacturers, its facilities are subject to strict rules and regulations, with the Department for Environment, Food and Rural Affairs providing guidance to protect bird welfare.

Given the complex nature and live elements of the supply chain, the firm's East Midlands facility remains open year-round, with the exception of Christmas Day. Two lines process a total of 24,000 birds an hour continuously, with one of the two lines remaining in operation during night shifts and cleaning.

Maintaining uptime of lines such as the site's Chill Chain is business critical, and it is essential that any planned maintenance is scheduled well in advance. If the lines fail unexpectedly, it can be costly, and potentially impact bird welfare.





THE SOLUTION

To continue to deliver high-quality products and ensure the welfare of its birds, the customer's engineers needed to maintain productivity and to achieve that, they needed insight.

As a fast, affordable and simple platform, RS Industria can be utilised to monitor the performance of new and legacy assets, driving down manufacturing costs and optimising efficiencies in operations.

RS Industria engineers worked with peers at the customer's site to implement monitoring solutions on key asset inverter drives, including its two lairage lines, chiller drives, kill lines, EV lines, and the Scald area.

The solutions enable continuous monitoring using specific parameters, including torque, speed, current and temperature, to deliver early warnings of degradation and other issues before they can halt production

THE OUTCOME

Within days of implementation, data from the Danfoss inverter on the Chill Chain line showed low torque on three of the drives, even when the line was running at speed. This immediately highlighted an issue within the gearbox, with prompt investigation revealing a broken input pinion.

As a key component driving the gearbox, the implications of an unseen broken pinion would have been serious. Total gearbox failure would have led to a minimum of two hours of downtime, at a cost of £1000+ plus parts.

Further RS Industria insight has since flagged other issues within the chiller, including a worn corner wheel. Had this been left to fail, it would have resulted in 80 minutes of lost production, at a cost of around £600+ plus parts. Meanwhile, data yielded by RS Industria has also identified worn bearings within the chiller that were impacting on production quality.





THE LESSONS

Digitally connecting assets to create continuous operational insight into plants and processes can identify early signs of degradation - before they stop the line.

NEXT STEPS

Customer engineers have been able to leverage RS Industria data to halt the potential for linestopping issues.

The continuous insight and added value already generated by RS Industria has impressed engineers who are now looking to roll out its use at other sites.

INSTALLATION AND ONBOARDING, AND THE RESULTING DATA AND ANALYSIS, IT WAS CLEAR RS INDUSTRIA UNDERSTOOD NOT JUST OUR MACHINES BUT OUR COMPANY GOALS. THE SOLUTION WILL HELP US TAKE OUR PREDICTIVE MAINTENANCE JOURNEY TO THE NEXT LEVEL."

CUSTOMER'S ENGINEERING MANAGER



RS-INDUSTRIA.COM | +44 (0)333 2470235 | RS-INDUSTRIASUPPORT@RS.RSGROUP.COM