aras

RACAL ACOUSTICS

CASE STUDY

Racal Acoustics Increased Data Management Efficiencies by 6x

COMPANY BACKGROUND

Racal Acoustics, part of the Esterline Corporation, produces audio devices, including in-the-ear headsets, medium-noise and high-noise headsets, press-to-talk devices, field telephones, and handsets, all specially tailored to military, paramilitary, and first responder markets. Furthermore, Racal Acoustics offers tailormade solutions to satisfy their clients' unique operation needs.

"We saw a 600% savings in our efficiency by managing electronic drawings with Aras. The time it takes to produce data packs has decreased dramatically because today we just need to press a single button."

- Jamie Griffin, Operations & Engineering Director, Racal Acoustics

PROBLEMS & CHALLENGES

- Assembly information loss
- Long product release time
- Time consuming processes that did not add value
- Need for CAD management tool along with PLM to track all part numbers

SOLUTION

Aras Innovator with the industry-specific solution for High-Tech Electronics.

BENEFITS

- Managing electronic drawings became six times more efficient
- Faster time to market
- Better traceability of part numbers and parts
- Increased process efficiency

NOTABLE METRIC

By implementing Aras Innovator, Racal Acoustics saw a 600% savings in efficiency by managing electronic drawings.

Racal Acoustics serves a global customer base with unique needs in various changing markets. In addition, the company is operating in an innovation-driven industry. That requires a high level of efficiency of processes and responsiveness to the innovative technologies that continuously evolve in the niche.

New technology creates new offerings in the product portfolio. With the growth of their portfolio, Racal Acoustics increased the volume of data and files they had to work with. Consequently, assembly information was lost due to splitting the information into different files. Further, the need for CAD management, along with PLM, for configuration management was greater than ever.

"Information was often lost because it was not linked to the initial CAD, and CAD itself became corrupted because we had to separate files into individual part numbers, so some assembly information was lost," said Jamie Griffin, Operations and Engineering Director at Racal Acoustics. He continues:

"It was taking 4 to 6 weeks to release product because of the process. We looked at that process and we found that we had something like up to 26 steps in the process, of which 18 did not add value, but we had to do it because of the way we handled our files, " says Jamie Griffin.

Therefore, it was important for the product development team at Racal Acoustics to eliminate all ineffective procedures that did not add value and that increased the time to market for their products.

Between 2006 and 2014, several feasibility studies were conducted, and all pointed towards the need for a system enabling higher efficiency of controlling engineering drawings. The system should support the complexity of the products, be flexible and easy to modify, as well as be intuitive for the users. An essential requirement was the financial aspect. Finding a product that has a lower initial investment was equally essential as meeting all the other demands.

For the purpose of improving their efficiency of controlling engineering drawings and improving their time-to-market performance, Racal Acoustics chose Aras Innovator with the industry-specific solution for High-Tech Electronics on top. Racal Acoustics included the industry-specific solution in their Aras Innovator implementation because it removed the need to customize and build specific features to support various company processes.

Minerva Group initially engaged with Racal Acoustics to implement Aras Innovator with the industry-specific solution on top. In January 2022, Minerva Group merged into Aras Corporation. The implementation of Aras Innovator with the industry-specific solution for High-Tech Electronics quickly led to significant efficiency improvements in managing electronic drawings as well as in producing data packs.

"The company had run several feasibility studies which all stated that we need to move towards PLM to improve our efficiency of controlling engineering drawings. All of those feasibility studies pointed to the use of Aras as being the most cost-effective product for a company of our size," says Jamie Griffin. He continues:

"We predicted about a 600% efficiency saving in the management of electronic drawings and I believe we have achieved something similar to that. If we pull a product from the past and try to do modifications on it, the improvement is even higher than 600%. We have also improved the production of the data pack by taking the manufacturing data from the PLM system and producing a single ZIP file that we can send to the manufacturer. The efficiency of producing data packs has increased dramatically because it can be done today at the press of a single button," says Jamie Griffin.

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Aras provides the most powerful low-code platform with applications to design, build, and operate complex products. It's technology enables the rapid delivery of flexible, upgradeable solutions that build business resilience. Aras' platform and product lifecycle management applications connect users in all disciplines and functions to critical product data and processes across the lifecycle and throughout the extended supply chain. Airbus, Audi, DENSO, Honda, Kawasaki, Microsoft, Mitsubishi, and Nissan are using the platform to manage complex change and traceability. Visit www.aras.com to learn more and follow us on Twitter and LinkedIn.