YASA Customer Success Story

This innovator of high-tech electric motors chose codeBeamer ALM to manage product development processes with ASPICE & ISO 26262 compliance requirements

codebeamer™

YASA is a British developer and manufacturer of high-performance e-motors and motor controllers founded in 2009.

The company's products are used mainly in automotive and industrial applications, with growing interest from the rail, marine, and aerospace industries as these sectors increasingly turn towards hybridization and electrification.

A major milestone and a good example of why YASA is considered a leader in the high-performance electric motor space: in 2019, the company announced that Ferrari selected its e-motor for the SF90 Stradale, their first hybrid production series supercar.

Tool environment & challenges

Prior to implementing codeBeamer ALM, like many other advanced engineering companies, YASA had been relying on a patchwork of Excel spreadsheets and other legacy platforms to control its development activities. Tools like Mathworks Polyspace and Simulink Test were (and still are) applied in Quality Assurance processes, while YASA's dev team uses Git for version control.

Such a fragmented tool environment that relies heavily on manual processes makes it difficult to have good mechanisms in place to manage traceability. Because of large projects with automotive OEMs, YASA was facing stringent ISO 26262 and Automotive SPICE requirements. As the software team made the transition to Agile processes, they found it challenging to define suitable workflows to satisfy regulatory compliance requirements in this iterative and self-organizing environment.

YASA's software team needed a controlled and transparent way to manage requirements. They were looking for a means to show traceability across the development lifecycle, and to formalize and capture test and validation results linked to specifications.

Consequently, when YASA selected codeBeamer ALM, one of the key drivers was the platform's ability to support ISO 26262 and ASPICE requirements. In 2018, YASA made an initial investment in codeBeamer ALM licenses and swiftly transitioned to this unified Application Lifecycle Management system. They have since further expanded their number of users.

Agile solution with compliance support

Around 70 team members actively use the system, spread across 2 different sites, working on 10-12 active projects. They are using codeBeamer ALM primarily for requirements management, task management, software development management, and release management. Integrated with Git, codeBeamer is filling in some gaps that YASA had had in their processes, and the development team has updated their workflows to accommodate compliance requirements in an Agile setting.

Overall, codeBeamer ALM helped YASA meet those needs for stricter control over process workflows. Using the system provides the development team with the ability to analyze the impact of changes and provides traceability across the process of product delivery. To streamline collaboration with customers, the team relies on codeBeamer's export-import capabilities that enable them to seamlessly exchange requirements with customers.

YASA uses the platform to gain increased visibility around task management, progress tracking, and performance monitoring in a distributed Agile setting. The dev team has been running a project to investigate the use of codeBeamer ALM for Failure Mode and Effects Analysis (FMEA), and is currently evaluating the system's capabilities for product risk management in general. While the software team was the first to use codeBeamer ALM, YASA is now running projects to consider the application of the platform in hardware and mechanical design.

> **One of the benefits that a lot of people are seeing is having everything within a single tool, being able to easily link different things together, rather than having to try and manage a range of separate tools.**
>
> *Will Treharne, Head of Software, YASA*

Benefits of integrated ALM

With an upcoming audit to assess YASA's ASPICE capability, the team enjoys the benefits of holistically integrated Application Lifecycle Management that codeBeamer ALM provides. The development team reports clear advantages around reducing manual work (and the chance of error) that's involved in managing traceability for compliance.

As YASA's Head of Software Will Treharne put it: "Having a single tool in place that we can use to coordinate our activities rather than having requirements and design documentation spread across multiple files and across the network has been hugely beneficial."

One of the big advantages that YASA's senior team members report is having greater visibility over the work that's going on within the team. This ability to drive and monitor team performance is further bolstered by the platform's ease of use: team members quickly get to a point where they can deliver business benefits with the tool. New members joining YASA's development team find it simple to use, while advanced users value the codeBeamer ALM's flexibility when adapting the system to the team's needs.
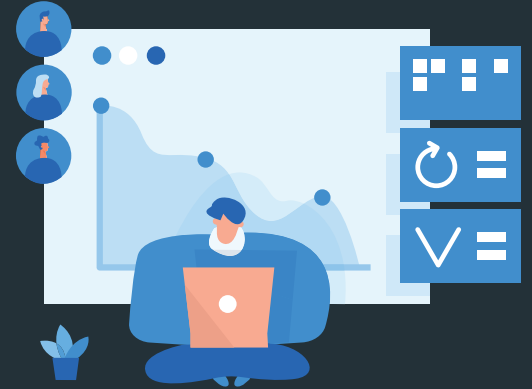
> **My impression is that most people get to grips with using the tool pretty quickly. I've been very impressed by the usability and the views. Very very simple, and easy to share.**

Will Treharne, Head of Software, YASA

Wondering if you could reap similar benefits?

Find out why companies have selected Codebeamer. See how PTC®'s Codebeamer technology could help you increase development efficiency and reduce costs.

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