

MRO operations
optimized through
improved parts
management



Key to Rolls-Royce Rotables' capability to deliver the line replacement unit (LRU) management service is the ability to control and monitor assets' movement to LRU repair vendors and back to customers. Use of the Optimized Systems and Solutions (OSyS) parts management solution has enabled Rolls-Royce to manage engine LRU repair and overhaul more effectively through process controls and proactive alerts. The solution improves information accuracy and availability. High volumes of parts are now managed efficiently through a complex repair supply chain.

"A key driver to the success of the 2008 upgrade of the inventory-management system was the strong relationship OSyS developed with the Rolls-Royce Rotables business team. As a result, all risks were identified and successfully mitigated early, the budget was well-managed, and the solution was implemented with minimal disruption to the stakeholders. The OSyS-hosted solution has consistently met the contracted service level agreement, and we are pleased with the effective visibility we have of assets around the world."

Dan Attew
Operations Manager, Rotables Services
Rolls-Royce, Gas Turbine Services

Rolls-Royce

Rolls-Royce, a world-leading provider of power systems and services for use on land, at sea and in the air, operates in four global markets – civil aerospace, defense aerospace, marine and energy.

The company seeks to add value for its customers with services that enhance the performance and reliability of its products. Removing technical and financial uncertainty associated with engine aftercare assists in maximizing operational reliability while minimizing financial risk and costs.

The need for information

Rolls-Royce Civil Aerospace offers a comprehensive suite of through-life services that cover all aspects of managing aero engines. TotalCare®, the flagship brand of these services, consists of a core set of services with additional service options available. One option is line replacement unit (LRU) management, which is delivered by the Rolls-Royce Rotables business team.

The LRU management service controls and monitors transportation of the units to and from vendor repair stations as well as the overhaul of the units themselves, including any updates to components. It also provides a technical history. To enable the effective implementation of the service, it was imperative that the Rolls-Royce Rotables business team had a system to reliably monitor the movement of the high-value assets. Not only would such a system improve efficiency of its Services business, it would also provide valuable information to confirm compliance with agreed repair cycles.

The OSyS solution

OSyS worked with the Rolls-Royce Rotables business team to capture and document its requirements and assisted with the evaluation of commercial off-the-shelf products and selection of the product that best met the company's needs. OSyS designed and configured a fault-resistant, Internet-enabled parts management solution based on

ProtectPerformPredict



Benefits Realized

- *More effective management of repairs and spares*
- *24/7 global availability of information*
- *Improved integration of Rolls-Royce and its partners*
- *Better understanding of the supply chain to drive efficiency*

industry-leading software applications. Designed to provide high systems availability, the solution was tested to be secure against any unauthorized access.

The parts management solution, hosted by OSyS, was successfully implemented in two months, providing up to 90 named users 24/7 access to the information being monitored. OSyS also supported Rolls-Royce with formal training and delivered user guides for Rolls-Royce personnel.

As part of ongoing support and management assistance, OSyS provides a hosting environment that delivers a very high level of system availability

Upgrade improves solution

In 2008, four years after the system's implementation, Rolls-Royce recognized that its requirements had grown much broader than the system had been developed to meet. Upgrading the OSyS solution would enable them to take a more flexible approach, meet the additional requirements and better support the business going forward. By simplifying the creation of reports, customer satisfaction could be improved and cost savings delivered with fewer resources. The system could also provide standardization at locations around the world.

With these additional requirements, OSyS upgraded the original solution to deliver increased functionality, completing the effort in July 2008. The project included designing and configuring the upgraded applications, migrating the data and increasing the system capability to accommodate up to 360 named users accessing the monitoring information. The upgrade included a complex workflow to manage all aspects of the asset movement process, providing appropriate e-mail and on-screen alerts and notifications to repair vendors, logistics providers and operators.

Outcome for customer

For the past five years, Rolls-Royce has benefited from easy access via the OSyS parts management solution to information concerning the movement of its high-value assets, knowledge that is key to its service offering. The solution has improved the accuracy of information, enabling the Rotables business team to better manage its service. It has also provided them the ability to more proactively respond to issues. Since the OSyS solution allows the team to identify exactly where all parts are at any one time, the team is able make informed decisions concerning the probability of meeting the agreed turnaround time or the potential need to consider an alternative.

The system has allowed the Rolls-Royce Rotables business team the capability to offer an asset-availability service rather than a reactive repair service. It has also increased efficiency by streamlining the process and reducing the number of resources required, benefits that increased with the solution upgrade.

The story continues

OSyS is currently working on enhancing the parts management solution to support further integration with external customer systems. This will provide additional opportunities to reduce turnaround times and increase the availability where possible.

TotalCare® is a registered trademark of Rolls-Royce plc.