



The challenge

Deutsche Bahn AG (DB AG) recognised a need to improve their IT Landscape to optimize the groups wide planning and parts management processes. The goal was to gain optimized inventory coverage at all their stock locations.

This included a continuous development of their operational structure and their business processes to achieve high parts availability at minimum cost.

The solution

Syncron Global Inventory Management


The results

- Stock level optimization in the network and increase of availability
- Automatically stock balance and rule based redistribution
- Virtual warehouses across locations
- Aggregated planning
- Exception based management of planning and procurement processes
- A seamless integration of the Syncron in the SAP-systems

About Deutsche Bahn AG

DB AG is the largest railway operator and infrastructure owner in Europe. DB AG carries about five million passengers daily in Germany, running 185,000 rail vehicles over 34,000 km tracks. To support their operation, DB AG stocks more than 640,000 spare parts SKU's across 100 store-rooms, service facilities. DB AG has over 300,000 employees and a turnover of about €34.4 billion.

www.deutschebahn.com



Spare Parts Planning -Running on Schedule at Deutsche Bahn AG

Deutsche Bahn AG (DB AG) selected Syncron to improve their inventory performance through centralizing, coordinating and automating the MRO and consumable spares purchasing processes. With more than 100 stock locations the concept of virtual warehousing has provided additional cost savings.

DB Project

To realize DB AG's projects goals the Syncron Global Inventory Management system provides a network-wide optimization and visibility for all types of spare parts inventory and demand streams, both for planned and unplanned demand. The system automatically adopts forecasting methods and algorithms, based on each part's demand information. As the fleet size grows in a given market, so does

the number of repair and maintenance events. This is handled automatically by the demand type classification in the system or by using the possibility to adjust the forecast through predefined (external) Material Requirements Planning for those cases where a forecast based on historical data would not be sufficient enough.

To balance inventory in the supply chain the Syncron system automatically evaluates the best sourcing option, including vertical and horizontal replenishment. Horizontal replenishment redistributes excess inventory from one location to another according to redistribution rules for a defined redistribution area. This prevents ordering from the supplier when there is excess stock available in DB AG own network.

"We at DB AG consider it essential to develop an effective and rational inventory management process." said Dr. Felix Hafner, MRP Parts Purchasing at DB AG, "We therefore together with Syncron, developed highly efficient forecasting, replenishment and distribution processes to gain the best possible availability of spare

“Deutsche Bahn AG conducts continuous automated calculation of parameters across more than 100 stock locations.”

parts and repairable spare parts. We focus on keeping the maintenance of trains (old and new) as efficient and productive as possible, so that constant rail traffic across the whole rail network is guaranteed.”

Another key feature DB AG recognized in the Synchron solution was the implementation of virtual warehouses. Virtual warehousing is a concept which provides substantial gains in accuracy, material visibility and lower inventory costs. Slow moving and expensive materials can be stocked at a certain stock location but are via a virtual warehouse available to all stock locations in the same region. This ensures the flow even of very slow moving materials which only in rare circumstances require availability.

Planning of Repairable Spare Parts

The next step in our project is to integrate the MRO supply chain planning process that controls the flow of repairable parts. Repairable parts — those items that can be repaired following a breakdown or failure — are of particular importance for the railway industry as they are typically heavily utilized and relatively expensive equipment. DB AG will implement the functionality for Repairable Spare Parts Inventory also called “Rotables Planning”. The Rotables

Planning module is part of the Synchron Global Inventory Management solution handling over 600,000 SKUs for DB AG.

Synchron Rotables Planning optimizes parts across the different nodes of the MRO supply chain with automatic forecasting and scheduling for repair the unserviceable parts. Repair orders and supplier orders are created using the forecasted demand of serviceable parts at the warehouse and replenishment parameters that includes the repair lead time and the supplier lead time. Repair orders and supplier orders are initiated in the timeliest manner to minimize inventory values while keeping or increasing service levels.

SYNCRON CASE STUDY DEUTSCHE BAHN AG

About Synchron

Synchron maximizes global supply chain performance, easily. Our ERP-independent software solutions for global inventory management, global order management, global price management and master data management, are implemented faster and at lower cost than other solutions. Synchron has had years of experience with cloud services and Software-as-a-Service (SaaS) as an alternative to hosted solutions and perpetual licenses. We deliver superior results to our customers through combining software expertise with extensive experience from selected industry sectors within manufacturing and distribution. To stay ahead, many world-leading global companies have chosen Synchron: Atlas Copco, Volvo, Tetra Pak, JCB, Mazda, Alfa Laval, Scania, BAE Systems, Electrolux, Renault, and Komatsu.

Contact Synchron

For more information, please visit:
www.synchron.com

or call us at:

Japan +81 (0)3 3560-3141
UK +44 (0)121 503 2650
US +1 678 638 6275
Sweden +46 (0)8 410 802 00