


Bernard Krone Holding GmbH & Co. KG, Spelle, Germany

Optimal Procurement and International Distribution of Spare Parts – with SAP APO

 Planning with APO lets us centrally manage our logistics network for spare parts. Thanks to the high level of automation in planning, we can employ optimized procurement strategies. We have significantly reduced our inventory levels for spare parts but are still able to maintain high availability.

Markus Rolfes, IT Organization and Project Management, Krone Group

Challenges

- Fast, global availability of spare and wear parts
- High storage costs and tied-up capital
- Large number of spare and wear parts: over 40,000 different materials

Solution

- SAP APO (Advanced Planning and Optimization)

Why itelligence?

- Many years of close, trustful cooperation
- Extensive consulting experience in the APO environment

Benefits

- Automatically generate sales forecasts even for sporadic needs
- Calculate seasonal safety stock
- Optimize procurement lot sizes
- Reduce storage costs and tied-up capital
- Bundle replenishment deliveries for container shipping



Over
60,000
spare part numbers



Planned in APO:

13

international spare part warehouses

Spare Part Inventory Levels Based on Demand

As a leading manufacturer of agricultural machinery, the machine manufacturer Bernard Krone GmbH offers its customers first-class service, even for spare parts. Use of agricultural machinery is very seasonal and often occurs during harvest time. If the machinery is damaged, it must be repaired immediately in order to minimize downtime on the field.

As part of the SAP SCM solution, SAP APO has a broad spectrum of functions for planning and executing logistics processes. In close cooperation between intelligence consultants and the Krone Group, a solution was implemented that combines individual forecasting models for planning spare part demand with processes for determining safety stock levels and for optimizing lot sizes.

The system automatically forecasts future demand for spare parts based on a customer's order history. APO Demand Planning uses this data to determine and then recommend to the end-user various MRP (Material Requirements Planning) parameters such as lot-sizing procedures and safety stock levels. Additionally, safety stock is built up during the harvest season and then reduced in the off-season.

Global Distribution and Availability Check

Procurement and global delivery for regional distribution facilities, in particular container shipping to the U.S., can be planned automatically using the Transport Load Builder (TLB) in APO.



We have achieved two simultaneous goals with SAP APO: high availability and reduced inventories.

The builder checks the (transport) purchase requisitions in terms of scheduling requirements and amount restrictions and then generates optimal (transport) orders which ensure that container capacity is utilized as much as possible.

In addition to purchasing spare parts, the company also manufactures its own. As part of the customer order availability check, customer orders are regularly matched against existing inventory. If it is discovered that capacity in the warehouse has fallen below a certain threshold, a planned order is created automatically in APO based on the availability of components. This order is immediately converted into a production order.

Consistently High Service Quality

Since 2008, the agricultural machinery manufacturer has used APO Demand Planning and APO Supply Network Planning in all of its spare part factories in Germany, England and the U.S. The spare part and logistics center in Spelle serves as the hub. By consistently using SAP APO, the company has been able to reduce warehouse inventory significantly while improving the availability of spare parts.



Company:
Bernard Krone Holding GmbH & Co. KG

Sector:
Machinery and vehicles

Products:
Trailers, semi-trailers and agricultural machinery

Number of employees:
3,097 (2014)

Revenue:
EUR 1.6 billion (2014)

Headquarters:
Spelle, Germany

Website:
gruppe.krone.de/english/