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Syncron Parts Planning Solution

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Demand Forecasting

Time-series forecasting is periodically executed automatically for all items in all locations. In SYNCRON Parts Planning each item is connected to a forecasting parameter set, and this set of parameters is used in the forecasting calculations. SYNCRON will tune the parameters based on best practices and industry knowledge which will allow minimum manual effort for the inventory planner(s) in their daily work. The demand forecasting calculation is based on demand transaction history data which is interfaced from the CUSTOMER ERP system(s). Advanced Seasonality functionality provides automated calculation and application of item-level seasonal profiles based on system evaluation of profile quality and strength.

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Inventory Optimization

Description

Inventory Optimization will be executed daily based on current forecast and forecast adjustments. For the setup of total targeted service level and stock values, SYNCRON Parts Planning uses inventory policies. To continuously track the right targets and efficient maintenance of the targets, each item is assigned to an inventory policy based on planning location and item group classification.

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Stock Replenishment

Description

1.1.1.1 Stock Replenishment

Replenishment calculations are performed daily to provide up-to-date input for CUSTOMER planner’s decisions. The output of the process is purchase and stock transfer

orders needed to support the target service levels and stock values (replenishment parameters) computed in the Inventory optimization step. SYNCRON Parts Planning uses replenishment parameter sets for the stock replenishment calculations. The parameter sets are configured according to SYNCRON best practices and input from the CUSTOMER to automatically calculate order in line with the CUSTOMER order requirements to minimize manual reviews and adjustments of the order quantities for the planner.

The system generates purchase and stock transfer orders based on defined ordering days set in an order calendar, typically to only suggest orders during working days and excluding weekends and bank holidays since no planner will review the orders these days. The ability exists to create many different ordering calendars in the software, but a typical project starts with one or just a few that can be assigned to one or several locations with same definitions of weekdays and bank holidays.

1.1.1.1.1 Order Suggestion export

Confirmed order suggestions created by SYNCRON Parts Planning will be exported to SYNCRON sFTP server to be picked up by CUSTOMER ERP System. The export schedule will be defined during the design phase of the project. The goal is to enable as automated process as possible for the CUSTOMER that includes for example enabling auto-approval of orders which do not need the planner's manual approval to be confirmed. This will allow the planner to focus on the parts requiring manual review which could be for example bulky, hazardous, or expensive parts that might need to be handled differently.

1.1.1.1.2 Replenishment parameters export

SYNCRON Parts Planning have the capability to export replenishment parameters calculated in the solution. The parameters will be exported in a delimited file to the SYNCRON sFTP server where it can be picked up by the CUSTOMER. This export is typically used in case CUSTOMER would like to align the ERP-system's planning parameters with the ones set in SYNCRON or to be uploaded to a Business Intelligence tool for other reporting outside Syncron Parts Planning.

1.1.1.1.3 Return order export

Dealer adoption rates is very important for a successful RIM program. Many OEM's uses a Return program to incentive their dealers to join the program and remove the risk of carrying stock from the dealer. The SaaS Solution can generate return orders (buyback orders) which includes system ordered items that the dealer is eligible to send back to central warehouse. The logic for classifying an item as eligible or not is specified by a return order parameter set. Typically, one return order parameter set is setup per project since all dealers are offered the same terms and conditions, if more return order parameter sets are needed later the user can manually add more in the SaaS Solution.

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Reporting and KPIs

Description

Standard Reports and KPIs based on SYNCRON Parts Planning management best practices. The KPI's calculations are based on both data loaded from CUSTOMER ERP and data calculated in SYNCRON. To allow good reporting quality it is important that the data sent to SYNCRON is of good quality. Example to be able to calculate the service level to end customer, lost sales data needs to be interfaced to SYNCRON to make the KPI calculated correctly.

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Global Planning

Description

Global Planning functionalities included in the project scope are Supply chain visibility, Point of Sales Aggregation, Stock redistribution, and Stock Allocation. All these functionalities will enable visibility in the CUSTOMER supply chain which will facilitate global planning for the CUSTOMER.

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Insights

Description

Insights module provides access into SYNCRON analytics tool which delivers a huge range of data analysis possibilities. Insights gathers all of the information stored in SYNCRON Parts Planning and generates reports that join them together. Functionality due to each huge flexibility allows to run complex data analysis and drill down from high-level information into low-level details of a single item. Insights additionally provides functionality to generate graphs out of the selected data range. Furthermore, the tool allows to save reports or graphs for frequent usage, create dashboards containing information which are most commonly used or share their own reports with other users.

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Insights+

Description

Insights Plus extends the functionalities of a base Insights module. It allows a larger number of dashboard designers to create dashboards within the application.
Further, it adds the possibility to use notifications for selected users (triggered by changes observed in pre-defined reports).

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Virtual Planning

Description

Virtual planning makes it possible to manage slow-moving items in a region. Items with insufficient demand to be stocked locally can be stocked virtually to make sure they are available somewhere in the region. Virtual planning is typically important when the supplier lead time to the region is long and by virtually planning an item, the availability in the region can be kept at a good level without significantly increasing the total stock in the region.

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(D2D) Item locator

Description

Parts locator is a feature that merges inventory availability with geographical data to inform the user about the nearest potential sources of selected items. Parts locator can be used in several modes and for several purposes. For example, the planner can search for the quickest source of an item for a particular location in case of a run out of stock. The user can also be on the move and enter his/her current location using an address, zip code, or geographical coordinates.

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D2D Dealer as a Depot

Description

N/A

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Causal Forecasting

Description

Causal forecasting is a method of predicting demand for items based on causal factors. This forecasting method is important for customers who have a lot of additional data coming from their equipment. Causal forecasting will be used together with the statistical forecast which is based on historical demand. The input for Causal forecasting is provided through the integration interface, and for items where this information cannot be provided, the statistical forecast will be used.

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Planned events management

Description

Planned event management utilizes known sales with delivery planned in the future to pursue the ordering based on it just in time. This together with the forecast will improve service level and immediately reduce the uncertainty of demand prediction, where it is possible.

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Supplier Portal

Description

N/A

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Multi-Echelon Inventory Optimization

Description

Multi-Echelon inventory optimization includes optimizing multiple echelons/tiers/levels in a supply chain at the same time (jointly), instead of one by one. The purpose of the optimizations is to minimize the total cost in the supply chain while at the same time keeping the target availability to end customers. The simulation result from the Multi-Echelon inventory optimization will prove where it will be most cost-efficient to keep the stock in the supply chain based on inputted target availability.

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Connected Inventory

Description

In the Connected Inventory functionality, SYNCRON Parts Planning will do Installed Base forecasting, based on sensor readings. By providing data of the machine locations that come from sensor readings, SYNCRON Parts Planning will find the closest location and adjust the forecast on the basis of the number of machines in the planning location vicinity.

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Replenishment Policy Approval

Description

Replenishment policy approval (RPA) is an advanced planning method, where the planner(s) review each suggested order line by the system. RPA allows the planner(s) to approve changes related to the replenishment parameters and let the ordering process be automated. With this functionality, the planner(s) will be able to decrease the amount spent per day related to ordering.

In the Syncron Parts Planning it is possible to configure which RPA changes the planner(s) should review manually and which can be auto-confirmed. This is controlled by a replenishment

parameter set. Typically, one or just a few RPA parameter set templates are configured which can be assigned on a location level.

The SaaS Solution generation of RPA's will follow an RPA calendar that can be assigned per location. The RPA calendar is typically used to align the generation of new RPAs with business hours. SYNCRON best practices suggest starting with one or just a few RPA Calendars, additional calendars can be set up by trained users later if needed.

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Replay simulator

Description

Replay Simulator is an advanced SYNCRON Parts Planning module for simulating business decisions and alternative scenarios by doing what-if analyses. The functionality provides users with an easy-to-use, user-friendly interface, the so-called Simulation center, for triggering and managing simulations. It is a unique simulation tool that allows utilizing actual historical demand to test out various inventory plans.
