

*Performing Drop Shipments in SAP: A Primer*

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*Performing Drop Shipments in SAP: A Primer*

Logistics Editor Suresh Sreenivasaiah teaches us the ABC`s of drop shipments in SAP. He starts by pointing out the characteristics, advantages, and disadvantages of drop shipments in general, and illustrates the process with a flow chart. From there he introduces SAP`s third-party processing, both automatic and manual, outlining steps and illustrating with screen shots to show how it supports drop shipping. From forecast to MRP consolidation; from drop-shipment determination to sales order creation; from delivery to invoice processing, Suresh shares his insights and experience to ease you through an otherwise complex configuration.

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## Forecast

Based on the market demand or customer's requirements, the demands (which are not orders) are considered for weekly or monthly planning buckets. These demands form the forecast for purchasing or production of the items (SKUs), depending on the company's business activities.

## MRP Consolidation

Typically, in the retail industry, this process is complex. The demand and forecast are driven by various places and systems. In these cases, the demand for the SKUs from various systems are consolidated in one application, and the whole planning system generates the requisitions for purchase or production. In complicated planning systems, there may be exclusive planning applications like SAP APO, Logility, or i2 Planning System. The Material Requirement Planning run is executed in these systems, and then fed to SAP R/3 as Purchase requisitions, or the MRP is executed for these requirements in SAP R/3.

## Drop Ship Determination

In a complex distribution business case, the generated requirements (planned orders or requisitions) will be filled by different plants or warehouses. The identification of the plant or warehouse for supplying the item is defined by the Drop Ship determination program. This program analyzes the destination, date required, quantity, shipping costs, and availability of item, and then proposes the quantity and the dates by which one of the warehouses can supply the material. This complex distribution analysis can be performed by advanced planning systems like SAP APO, Oracle APS, or the i2 system. In their absence, a custom program with all the business logic related to the distribution, demand, supply, and networking points needs to be

built in SAP to determine the supplying source. This job would determine the supplying source and route the purchase requisition to the concerned plant.

## Sales Order Creation

The demands that are confirmed from the customer appear as purchase orders with all the details of the required product, including quantity, destination, and prices. The purchase order placed by the customer would be entered as a sales order in the system.

In a normal drop-ship order in SAP, when the sales order is checked for document completion and then saved, a Purchase Requisition is created automatically (through the set triggers). In SAP, the drop-shipment order processing is called Third-party order processing. The processing of third-party orders is controlled via material types. Material types define whether a material is produced only internally, can be ordered only from third-party vendors, or whether both are possible. For example, a material that is defined as a trading good can only be ordered from a third-party vendor. However, if you manufacture your own finished products, you may

also want, from time to time, to be able to order the same type of product from other vendors.

Third-party items can be created automatically by the system, depending on how your system is set. However, you can also manually change a standard item to a third-party item during sales processing.

- Automatic third-party order processing

If a material is always delivered from one or more third-party vendors, you can specify in the material master that the material is a third-party item. To specify a material as third-party item always enter BANS in the Item Category Group field in the Sales 2 (sales organization data) screen of the material master record.

During subsequent sales order processing, the system automatically determines the appropriate item category for the third-party item. The item category "TAS - third party item" will be automatically set in the Sales order (see Figure 2), if the material has been defined for third-party processing.

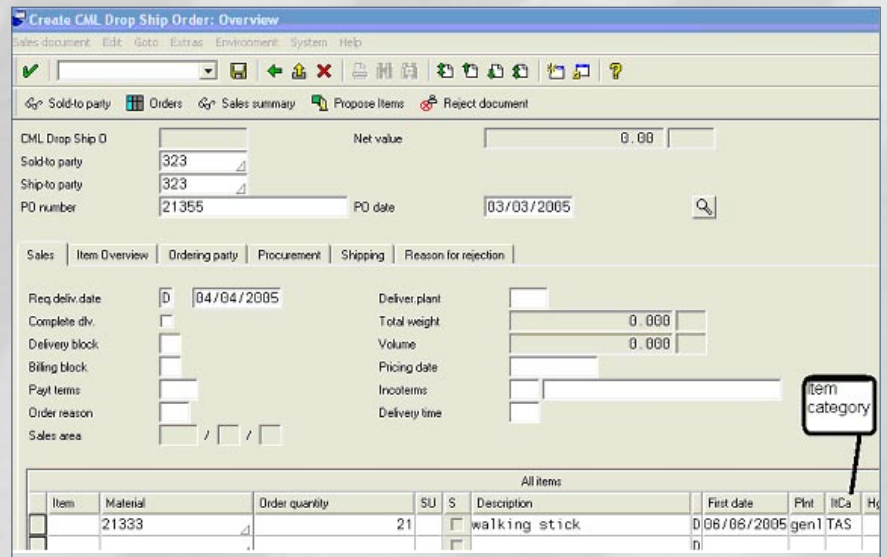


Figure 2: Automatic Third-Party Order Processing

- Manual third-party order processing

For a material that you normally deliver yourself, you specify the item category group NORM in the material master. In the case of a material that you normally deliver yourself but occasionally need to order from a third-party vendor, you can overwrite the item category during sales order processing (as you would do in Figure 3).

*Other SAP features:*

If address data for the ship-to party is changed in the sales order in third-party business transactions, the changed data will automatically be passed on to the purchase requisition, and also to the purchase order (if one already exists). In the purchase order, you can display the address data for the ship-to party in the attributes for the item.

You can only change the address data for the ship-to party in the sales order for third-party business transactions, and not in the purchase order.

**Purchase Requisitions**

- Automatic creation of PR

When you save a sales order that contains one or more third-party items, the system automatically creates a purchase requisition. Each third-party item in a sales order automatically generates a corresponding purchase requisition item. During creation of the requisition, the system automatically determines a vendor for each requisition item. If a sales order item has more than one schedule line, the system creates a purchase requisition item for each schedule line.

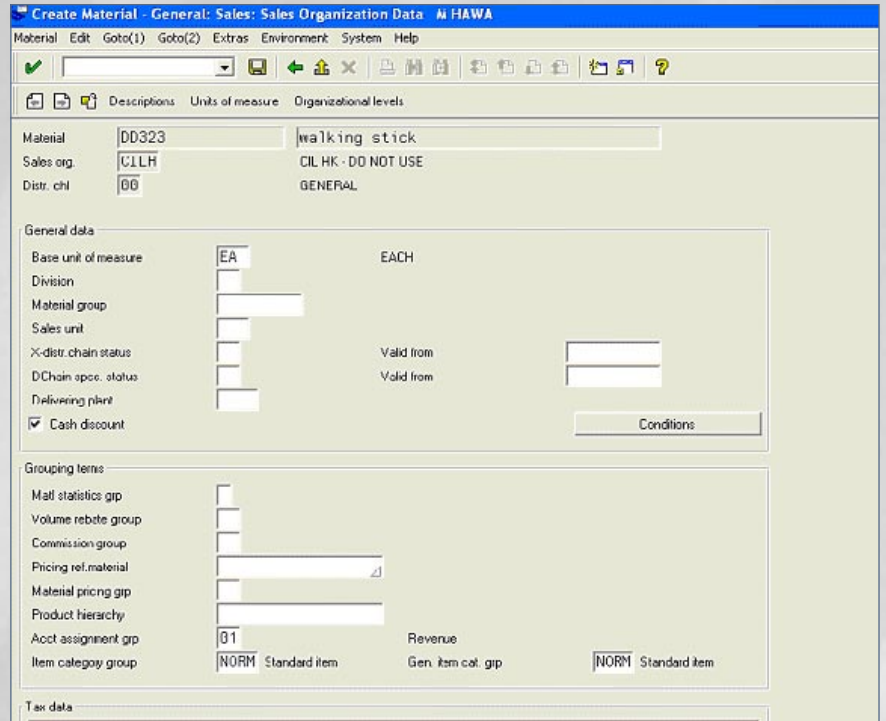


Figure 3: Manual Third-Party Order Processing

- Manual creation of PR

If you do not use SD, you can plan a third-party business transaction using a purchase requisition. To enter a purchase requisition with a third-party item manually, proceed as follows:

1. Enter the item category “s” and an account category (for example, x - all account assignments). When you press ENTER, the account assignment screen is displayed.
2. Enter the account assignment data (for example, the number of the G/L account). The account assignment data you have to maintain depends on the account assignment category.
3. Save the purchase requisition.

**Drop-Ship Purchase Order**

Purchase orders are created from purchase requisitions in the usual

way. The sales order generated purchase requisition is referenced while creating the purchase order. During creation of the purchase order, the system automatically copies the delivery address of your customer from the corresponding sales order. In a sales order, you can enter purchase order text for each third-party item. When you create the corresponding purchase order, the text is automatically copied into the purchase order. The number of the purchase order appears in the document flow information of the sales order.

*Other SAP Benefits:*

- All changes made in the purchase order are automatically made in the sales order as well. For example, if the vendor confirms quantities and delivery dates different from those you requested and enters them in the purchase order, the revised data is automatically copied into the sales order.