Special Functions

The R/3 MM application component provides certain special functions. These functions can influence all areas within Materials Management including Material Requirements Planning, Purchasing Inventory Management, and Invoice Verification. The functions outlined below clearly demonstrate the flexibility and diverse uses of the MM application.

Consignment Material

Consignment material is material belonging to a vendor that is stored on the prospective buying company's own premises. It is not valuated at the vendor's defined selling price by the buying company until it is withdrawn from consignment stores or transferred to the company's own stock. Neither, does it lead to the creation of liabilities, nor accounts payable. Material not withdrawn from consignment stores can be returned to the vendor. Settlement of amounts due to the vendor is usually effected on a periodic basis (for example, monthly or quarterly).

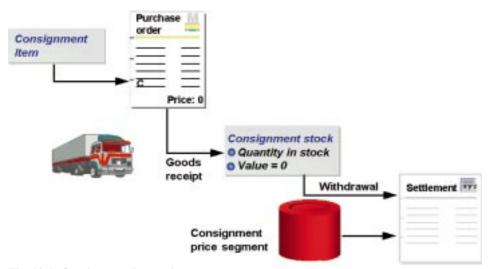


Fig. 10-1: Consignment Processing

Stocks of consignment material can be managed under the same material number as stocks of a company's own material, being treated as special stocks. The relevant quantities are managed separately within a storage location, according to vendor. Purchase prices are recorded on a vendor-specific basis. At valuation level, a moving average price is formed.

Receipts relating to consignment order items, or consignment scheduling agreements, are posted by MM to unrestricted-use stock, GR blocked stock, or stock in quality inspection stock fields using the appropriate special stock indicator.

If the consignment material is subject to management in batches, and if the batch status management facility is active, goods receipts can also be posted to restricted-use stock or general blocked stock. The movements described in Special Stocks

Material Movements

Chapter 6 (Inventory Management) can also be effected for consignment materials. An example is the withdrawal of a random sample from consignment stock for quality inspection purposes. Withdrawals of consignment material can be pre-planned using reservations.

All movements involving consignment material are clearly identified at the time of posting by setting the special stock indicator.

Contractual stipulations may provide for transferring consignment material from the vendor's stocks to a company's own stocks. For example, there may be an agreement with the vendor that any consignment stocks left over at the end of the fiscal year should be handled this way. A company can periodically replenish its own stocks using transfers of this kind. Individual withdrawals are then posted against its own stock as the need arises.

What are the features of consignment processing?
□ Vendor-specific special stocks for the management of consignment material
□ Separate management of quantities according to vendor
□ Movements of consignment material handled in the same way as conventional movements

Returnable Transport Packaging

Returnable transport packaging (RTP) is a multi-trip packaging medium (for example, pallets or containers) in which various goods can be transported more than once.

Returnable transport packaging from a vendor that is stored at a location on your premises is managed as special stock and clearly designated as belonging to the vendor. Since it belongs to the vendor, it is not a part of your valuated stock.

The receipt of returnable transport packaging from the vendor can either be entered as a separate transaction or in conjunction with the goods receipt for the purchase order.

To obtain an overview of the current RTP stocks of a given vendor, you can display a stock overview.

Returnable transport packaging is returned to the vendor without reference to the purchase order.

What are the characteristics of returnable transport packaging (RTP) from the vendor?	
	Vendor-related special stocks
	Posting of RTP receipt with or without reference to a purchase order

Pipeline Material

A pipeline material is a material that flows directly into the production process from a pipeline (for example, oil), from a pipe (for example, tap water), or from another similar source (for example, electricity). In the R/3 System, pipeline withdrawals reflect the consumption of such materials.

Depending on the system configuration, a material can be withdrawn only from the pipeline or, along with the pipeline, normal stocks of the material can also be managed.

A material from the pipeline is always available. It can be withdrawn from the pipeline at any time and in any quantity. You can enter a pipeline withdrawal for an order, a cost center, or a network. The withdrawal is valuated at the price defined in the pipeline info record.

The pipeline withdrawal results in a vendor liability that must be settled periodically in a way similar to the management of consignment stocks. Consumption statistics are kept.

The pipeline withdrawal has no effect on existing warehouse stock or on the availability of the material.

What are the characteristics of a pipeline material?		
	Availability	
	Liability towards the vendor in the case of withdrawals	
	Parallel management of normal stocks	

Subcontracting

The subcontracting or outsourcing of processes (such as subassembly) can be handled based on subcontract orders. MM's subcontracting functionality supports:

- ☐ Ordering process in the outsourcing, or farming out of production activities and services
- ☐ Provision of material components to the subcontractor for production/assembly purposes
- ☐ Issue of material to be provided to the subcontractor from the ordering company's own plant stock, or delivery of such materials by a third-party vendor
- Posting materials produced/services performed by the subcontractor as goods receipts
- ☐ Posting the receipt of by-products at the same time as the goods receipt posting
- ☐ Posting consumption/usage of materials provided to the subcontractor at the time receipts of the ordered material are posted

If a company maintains stocks of materials provided to the subcontractor on the subcontractor's premises, these are treated by MM as vendor special stocks. The reason is that although it belongs to the providing company, they are no longer available and not included in total plant stock.

Stocks

Provision of Components

The stock of material provided is managed without PO reference. However, the provision of material can be initiated using existing purchase orders. The components can be supplied from the company's own plant stock or from a third-party vendor.

Batch Requirement

If "material to be provided" items are supplied from several batches, the relevant deliveries are identified accordingly in the system. This permits any subsequent return deliveries or reversals. It also permits the consumption/usage of this kind of material which is posted under the appropriate batch number.

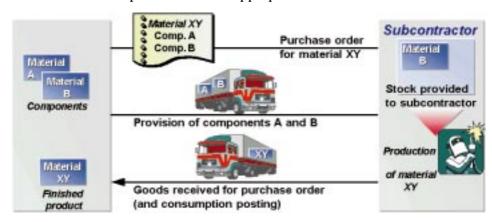


Fig. 10-2: Special Stock with the Subcontractor

Goods Receipt

On receipt of material that has been produced by the subcontractor, the quantities and values (at the valuation price in the material master record) of the input materials provided by the ordering company and consumed in the production process, are posted out of stock. The relevant quantities are included in the consumption statistics. The goods receipt (GR) value of the material produced by the subcontractor equals the net PO value plus the value of the input materials to be posted out of stock as described above.

- ☐ With materials managed in batches, a separate goods issue (GI) item is generated for each batch from which materials are provided to the subcontractor.
- ☐ The quantities of input materials provided that are to be posted out of stock kept with the subcontractor appear as default values in the ratio GR quantity to PO quantity. They can be corrected by you.

Subsequent Adjustment

If necessary, on receipt of the incoming invoice, the already-posted consumption of materials provided to the subcontractor can be corrected to account for any over- or under-usage subsequently determined.

How is subcontracting supported in Materials Management?

- ☐ Stocks with subcontractors count as special stocks.
- ☐ Automatic consumption postings for input materials provided to the subcontractor at goods receipt of the ordered material - are posted.

Physical Stock Transfers Through Stock Transport Orders

For transfers of stock from plant to plant, stock transport orders can be used. This improves material requirements planning and allows pre-planning of delivery costs. The procurement price (the acquisition price) applied to incoming transferred stock reflects the valuation within the issuing plant or the issuing company code, plus any incidental costs of delivery. With materials that are subject to moving average price control, the moving average price changes after each receipt. Stock transfers involve the following activities:

Plant-to-Plant

The receiving plant orders the material from the issuing plant and pre-plans the delivery costs (for example, freight, duty, transport insurance, unloading costs, and so forth) in the order item.

Stock Transport Order

The issuing plant posts the goods issue (GI) with reference to the stock transport order. The goods issue can either be entered as a goods movement in Inventory Management or through an R/3 Sales and Distribution delivery. The quantity withdrawn from stock at the issuing plant is listed as stock in transit at the receiving plant.

Goods Issue

The receiving plant posts the goods receipt (GR) with reference to the stock transport order. The GR has the effect of reducing both stock in transit and the open PO quantity at the receiving plant.

Goods Receipt

Cross-Company-Code Stock Transfer

Even if the plants involved belong to different company codes, stock transfers can be entered using one of the following functions:

- ☐ Stock transfer from plant to plant in one step or two steps
- ☐ Stock transport order with or without R/3 SD delivery

In these transactions, the stock transfer is posted at the material's valuation price valid in the issuing plant.

In addition, stock transfers can be performed in conjunction with a delivery and billing document. This means representing the sales of goods at a particular price from the issuing plant A to plant B. In this transaction, the plants involved must belong to different company codes.

In the receiving plant, a standard purchase order is entered for the vendor assigned to the issuing plant.

The issuing plant creates a delivery for the stock transport order and a billing document. This billing document is used for intercompany billing, a process where normal price determination can take place. Using IDoc, this intercompany billing can be posted through EDI as an incoming invoice with reference to the purchase order. Financial Accounting posts it as receivables in the issuing company code.

Upon receipt of the goods, the receiving plant posts the goods receipt at the price defined in the purchase order. Invoice verification is made with reference to the purchase order.

What is the purpose of stock transport orders?

- ☐ They facilitate the physical transfer of stock from plant to plant (involving transport over longer distances).
- ☐ They are significant in terms of material requirements planning. They also control and permit the person ordering to make advance allowance for any delivery costs that are liable to be incurred.