

# An Overview on Controlling Scenarios in Make-to-Order (MTO)

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**Abstract:** *SAP Consultants work in an organization that uses various production processes to produce goods / services. They need to find out the suitable methods for mapping these production processes in the SAP ERP application. In addition to manufacturing processes in stock, They also need to create activities for sales orders directly (products or services).*

**Keywords:** SAP Controlling, Management Accounting, Sales Order, Make to Order

## I. INTRODUCTION

### Business Statement

SAP Consultants work in an organization that uses various production processes to produce goods / services. They need to find out the suitable methods for mapping these production processes in the SAP ERP application. In addition to manufacturing processes in stock, They also need to create activities for sales orders directly (products or services). For this reason, I am trying to write an article that provides basis knowledge for consultants working newly on this area/Topic. This article provides an understanding of the value flow of production with and without product cost by sales order.

The features of MTO production are as follows:

- We can manufacture a product and its subassemblies individually for a particular customer.
- We can manage stocks in individual customer segments using sales orders.
- We cannot directly use quantities produced for a particular sales order to cover another sales order requirement.
- We can procure components, especially for an individual sales order.

The following are the important decisions to be made in MTO controlling scenarios:

1. The possibility of carrying out MTO production with or without product cost by sales order.
2. Maintaining your sales order stock as valued or non-valued.

For MTO production (sales-order-related production and engineer-to-order production), the requirement for an MTO material is planned using the sales order item number and thus a separate segment is created in the planning run of requirements planning. In the planning segment, the requirements and stocks of the sales order items are managed separately. Thus, various customer-specific variants of a product can be managed using only one material number.

You can carry out single item planning for any level of the BOM structure, starting from the sales order. Therefore, it is also possible to procure assemblies and components specifically for the sales order and manage this stock individually for the sales order. It is also important to configure the components for producing the individual customer product.

### MTO Without Product Cost by Sales Order

The following are the environment areas of MTO production without product cost by sales order:

- Production controlling focused on product groups
- High volume production
- Product cost by sales order similar to make-to-stock (MTS) production.

The new functions for MTO introduced will enable the system to handle MTO production in a similar way to MTS production. If the sales order is important for you logistically, you can also use the sales order without the cost object property.

**The results of sales order costing are used for the following:**

- Sales and pricing decisions
- Planned costs (only for cost objects)
- Methods of results analysis based on the percentage of completion (POC) (only for cost objects)

The examples that illustrate MTO without product cost by sales order are as follows:

1. Assemble to order
2. MTO with packaging variants

You can use these options when your production controlling strictly focuses on the products and not on the sales order. This procedure is ideal for an MTS environment or MTO production that only requires the sales order for logistical reasons. You do not need to perform any additional period-end closing activities for the sales order.

In such a situation, the system carries out sales controlling by Profitability Analysis (CO-PA).

The sales order can have a logistical significance in the following cases:

The sales order creates the independent requirement for you.

**The sales order is required for a variant configuration.**

A sales order cost estimate is possible in both cases. However, the estimate results are only updated on the cost object as plan values if it is a cost object.

Sales order costing with a quantity structure supports the cost component split and provides a costing structure, a cost element itemization, and an itemization.

If you use a project in addition to the sales order (customer project production), use the project as the cost object. In this case, the system creates the sales order without the cost object property

**Make-to-Order with Product Cost by Sales Order**

**In product cost by sales order, the following questions will influence your decisions:**

1. How high is my profit margin for this particular sales order?
2. How can I manage special sales costs?
3. How high is my funds commitment? Is this sales order performing well from a costing point of view?
4. Where did the late customer changes affect my production costs?

**You can also use results analysis to perform the following tasks:**

- Create reserves for expected losses automatically.
- Add reserves for foreseen risks manually
- Calculate goods in transit (goods that have been shipped but not yet invoiced)

Product cost by sales order is necessary if you want to work with non-valuated sales order stock

**Non-Valuated Versus Valuated Sales Order or Project Stock**

The new SAP ERP functions for valuated sales order stock, which are introduced in Release 4.0, enable the system to handle MTO production in a way similar to MTS production.

In Release 3.0/3.1, this stock is always non-valuated. In Release 4.0, you can choose whether you manage this stock as non-valuated or valuated sales order stock.

**Valuated Sales Order Stock**

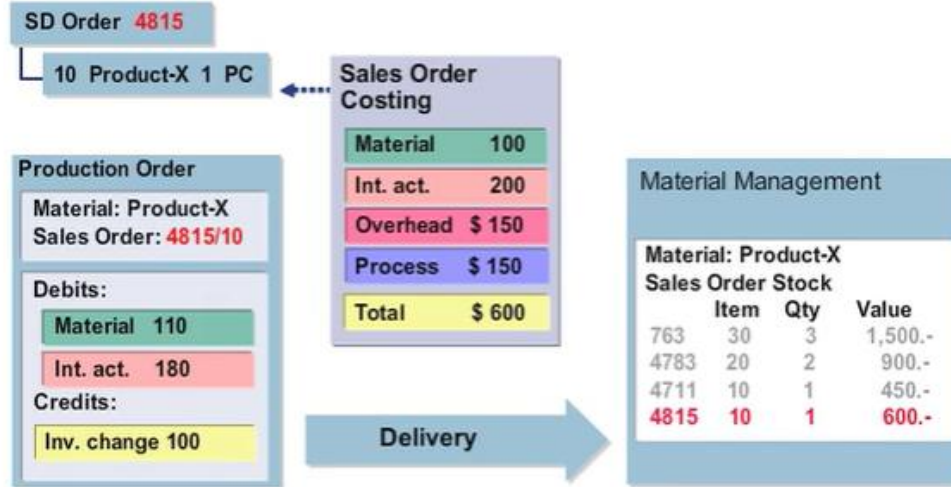
The new SAP ERP functions for valuated sales order stock (or project stock) introduced in Release 4.0 allow the system to handle MTO production in a way similar to MTS production. All deliveries to sales order or project stock credit the delivering object and form accounting stock.

Valuated sales order stock enables us to perform the below tasks:

- Calculate production variances in related production orders.
- Settle the variances to CO-PA
- Provide a cost component split for the cost of goods sold.
- You can use sales order costing as the basis for stock valuation.

The inventories assigned to sales orders and projects carry costs as well as quantities; goods movements for these inventories generate postings in Financial Accounting (FI). The costs of the materials will be determined by costing the sales order or production order. Therefore, the stock value can be displayed immediately in FI; a material cost estimate in the Controlling component is not necessary. The valuated goods movements result in debits / credits to the affected objects.

The goods receipt, including the stock value, is valuated using a predefined valuation strategy sequence



Credit : SAP

The following are the features of valuated sales order stock:

- Combined quantity and value flow
- Simplified inventory determination
- Assembly costs shown with multilevel MTO production
- Variances can be determined for these production orders
- Similar to MTS production
- Enables more controlling scenarios and logical decoupling of Product Cost Controlling (CO-PC) and Production Planning (PP)

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