

Make-to-Order Production with Variant Configuration

SAP Best Practices



Purpose, Benefits, and Key Process Steps

Purpose

- This scenario describes a business process, which is typical for companies which are manufacturer of products with variants.

Benefits

- Variants of a product were represented over one configurable material
- Sales & Operations Planning can be done for predefined material variants

Key Process Steps

- Sales order processing for configurable material
- Manufacturing
- Delivery
- Billing
- Plant closing
- Company closing

Required SAP Applications and Company Roles

Required SAP Applications

- Enhancement package 5 for SAP ERP 6.0

Company Roles

- Production Planner
- Sales Administrator
- Production Supervisor
- Warehouse Clerk
- Billing Administrator

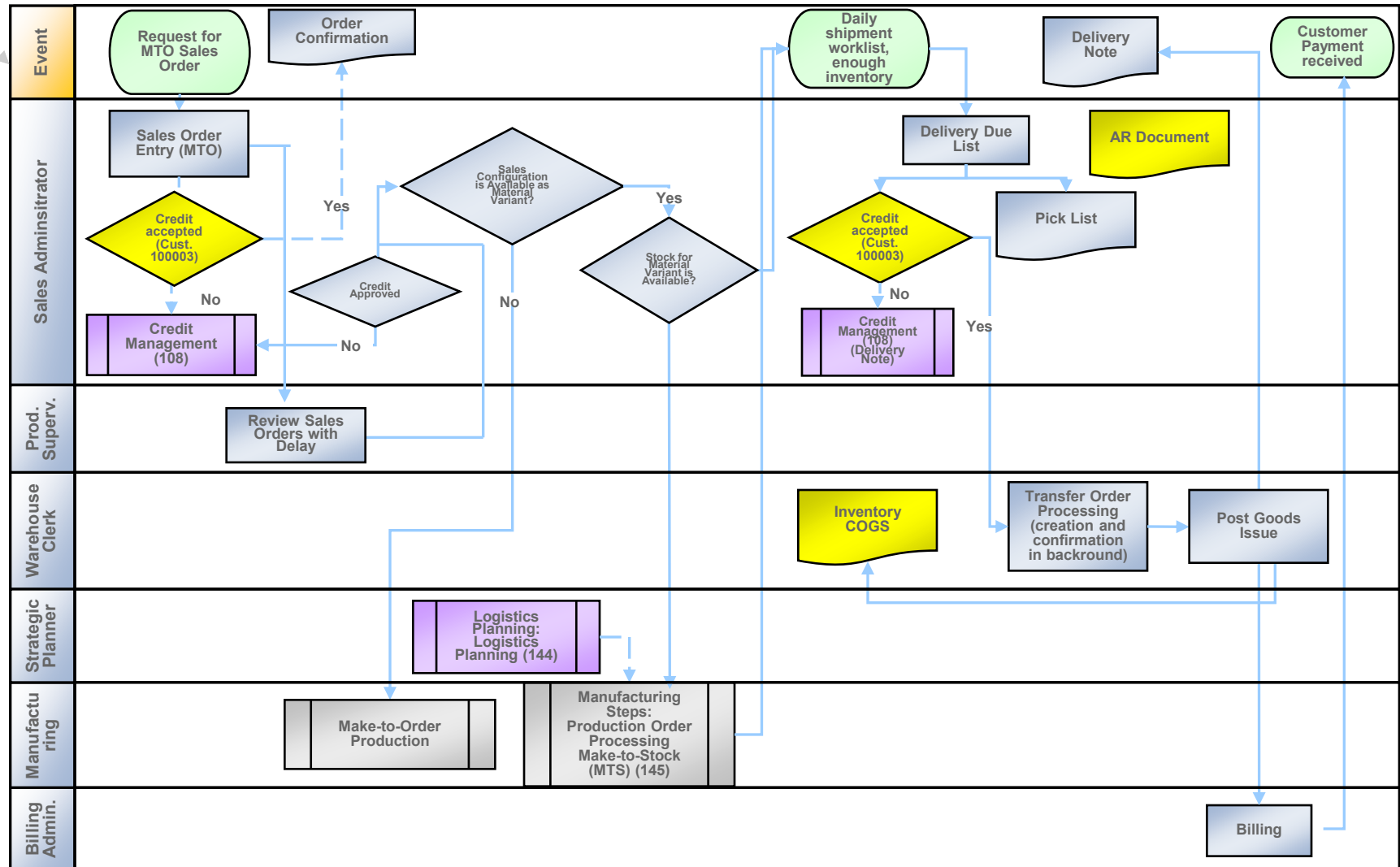
Detailed Process Description

Make-to-Order Production with Variant Configuration

- The scenario demonstrates sales order processing with materials with pre-selected characteristic values (material variants) and components that are produced according to sales quantities planned for these variants. If the sales order configuration is not available as a material variant, then customer service can configure the material on the order by choosing the required characteristic values. A sales order cost estimate is created on saving the order which is subsequently used to value the cost of goods sold.
- The process is triggered when an order for a configurable material is received from the customer. The customer order is recognized in the MRP run resulting in planned order for production of the material. If insufficient warehouse stock is available, purchase requisitions are created for the raw materials required.
- When the production order is created, target costs are calculated for the order lot size (preliminary costing). During the production process, costs incurred are updated on the order, which enables you to keep track of and compare target costs and actual costs at any time.
- Period-end-closing activities are applied to the order. This includes Work In Progress calculation and variance calculation. After this, Work in Progress is settled to financial accounting and production variances are settled to management and financial accounting. Production variances are settled to profitability analysis with the sales order as one of the characteristics.

Process Flow Diagram

Make-to-Order Production with Variant Configuration



Legend

Symbol	Description	Usage Comments
	<p>Band: Identifies a user role, such as Accounts Payable Clerk or Sales Representative. This band can also identify an organization unit or group, rather than a specific role.</p> <p>The other process flow symbols in this table go into these rows. You have as many rows as required to cover all of the roles in the scenario.</p>	Role band contains tasks common to that role.
	External Events: Contains events that start or end the scenario, or influence the course of events in the scenario.	
	<p>Flow line (solid): Line indicates the normal sequence of steps and direction of flow in the scenario.</p> <p>Flow line (dashed): Line indicates flow to infrequently-used or conditional tasks in a scenario. Line can also lead to documents involved in the process flow.</p>	Connects two tasks in a scenario process or a non-step event
	Business Activity / Event: Identifies an action that either leads into or out of the scenario, or an outside Process that happens during the scenario	Does not correspond to a task step in the document
	Unit Process: Identifies a task that is covered in a step-by-step manner in the scenario	Corresponds to a task step in the document
	Process Reference: If the scenario references another scenario in total, put the scenario number and name here.	Corresponds to a task step in the document
	Sub-Process Reference: If the scenario references another scenario in part, put the scenario number, name, and the step numbers from that scenario here	Corresponds to a task step in the document
	Process Decision: Identifies a decision / branching point, signifying a choice to be made by the end user. Lines represent different choices emerging from different parts of the diamond.	Does not usually correspond to a task step in the document; Reflects a choice to be made after step execution

Symbol	Description	Usage Comments
	To next / From last Diagram: Leads to the next / previous page of the Diagram	Flow chart continues on the next / previous page
	Hardcopy / Document: Identifies a printed document, report, or form	Does not correspond to a task step in a document; instead, it is used to reflect a document generated by a task step; this shape does not have any outgoing flow lines
	Financial Actuals: Indicates a financial posting document	Does not correspond to a task step in a document; instead, it is used to reflect a document generated by a task step; this shape does not have any outgoing flow lines
	Budget Planning: Indicates a budget planning document	Does not correspond to a task step in a document; instead, it is used to reflect a document generated by a task step; this shape does not have any outgoing flow lines
	Manual Process: Covers a task that is manually done	Does not generally correspond to a task step in a document; instead, it is used to reflect a task that is manually performed, such as unloading a truck in the warehouse, which affects the process flow.
	Existing Version / Data: This block covers data that feeds in from an external process	Does not generally correspond to a task step in a document; instead, this shape reflects data coming from an external source; this step does not have any incoming flow lines
	System Pass / Fail Decision: This block covers an automatic decision made by the software	Does not generally correspond to a task step in the document; instead it is used to reflect an automatic decision by the system that is made after a step has been executed.

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