



The primary responsibility of the Order module is to produce a document that gives manufacturing permission to make something. The order then manages that build through the manufacturing process.

The following are components of the Order module:

Standard Order

Work orders can be created in a variety of ways. They can be started manually, directly from a sales order, or automatically as part of the material planning process.

A standard work order has information on what to make, the route to use to make it, what material to use, how it is to be configured if it can be built in different ways, and what lot/serial/traits go into making it. The work order also gathers all the transactions to document the actual process. The transactions may consist of the amount of labor it took, when each operation step was started and stopped, and the work in process (WIP). Also included are components issued to the job, recording the value of scrap, and tracking and recording overhead, etc.

Header	Route	Material	Config	ID	Trans	Status	Notes
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Work Order	1010	Status	FPO 01/17/2017	<input type="checkbox"/> Order Locked	Start Qty	2.000	
Created	01/17/2017	BOM	01/17/2017	Printed	//	Projected Qty	2.000
						Finish Qty	2.000

Item	Rev	Description
MBFG01	001	FGcfg Men's 21 Speed White Mtn Bike (Serial Numbered)

Route	Rev	Description
BIKE2		Build the Bike (Simple)

Customer	Description	Order Type
		Build

Misc01	Misc02	Misc03

SO No	Line

Customer PO

Start/Restart	01/31/2017	Shipped	//	Priority	Active
Needed By	02/16/2017	Completed	//	Schedule	Forward
Sched Comp.	01/31/2017	Work Center	Best Alternate	Overlap Qty	0.000

Exit Save F9 Del Bwd Get F8 Fwd Add F7 Print Label Copy

Work orders are designed to be printed and accompany the job through the shop. There are options to print them with their route and material list and even include bar codes on the document for easier processing.

Work orders are created and are formally released through a Firm Plan Order (FPO) process. FPO'ing an order allocates the items on the material list in inventory and makes that order available for the MRP tools.

Work orders can be classified based on whether they are to assemble an item, build an item, rework an item, perform maintenance in the shop, or simply to track a manufacturing activity.

The ALERE work order is very flexible allowing the route and material list to be modified while it is in process, the quantity to be changed and the finished items to be placed in inventory as they are completed. Material pick lists can be printed to aid the issuing of components from inventory to the order.

The date the work order is expected to be completed is automatically updated if the Schedule Module is being used. The individual orders can be set to use forward scheduling or backward scheduling techniques. When an order is forward scheduled, the time it will take to manufacture the items is calculated beginning with the start date on the order and working through the route to arrive at when it is expected to be completed. When an order is backward scheduled, the time it will take to manufacture the items is calculated beginning from the needed by date and worked backward through the route to arrive at when it should be started.

Partial quantities on a work order may be posted to inventory as they are finished and without completing the order.

Express Orders

When the desire is to simply and quickly process a work order to make an item, then the express order is used.

The screenshot shows a software window titled "Express Work Order Processing". The window has a green header bar with a logo on the left and window control buttons on the right. Below the header, there are several input fields: "Item" with the value "MBBR01", "Description" with "Brake Assy-Racing", "Quantity" with "12.000", and "Mtl Location" with "LOC1". To the right of the "Quantity" field is a checked checkbox labeled "Allow Cost Update". Below these fields is a "Progress" section with a list of checkboxes: "Order Validation", "Order Created", "FPO Order", "Labor Posted", "Material Posted", and "Order Completed", all of which are currently unchecked. At the bottom left of the window, there are two icons: a house icon labeled "Exit" and a document icon labeled "Post".

Just enter the item to be made, add a quantity, choose where to issue the inventory material from, and go. The work order is created, released, material issued, standard route labor posted, finished goods posted in inventory, and the order completed - all automatically!

A completed work order is left behind to document the job.

Transactions

ALERE is a transaction-based system. That means that everything that occurs is done with a transaction. An example would be recording the time it takes to perform a setup on a work center for a job.

Transactions ensure that the most stringent ISO requirements can be easily met.

Bar coding is integrated and can be used to quickly post the many kinds of transactions that a work order can accumulate while being manufactured.

Mass transactions that authorize the release of many work orders simultaneously or issue long lists of materials to orders with one key stroke help to speed the process.

Inquiry

A real-time inquiry process makes it easy to look up a list of orders for a customer. Choosing an individual order from the list will display that order.

The screenshot shows a software window titled "Work Order Inquiry" with a green header. Below the header are five input fields: "Item" (containing "MBCH01"), "Customer", "Sales Order", "Customer PO", and "Route Number". Below these fields is a table with the following columns: "WO", "Cust No", "Quantity", "Op", "Description", and "Scheduled". The table contains two rows of data:

WO	Cust No	Quantity	Op	Description	Scheduled
1009		10.000	10	Issue Parts & Assemble	//
1011	CC01	1.000	10	Issue Parts & Assemble	//

Below the table, there is a summary line: "Item: MBCH01 Total Qty: 11.000 Orders: 2" and a description: "Desc: Chain Assy". At the bottom of the window, there is a toolbar with icons for "Exit", "Inquiry", "History", "View", and "Print".

The same inquiry tool can be used to find all orders building a specific item or which are on a sales or customer purchase order.

History

Over time, completed work orders can accumulate and their sheer quantity can affect the performance of the software. These orders can be archived, which removes them from the current file and moves them to a non-current file while preserving all the details.

These archived orders are still available for viewing and for analytical analysis.

Order Reports

A wide range of reports are readily available. There are process reports that include pick lists, work orders, and material requirements.

There are control reports to track lot/serial ID's and where they are used, open work order status, unfinished stock, and work in process general ledger balances.

There are also activity reports to track WIP by customer and sales, analyze work order performance, assess employee and work center productivity, review transaction analytics, and reconcile work orders.

All these reports may be viewed on a screen, printed, exported to a spreadsheet, or turned into a PDF file for distribution.

