



Perhaps the most powerful tool in ALERE is the Plan module. It is in this module that the full range of MRP (Materials Requirements Planning) techniques that use bill of materials, inventory data, and scheduling are used. Not only are the requirements for materials calculated, but the purchase orders and production orders that are recommended can be automatically generated and released.

In addition, because the planning is time-phased, it makes recommendations to reschedule open purchase orders and work orders when they are not in phase.

The following are components of the Plan module:

### Plan Orders

This tool employs bills of material data, inventory data, sales orders, purchase orders, and the production schedule information to calculate requirements for materials. Using a time-phased approach planning is accomplished by exploding the bill of material, adjusting for inventory quantities on hand or on order, and offsetting the net requirements by the appropriate lead times.

All levels of a bill, from the item being manufactured down to the raw materials, are calculated in one pass instead of the traditional MRP method of one level at a time. The process provides the option to either calculate the material requirements using a bucketed system or a bucketless system. In a bucketed system all data is accumulated into buckets consisting of weekly or monthly time periods. In a bucketless system the information is displayed using dated records.

If the ALERE Schedule module is present, the planning process may be synchronized with the finite capacity production schedule to achieve "synchronous manufacturing". This is a very advanced Just-In-Time (JIT) manufacturing technique whereby the material required for each work order route step can be scheduled to be delivered to the work center on which that step is to be performed, on the exact date and time it is required.

Allowances can be made to cushion lead times and for setting a minimum period between orders.

Multiple levels of inventory order criteria can be used. They include: safety stock with or without inventory and zero stock levels with or with inventory.

Order quantities include: standard quantities with and without safety stock and exact quantities with and without safety stock.

Location	LOC1
Schedule Synchronization	None
Include Pending Orders	Purchase / Work Orders
Order Criteria	Safety Stock
Grace Period (days)	0
Order Quantity	Standard
Minimum Order Period (days)	1
Cushion (days)	0

Started 10:40:42 Finished 10:40:44

Elapsed: 00:00:02

WO's: 2 PO's: 8 Errors: 10

Exit Go Repeat Pref Errors

## Work Orders

Recommended work orders from the planning process can be selectively chosen, edited, and mass generated using this process. The orders are created in an unreleased state.

Once generated, the actual work order number is displayed where you can drill down to the actual order.

## Purchase Orders

Recommended purchase orders from the planning process can be selectively chosen, edited, and mass generated using this process. The orders are created in an unreleased state.

Once generated, the actual purchase order number is displayed where you can drill down to the actual order.

Gen	Sep	Order	Supplier	Item	Needed Qty	Order Qty	U/M
✓	<input type="checkbox"/>	P00008	JS01 /MAIN	MBPD03	48.0000	48.0000	EACH
	<input type="checkbox"/>	P00009	JS01 /MAIN	MBPD05	102.0000	0.0000	EACH
	<input type="checkbox"/>	P00010	JS01 /MAIN	MBPD05	52.0000	0.0000	EACH
✓	<input type="checkbox"/>	P00011	JS01 /MAIN	MBPD05	48.0000	48.0000	EACH
	<input type="checkbox"/>	P00012	JS01 /MAIN	MBWH03	3002.0000	0.0000	EACH
✓	<input type="checkbox"/>	P00013	JS01 /MAIN	MBWH03	2520.0000	2520.0000	EACH
✓	<input type="checkbox"/>	P00014	JS01 /MAIN	MBWH04	27.0000	27.0000	EACH

Filter:  P/M:

New Order Status:  Accepted  Pending

New Order Type:  Purchase Order  Quote

Tagged:  of   Show Blankets Only  Combine Dates

Purchase Orders Generated:

Exit Generate All None Print

## Sales Order Planning

This function allows work orders and purchase orders that are required for a specific line on a sales order to be generated.

## Item MRP Planning

The purpose of this function is to allow the MRP to be run for a specific item and then research the resulting demand and supply information.

The major advantage that this approach offers over running the MRP report for an item is that the information is presented on a screen grid which permits drill down to the work orders, purchase orders, etc.

### Order Push Pull

The Order Push Pull function is part of the process to help control existing work orders in a production facility. It is used before planning new orders as it makes recommendations on which work orders to cancel, update the dates they are needed, and change the quantities they have on order.

Making these recommended changes will affect the plan orders calculations.

This function includes the ability to select which work orders to automatically change.

### MRP Locations

The purpose of MRP Location is to organize selected inventory locations into groups for the purposes of MRP planning. This allows locations that are for defective or returned items to be excluded from the planning process.

### Reset Plan Tables

This utility extends the functionality of the material planning process by allowing the records from previous calculations to be quickly cleared. This is particularly important when switching between running the plan process for a group of locations and running it for a single location that is part of the group. It avoids double planning the material requirements for the single location.

### Plan Reports

A wide range of reports are readily available. There are reports that perform extensive MRP planning,

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