

## Plan Module

Perhaps the most powerful tool in ALERE Manufacturing is the Plan Module. It is in this module that the full range of MRP (Materials Requirements Planning) techniques is provided.

MRP uses bill of material data, inventory data, sales orders, purchase orders, and the production schedule information to calculate requirements for materials. MRP, using a time-phased approach, 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.

In ALERE, 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. Further, because it is time-phased, it makes recommendations to reschedule open work orders and purchase orders when due dates and need dates are not in phase and when quantity changes are required.

The MRP process provides you with 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 you are using the ALERE Schedule module, the planning process may be synchronized with your 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.

Generate Recommended Orders

Gen	Order	Item	Quantity	U/M	Start	Needed	MB Loc	FG Loc
M00001	MBPD01		25.000	EACH	02/15/2013	02/22/2013	LOC1	LOC1
M00002	MBPD01		4.000	EACH	03/24/2013	03/31/2013	LOC1	LOC1
M00003	MBSP01		11.000	EACH	03/24/2013	03/31/2013	LOC1	LOC1
M00004	MBWH01		42.000	EACH	02/15/2013	02/22/2013	LOC1	LOC1
M00005	MBWH01		4.000	EACH	03/24/2013	03/31/2013	LOC1	LOC1
M00006	MBWH02		61.000	EACH	02/15/2013	02/22/2013	LOC1	LOC1
M00007	MBWH02		4.000	EACH	03/17/2013	03/24/2013	LOC1	LOC1
M00008	MBWH02		42.000	EACH	03/24/2013	03/31/2013	LOC1	LOC1

Set FG location to SO Ship From location  
 Filter: None SO Link: All Orders  
 Tagged: 0 of 8 Order Size: Unlimited 0.000 Generated: 0

Plan Orders - Report

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 16:50:53 Finished 16:50:54

Elapsed: 00:00:01

WO's: 8 PO's: 17 Errors: 6

Exit Go Repeat Pref Errors Help

Work orders and purchase orders that are recommended by the planning process can be reviewed, changed, and then automatically created. Recommended purchase orders are converted to actual purchase orders in the ALERE Purchase Module and recommended work orders are generated in the ALERE Order Module.

Extended MRP capabilities have been included that allow material planning to be done for a single item, a selected location, or a group of inventory locations. These capabilities also allow you to calculate

requirements for a specified sales order which may have listed multiple different items.