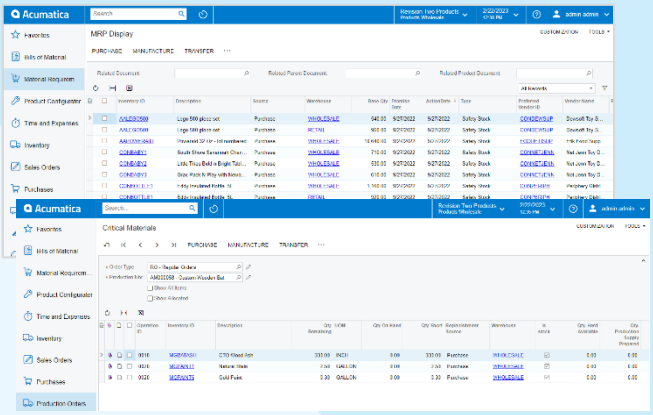
Acumatica
The Cloud ERP

Accordant



Material Requirements Planning (MRP)

Time-phased material planning ensures materials are procured or manufactured just in time. Critical material reports and exception messages help planners respond to real-world changes impacting demand and production schedules.

- **Drive material requirements plans from the Master Production Schedule (MPS)**
- **Identify critical materials and manage plans by exception**
- **Run MRP for actual and forecasted material demand**

Key business benefits

- Coordinate labor, machines, and inventory and optimize your company's processes.
- Identify critical materials impacting production schedules.
- Leverage powerful features for multiple production environments.
- Access recommendations to defer, expedite, and delete supply items.
- Identify late orders and display any transfers that are available from another warehouse or site.
- Drive material plans from defined or historical demand forecasts.

Related resources

- Mitigate Supply Chain Disruptions > LEARN MORE
- Role-Based Manufacturing ERP Software > LEARN MORE
- Schedule a Personalized Demo > LEARN MORE

Satisfy Customer Requirements While Maintaining Optimal Inventory Levels

Generate time-phased manufacturing and purchasing plans for optimal inventory availability tied to forecast and customer demands. Reduce inventory, improve customer service, and avoid shortages and stock-out scenarios that result in costly changeovers and rush orders. MRP enables companies to set and maintain stock levels for frequently used items with a consolidated view of demand in user-defined time buckets with recommended actions to manage shifts in supply and demand.

MRP DISPLAY

- Manage by exception to identify what needs to be purchased, transferred, or produced from a single screen.
- All supply and demand can be viewed from a centralized location.
- Production, Purchase, and Transfer Orders are created directly from this screen.

FULL REGENERATION

- Schedule regeneration to run anytime, day or night.
- All existing planned orders for all items are eliminated.
- MRP starts over, calculating gross and net requirements. It then replans the required materials to be produced or purchased.

MASTER PRODUCTION SCHEDULE

- Drive your plan and plant operations from the Master Production Schedule (MPS).
- MRP plans all requirements based on the MPS.
- MPS will be treated as pre-planned production orders acting as the supply for other demand requirements.

"[MRP] has been a game changer. We never had that. We didn't know what was on order or what to make until we reviewed the order. Now the computer tells us what to make and when to make it."

–Cory Childers, Production Manager, AFF|group

> CUSTOMER STORIES

Forecasting

Forecasts can be calculated or entered manually. These forecasts can be dependent and consumed by sales orders, or they can be independent. Input forecasts as one-time, weekly, monthly, or yearly.

MRP Planning Detail

Review and execute the complete material plan through MRP screens that show all activity, orders, requirements, balances, and recommendations for an inventory item.

Multi-Warehouse

Manage production plans, procurement, and transfers across warehouse locations. MRP suggests planned production orders that drive requirements throughout your organization to supply warehouses down to your vendors.

Queue, Finish, and Move Time

Queue, Finish, and Move Time: Improve material requirements planning by defining finish, move, and queue times for operations that require cooling, drying, movement to upstream operations (such as outsourced manufacturing services), and other expected non-production times.

MRP Days Supply

Define planning buckets to consolidate demand into single purchase orders. Planned period sizes are defined by item class, stock item, or item and warehouse combination. Further, a system-wide setting can be defined for planned orders beyond the initial planning horizon for longer-term planning.

Grace Period

Set a grace period for the number of days after receipt where a supply transaction is considered to meet the requested date for item demand.

Manage by Exception

Access MRP exception messages for recommendations to defer, delete, expedite, or place on hold actual or firmed production, purchasing, kit assembly, or transfer orders based on refreshed data in the system. Exception messages further aid planners with information such as available transfers, notifications for orders without scheduled shipment dates, transfers without replenishing warehouses, and circular transfers.

Demand Time Fence

Specify the demand time fence to control which data the system uses for inventory planning. The demand time fence is the time from the inventory planning date during which the forecast is no longer included in the total demand and projected available inventory calculations. During this time, the system considers only customer orders for inventory planning. Beyond this time, the greater value of dependent forecasts and actual demand drives planning.

Transfers

Balance supply and demand for planned inbound and outbound transfer orders across warehouse locations.

Blanket Sales Orders

As forecasted demand, blanket sales order lines for future dates are included in MRP planning. Blanket release child sales orders are processed as normal sales order demand.

Order Quantities

MRP uses safety stock and reorder point levels to determine quantities for planned orders. Further, users can set minimum and maximum order quantities for suggested orders to match production batch sizes or preferred supplier order quantities. Lot sizes are used to smooth demand quantities by defined multiples. For example, a lot size of 5 and demand for 37 units would result in a planned order for 40 (rounded up from 37 in a multiple of 5).

Order Lead Times

MRP respects vendor lead times defined in inventory for purchased items. Users can set additional lead time when the product may need to be quarantined and inspected before it is moved to an on-hand location for manufacturing. Lead times are also defined for manufactured items and warehouse transfers.

MRP History and Audit

Benchmark previous MRP generations to evaluate past MRP performance to understand if generation times varied due to larger date ranges, setup issues, or other factors.

Kits and Components

Generate suggested kit assemblies based on forecasts or actual sales order demand. MRP will suggest planned purchase orders and warehouse transfer orders for kit components required for stock or non-stock kit assemblies.

MRP Planning Horizons

Optimize MRP generation with ‘planning horizons’ capabilities that enable organizations to define time-constrained data for inclusion in supply and demand calculations.

RMA Options

Configure MRP to include or exclude sales order returns from return merchandise authorization (RMAs) as supply for inventory planning calculations.

ABOUT ACUMATICA

Acumatica Cloud ERP is a comprehensive business management solution that was born in the cloud and built for more connected, collaborative ways of working. Designed explicitly to enable small and mid-market companies to thrive in today’s digital economy, Acumatica’s flexible solution, customer-friendly business practices, and industry-specific functionality help growing businesses adapt to fast-moving markets and take control of their future.

For more information on Acumatica, visit **www.accordantco.com** or call us at **973-887-8900**.

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