

	$\sim$	I			
 he	(			~	
	$\sim$		uu	••	

Acumatica	Seerci	۱. ·		۵ ۵				Revision Protects W	Two Product Indexate		202023 OLENI 👻	0	adminiadmini 🗸	
Favoritos	MRP	Display										сивто	M24TON TOOLS	
Bils of Malerial	PURCH	MOC	алитисти	RE TRANSFER										
Material Requirem	Related Decement.		,0 Related Parent Document.			(P Related Product Document				A				
	-	- 1									A	Neovets	- v	
Product Configuration		horn		Description	South	Warohouse		Dette	Action Toto	Tape	Prof	tend for ID	Wendor Name	5
Time and Expanses		0440	20500	Loge 500 place set	Purchase	WHOLESALE	640.00	\$272622	527/2022	Safety Stock	k <u>50</u>	NDEWBUP	Dovision Tay 8	
		AND	10000	Logo 500 place set	Purchase	RETAIL	900-00	8212822	9215155	Safety Steel	k 00	NDCMDUP	Devision Tay G	
Inventory G			AP-R60	Prevented 32-0x - 1d	numbered Pardsee	WHOLESSEE	10,640-00	8242922	50,0199	Service Stock	k <u>15</u>	DELENE	htk hose 3kpp	
		0.018		South Share Secure	al Chan Pardness	WHOLESALE		9272622	5/27/2522	Salwy Stan	k <u>50</u>	NUTLEN	Nations Toy D	
Sales Orders	0	0048	68N2	Little Titles Bold in B	ight Tabl Purchase	WHOLESALE	530.00	9/27/2022	527/2122	Saley Stock	k 55	NITERS	Net John Toy D	
		CONE	ABY3	Grac Pack N Play M	th Newb. Purchase	WHOLCSALC	610-00	\$212622	527/2122	Safey Stock	k <u>co</u>	NUCTION	Not John Toy D	
7 Purchases			0111121	Eddy Insulated Kell		WHOLESALE		8242822	1010192	Servey Store		OF REAL	Perphasy (Deb)	
	0	CONE	OTTLES	Edde Inschool Ball	e.SL Nuchtere	RETAIL	592.00	9272822	5474122	Sales Dax		NTERPH	Peristery Didit.	
Acumatica	9	Nerch		0 ۹					Revisit Product	an Two Produ s Mialesale		9/0023 5 Mil ~	0 2 **	
C Acumatica	Cr	Itical M	aterials						Rosisi Protuz	on Two Produ s tithulesale	њ — <sup>20</sup> ш		COSTON 2013	nin adad Mi 10
		Itical M	aterials < >	A O	MANUFACTURE 1	RUNDFER			Revisi Poduc	on Two Produ s Wholesale	α v τ τ			
St Favorites	0 9	Itical M	< > 80-8		2	awaren			Resist Proba	on Two Produ s Mholesale	as v 10			
☆ Favorites	0 0 m. 0	Itical M IK	< > 80-8	31 PURCIEVAD gale Oxfere 199 - Castern Wender Ba All Itoria	2	ninaren			Product	on Two Produ s Uhulosalo	as v _ 12			
과 Favorites Billis of Material 앞 Material Require 관 Product Configu	Cr vo m v	Itical M It Ditor Type Pendiction	K AMODIN Line Lines	31 PURCIEVAD gale Oxfere 199 - Castern Wender Ba All Itoria	2	ningfer			Product	an Two Produ s Uhulosak	as v _ 12			
Favorites	Cr vo m v	Itical M IK DiferType Emdiction	K S BO - Da AMODO Dhow Show Show Show	31 PURCHARD optier Ondere 199 - Custom Wonder Be Alforsten Alforsten	2	Q12 100H	Qy On	Rand Q	ry Short Repl	niskerer	Vanisses	DIM V	COSTON-2444	× 12
과 Favorites Billis of Material 앞 Material Require 관 Product Configu	Cr vo m	Itical M IK DiferType Emdiction	<ul> <li>KO - Th</li> <li>AM010</li> <li>Ohou</li> <li>Shou</li> <li>Shou</li> <li>R</li> </ul>	31 PURCHARD optier Ondere 199 - Custom Wonder Be Alforsten Alforsten	P // 4 P //		Qay On 1	Rand Q		niskerer		рни ¥	CUSTOM 2010	N 10
International Require           International Require           International Require           Product Configure           Time and Expension           International Report	Cr m nater avs 0 2 1	Itical M IK DiferType Emdiction	K > BO - Da AM010 	31 FURCHAGE gale Oxfore 59 - Oxfore Wooden Bu All Rens All Rens Al	P // 4 P //	Q12 100H			ry Short Regi	niskerer		DIM V	COSTON-2444	Product
Favorites Bits of Material W Material Require Product Configu OThe and Experi	Cr m () sater sater Sate () Sate ()	Itical M It Difer Type Endection		31 FURCHARE apple Orders 59 - Cozen Wooler Bo All Bens Alexand Inestoy (3) Br MERMANSI C	P A P A	Oty UOM Remaining			ry Short Regi Stea 333.00 Fer	anishmeet Ve	Warehouse	ik stack	COSTON 2017	Production
International Require           International Require           International Require           Product Configure           Time and Expension           International Report	autor au	Itical M IK Ditor Type Pendiction		31 FURCHAGE spile Oxfore 59 - Oxfore Wooder Bu All Bress Allocated Investory ID Be MICENCIASI C MICENCIASI N	P P P P P P P P P P P P P P P P P P P	Oty 1008 Renations 333.09 INCI		100	ry Short Regi Stea 333.00 Fer	anlikkenser va stasje	Wernhauer Withoussee	B MA B B B B B B B B B B B B B B B B B B B	COSTON 2010 One Hand Acculated E 00	Production

# 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
- Role-Based Manufacturing ERP
   Software
- Schedule a Personalized Demo

# 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

# 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.

#### **Forecast Consumption**

Compare forecasted demand with actual demand to understand which orders consumed demand forecasts in each planning period.

# **Production Orders by Build Capability**

Identify which production orders to release using intuitive color coding to indicate material availability. View critical material and production order details with side panels. Streamline decisionmaking, reduce delays, and improve production planning efficiency.

# 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.

Version 20250320

For more information please contact,

Algorithm Inc.

6724 Perimeter Loop Road #332, Dublin, OH, 43017

https://www.algorithminc.com

Email: info@algorithminc.com

LinkedIn