

Planner+PLUS

The Material Control System (MCS+PLUS) is built on AMAPS unique supply/demand database that balances inventories and orders against independent and dependent demands. MCS+PLUS take a proactive approach to material control based on timely information and suggested alternatives. MCS+PLUS combines the power an intelligent Graphical User Interface and advanced user features to help your materials personnel quickly identify and select corrective action options. MCS+PLUS, working in conjunction with other AMAPS+PLUS modules support material planning and control for all types of manufacturing environments: flow, repetitive, discrete, and job shop.

“Paperless” System

There is a vast amount of data involved in the planning and control of materials: item data, bill of materials, inventory, orders, vendors, etc. In the past, this data was presented in a myriad of reports and screens that had to be constantly reviewed. With the advent of window-based technology, came the ability to present data in a more useable manner. Unfortunately, in many applications, the systems' designers used automated tools that created windows that reflected the database design rather than the users' needs. MCS+PLUS was designed based on over twenty years of working with AMAPS users. The windows and displays MCS+PLUS eliminate the need for batch reports. MCS+PLUS is a "paperless system" that supports the natural functioning of the user's job.

Single Window for Exception Analysis and Action

The Planning Window in MCS+PLUS provides a comprehensive but easily understood “picture” of an item’s inventory and order situation. Inventory coverage over time is graphically displayed at the top of the window. Order due dates with recommend changes are shown as icons. Orders and inventory are continuously analyzed throughout the day as transactions are processed and exception conditions are recalculated and graphically displayed. Detail information on orders, requirements and supply/ demand analysis is only a button click away.

Real Time Simulation

The Projected Inventory window provides the view of all orders, requirements and projected inventory. Planners may enter proposed changes to dates or quantities and simulate the impact of these changes before taking action. This enables the planner to test various replenishment plans before committing to action.

Real Time MRP Analysis

Whenever a new manufacturing order is entered, or an existing order changed, MCS+PLUS will "explode" the order to recalculate the demands for components. The resultant changes will then be reanalyzed, and if new exception conditions are created, the effected items or orders will be flagged and appropriate planners will be notified.

Pegged Requirements

All requirements within the AMAPS+PLUS supply/demand database are pegged either to a forecast, customer order or higher level manufacturing order. Using the Projected Inventory window in MCS+PLUS, the planner, by simply pointing and clicking, can peg up and down the order structure. The Pegging+PLUS module provides full upward and downward pegging. Using this pegging window, you can peg upward from a purchase part to determine which end item, and intervening orders are planned to consume it. Additionally, you can peg downward from a manufacturing order to see the status of lower-level supporting orders or inventory.

“Can Build” Calculation

Under some circumstances when an order may be short certain components, you may want to reduce the order quantity to avoid the shortage. However, it is often not easy to manually calculate how many of the order you could actually build based on the components' inventory situations. MCS+PLUS automatically calculates a "Can Build" quantity for any order that is short components. Using the simulation capabilities with MCS+PLUS, you can then see what the impact higher level assemblies or customer orders by building a reduced quantity.

“Push Out” Identification

In planning materials, it is usually best, to "push out" orders, particularly for higher level orders, to their true need dates before attempting to resolve shortages or "reschedule ins." By doing this, you reduce the near term component demands and therefore eliminate shortages caused by building orders you don't need. In addition, you free up factory capacity to work on jobs that are needed. MCS+PLUS provides a list box of all items that have orders that can be de-expedited and then will display the recommended reschedule out date. This analysis for potential move-outs is continuously performed the day as part of normal transaction processing.

Simplified Order Maintenance

Within an MRP system, there are many orders that require only cursory review before updating their status. MCS+PLUS allows you to display multiple orders in one window, e.g., all order for a planner code to release, sort the orders by any criteria, e.g., quantity, then select a group of the orders and change the status from firm to released with one click of the mouse. This valuable time saver enables you to spend your efforts on those items that require greater analysis.

Substitute Part Control

In most manufacturing environments, there are components that can be substituted for each other depending on availability or other conditions. However, this substitution process is often informal and undocumented. AMAPS+PLUS full supports the control of substitutes. You may define authorized substitutions in the BMS+PLUS module. Within MCS+PLUS, whenever there is a shortage for a part that has substitutes defined, the substitutes are displayed in a drop down list. The availability of the substitutes can then be reviewed by simply clicking on the item.

Simplified Transaction Processing

MCS+PLUS minimizes the amount of data entry required for inventory transactions. Scrollable displays with pop-up windows allow users to point and click to select valid data fields instead of error-prone keying. Inventory and order balances are shown with current quantities. When a user enters a transaction quantity, the resultant balances are immediately displayed prior to updating. This allows the user the opportunity to verify the correct data has been entered.

Flexible Issue Control

In order to support the different types of manufacturing environments, MCS+PLUS provides three material issuing methods: manual, automatic, and group. The issue control may be specified by plant and overridden at the item and the bill of material levels. This flexibility enables you to maintain tight control over those items, which require it, but to simplify reporting and transaction processing for floor stocked items, line replenishments or kit issues.

Summary

These are just a few of the capabilities that highlight the feature richness and ease of use of MCS+PLUS that will improve the productivity of all the users and improve the effectiveness of your materials organization.

Planner+PLUS

File Window Actions Sort Options Inquire Help

Projected  

Coverage 

Orders **333333** 0 0 **3** 0 **3**

Reschedule to 

Exceptions  Past Due 0 Date Excess 0 Count 30 Weighted 273

Item Number DR Dms Item 1 Cat Item 1

	Item Number	ABC Llc	Commoc
1	R 102-DMS	A	0
2	Y LTS-CM-COMP1	A	2
3	R LTS-CM-COMP2	A	1
4	Y LTS-CM-PARENT	A	0
5	R LTS-CM-SERPAR	A	0
6	Y LTS-ITEM1	A	0
7	R LTS-S-COMP1	A	1
8	R LTS-S-SERPAR	A	0
9	R DMSITEM1	A	0
10	Y DMSITEMA	A	0
11	R DMSITEMB	A	0
12	R DMSITEMC	A	0
13	R DMSITEMD	A	0

Action Options

Supply Inquiry	Change All	Firm Orders
Demand Inquiry	Split Supplies	Cut Orders
Supply/Demand	Combine Supplies	Place Orders
Item Data	Cancel Supplies	Release Orders
Multi-Plant S/D	Maintain Supplies	Auto Status Change
Stock Status	Maintain SMP	UnFirm Orders
Components	Order Shortages	UnCut Orders
Secondary Supplies	Item Shortages	PORD Maintenance
Customer Orders	Dmd Mass Change	Full Level Pegging
MSS Orders	Item Demand Maint	

Ready Total Items: 16 Completed: 0 Horizon: 04/01/2010 Width: 5 Shop Days

Planner+PLUS - [Maintain Supplies for 20002 Fiber Gelatin, 225cc, 24x5.29, 7.935 Lbs]

File Window Sort Select Purge Percent Show Closed Orders Help

Auto Forced Cut Date Change

Supply Data

Item No	Order Number	Item Description	Order Type	Order Status	Force C	New Status	O/S Quantity	Due Date	Start/Dock D
1	20002 MFG002304	Fiber Gelatin, 225cc, 24x5.29 = Manufactur	1 = Firm	1 = Firm	1 = On	1 = Firm	56	07/18/2008	07/18/2008
2	20002 MFG002305	Fiber Gelatin, 225cc, 24x5.29 = Manufactur	0 = Planned	0 = Off	0 = Planned		100	08/04/2008	08/04/2008
3	20002 MFG002306	Fiber Gelatin, 225cc, 24x5.29 = Manufactur	0 = Planned	0 = Off	0 = Planned		100	09/05/2008	09/05/2008
4	20002 MFG002307	Fiber Gelatin, 225cc, 24x5.29 = Manufactur	0 = Planned	0 = Off	0 = Planned		500	03/13/2009	03/13/2009
5	20002 MFG002308	Fiber Gelatin, 225cc, 24x5.29 = Manufactur	0 = Planned	0 = Off	0 = Planned		500	04/13/2009	04/13/2009
6	20002 MFG002309	Fiber Gelatin, 225cc, 24x5.29 = Manufactur	0 = Planned	0 = Off	0 = Planned		100	05/01/2009	05/01/2009
7	20002 MFG002310	Fiber Gelatin, 225cc, 24x5.29 = Manufactur	0 = Planned	0 = Off	0 = Planned		500	05/11/2009	05/11/2009
8	20002 MFG002354	Fiber Gelatin, 225cc, 24x5.29 = Manufactur	0 = Planned	0 = Off	0 = Planned		500	06/12/2009	06/12/2009
9	20002 MFG002355	Fiber Gelatin, 225cc, 24x5.29 = Manufactur	0 = Planned	0 = Off	0 = Planned		100	06/22/2009	06/22/2009
10	20002 MFG002356	Fiber Gelatin, 225cc, 24x5.29 = Manufactur	0 = Planned	0 = Off	0 = Planned		500	07/10/2009	07/10/2009

Ready Total Items: 125 Completed: 0 Horizon: 11/19/2008 Width: 5 Shop Days