

# AXIS Diplomat

## Material Requirements Planning

*The AXIS Diplomat MRP module provides the ability to forecast the demand for materials required by manufacturing. This demand is automatically calculated based on the number and variety of customer sales orders and internal works orders for stock, based on sales projections.*

MRP works in conjunction with the Accounts, Bill of Materials, Sales Order Processing, Purchase Order Processing and Purchase Requirements modules. The Stock Ledger provides the information (via stock transactions) to forecast stock movement activity, whilst Bill of Materials provides the information about the nature and quantity of materials (sub-assemblies and components) required to manufacture the ordered goods.

Sales Orders and Internal Works Orders (maintained via the MRP module) can be flagged as Planned or Unplanned and the MRP functions are designed to only look at Planned Orders. By amending this status on individual orders, the Production Manager has the ability to adjust the manufacturing mix to meet available resources.

A function, "Trial Planned Order Explosion", is used to produce a picture of material requirements for the Planned items. This function will process all of the planned orders falling within specified criteria, checking manufacturing material requirements against the projected available stock at the order due date.

No amendment is made to the stock ledger at this stage, the report can be run as many times as required, varying the Planned order mix, to provide a powerful 'what-if' requirements analysis.

## Material Scheduling

Once a satisfactory manufacturing plan / order mix has been obtained using Provisional Planning methods, the items flagged as planned can be scheduled.

Scheduling operates in three basic phases:

- ◆ Firstly the sales order allocations for assembly items are checked to see if the projected free stock on the order due date is sufficient, if not an internal works order is generated for the item.
- ◆ Secondly all internal works orders (including those generated by phase 1) will be checked to see if there will be any additional works orders required to satisfy the sub-assembly requirements.
- ◆ Finally the internal works orders are processed in order to generate manufacturing allocation transactions for the sub-assembly and component requirements.



## Purchasing Support

Having identified the material shortages associated with the planned and/or scheduled orders, the system can generate Purchase Requirements (on systems with the Purchase Requirements module) which can be used to create Purchase Orders. For further information, please consult the Purchase Requirements overview.

## Enquiries

Works order enquiries provide details of the works order plus a list of any associated jobs scheduled to complete the works order.

Job enquiries (for scheduled works orders) list the components required for the job.

A kit status enquiry enables the stock availability for components to be easily checked and for shortages to be actioned.

## Reporting

The MRP reports provide facilities for checking details of outstanding and potential works orders, showing projected stock levels, and assessing the effect of scheduling different configurations of orders for manufacture (Trial Kitting).

## Works Order Dockets

A works order docket may be printed for all scheduled works orders for which a docket has NOT been previously printed. This function can also be used to re-print a specific 'Works Order Docket' if desired.

For more information, please contact Axis First or visit our web site:

Optionally, a list of components required to make the assembly, and their availability, can be included on the document.

## Work in Progress Valuation

This function provides the facility to value the materials issued to jobs which are currently scheduled but not yet completed.

## Stock Movements

The standard set of Stock Movement Booking facilities is augmented with the following additional functions:

- ◆ Issue Components for Job
- ◆ Close Unissued Components for Job
- ◆ Issue Manufacturing Allocations
- ◆ Close Manufacturing Allocations
- ◆ Goods Received from Works

When receiving goods from the factory there is a further option to backflush any unissued components for the job.

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