

Sage Line 500 - Graphical MPS

Sage's new Graphical MPS module allows the creation of an optimised Master Production Schedule (MPS) using a graphical planning environment. This enables realistic, achievable production plans to be created against sales forecasts and target stock levels. This is a powerful tool for planners which is pre-configured and fully integrated with Line 500.

Records Kept

Sales Orders

Sales Forecasts

Resource groups

- Resources can be assigned to resource groups which are define resources that produce similar products.

Resources

Resources are defined at a high level within the business. Typically these will be product lines, factories or even countries.

Product resource and time requirements

- The total time to produce the product is recorded against the resource or resource group. You can define how you wish Graphical MPS to calculate the run time for a product by configuring the interface to read either the manufacturing lead time, total time (from the route) or enable direct user entry of the process rate, rate per hour or a fixed time for the batch in Graphical MPS.

Resource capacity calendar

- For each resource you can define the standard the working calendar and define in advance holidays, vacations or shutdowns when the normal working pattern is not valid.

Product database

- Planning Attributes and Product Attributes
 - 'Lead Time' the time span required to produce an item.
 - 'Make Window' a specified time window within which Graphical MPS will attempt to load a batch of work backwards from its Due Date.
 - 'Target Stock Level' defines the ideal stock level that should be maintained for this product OR
 - 'Target Days of Cover' defines the ideal stock cover that should be maintained for this item.
 - 'Safety Stock Level' only works in conjunction with 'Target Days of cover', specifying a value in this field assists in preventing stock levels from dropping to zero, if 'Target Days of Cover' have been specified and the demand were to drop to zero.
 - 'Minimum & Maximum Reorder Quantity'
 - 'Reorder Multiple' used to define the minimum increment when calculating a batch size. So for example if the 'Reorder Multiple' was 25 the Max. Reorder Quantity was 100 and the make requirement was 160 then two batches one of 100 and another of 75 would be created.

- 'Reorder Due Date Offset' is the period in Days, designed to provide a mechanism to spread demand over a number of periods. The data mappings may be configured to take the Reorder Multiple from Sage Line 500.
- 'Hot Spots Grid Boundaries'
- The values of 'Blue % >' (maximum stock) and 'Red' (minimum stock) can be specified.
- Colour coding is used to indicate the status stock in the grid's cells at any point in time:
 - Blue - exposes excess stock.
 - Green - shows a satisfactory level.
 - Amber - indicates less than the target stock level.
 - Red - implies a dangerous stock condition.

'Forecast Import Options'

- Point load and spread load

Your sales forecast may be expressed in terms of monthly (four weekly) or even quarterly demand. To create a Master production Schedule we need to understand whether this demand is expected spread over the month or quarter or is to be viewed as a single large sale on the forecast date (a point load).

If the spread load option is used then the forecast is spread over the desired time into daily amounts (not rounded). These demands are then amalgamated into the weekly planning buckets for creation of the MPS.

Tasks Supported

The Master Production Schedule gives production, planning, purchasing, and top management the information needed to plan and control the manufacturing operation. The application ties overall business planning and forecasting to manufacturing capacity through the Master Production Schedule.

The Master Production Schedule will drive detailed material and production requirements through the Sage Line 500 Material Requirements Planning module and via Production Scheduling to provide a detailed shop floor plan.

Sage Data Transfer Menu

The data export is user configurable to allow selection by Product Group ranges and to enable automatic population of product and stock holding parameters from the Sage Line 500 stock master file.

- 'Clear and Import Forecast and Stock data'
 - Initial stock, sales and forecast demands are imported from Line 500
- 'Import Demand and Stock Data'
 - Initial stock, sales and forecast demands are imported from Line 500
- 'Demand Data'
 - Allows demand data to be manually entered in the Graphical MPS module.
- 'Reload Demand Data'
 - Refreshes the demand data from the Sage Line 500 data files
- 'Export MPS Data'
 - Exports the optimise MPS to Sage Line 500, ready for the next MRP run.

Generate Plan

- The Sequencer opens showing two active windows; a Multi Plot window, showing stock level by SKU (Stock Keeping Unit) and a Hot Spots Grid, with tabs which display forecast, stock and production information. As a default, the forecast tab is open and the Forecast and Stock data just imported is displayed.
- Coloured coded 'hot spots grid' enables user to easily identify under/over stocking.
- Production load (make requirement) is calculated then scheduled against available resources.
- 'What-if' modelling facilities are provided to determine the impact of changes in demand, resources and stock holding policy.

Additional plots

- Plots showing Actual Days of Cover, Actual stock, Actual Production, Production Shortage, Capacity, Productive Capacity and Utilisation are also available.

Customised Report Writer

- The user can modify and save the in-built standard reports and create additional reports using the in-built Report Writer.

E-mail Gantt charts and reports

- The user can automatically e-mail Gantt charts (as a bitmap) or reports (in RTF format) from within the Graphical Planning module.

Schedule export to Excel

- The user can export user defined schedule data to an Excel spreadsheet.

Web Publisher

- The user can automatically create reports and Gantt charts in HTML format to display on a web page. These can be viewed using Microsoft Internet Explorer.

Integration with other modules

Sales Order Processing

- Integrates Sales Orders demands.

Inventory Control

- Integrates with Inventory to determine initial stock levels and to retrieve product attributes.

Routing

- Optionally integrates with the Routing module to determine resource and time requirements.

Material Requirements Planning (MRP)

- Extract Sales Forecast files to Graphical MPS
- Import MPS from the Graphical MPS module.

