

Introduction to the RTIS Production Planning Module

<i>Core Functionality</i>	<i>Benefits</i>
Optimisation of production within real-time limitations	<ul style="list-style-type: none"> • Reduce factory bottlenecks • Avoid committing to unrealistic lead times • Smooth factory loadings • Ensure stock availability before planning • Machine optimisation
Multiple independent time frames for planning	<ul style="list-style-type: none"> • Organise material preparation • Early notification to purchasing department • Consideration of effects and opportunities afforded by approximate long term forecast
Multiple planning strategies	<ul style="list-style-type: none"> • Mix and match various planning and scheduling strategies • Adjust planning strategies according to current situation • Manually adjust resulting plans to accommodate specific circumstances

Overview

The nature of a planning module will depend almost entirely on the exact planning or scheduling issues that need to be addressed, and the availability of existing data from other systems. The system provides some degree of optimisation within the limits of the real-time constraints. The optimisation can be determined by various different strategies:

- Maximise Factory throughput
- Prioritise according to Order urgency
- Most efficient use of Raw Materials stock
- Maintain Finished Good stock levels

The module allows for the operator to choose between strategies, apply several strategies at once in order of priority, and manually adjust the resulting plans.

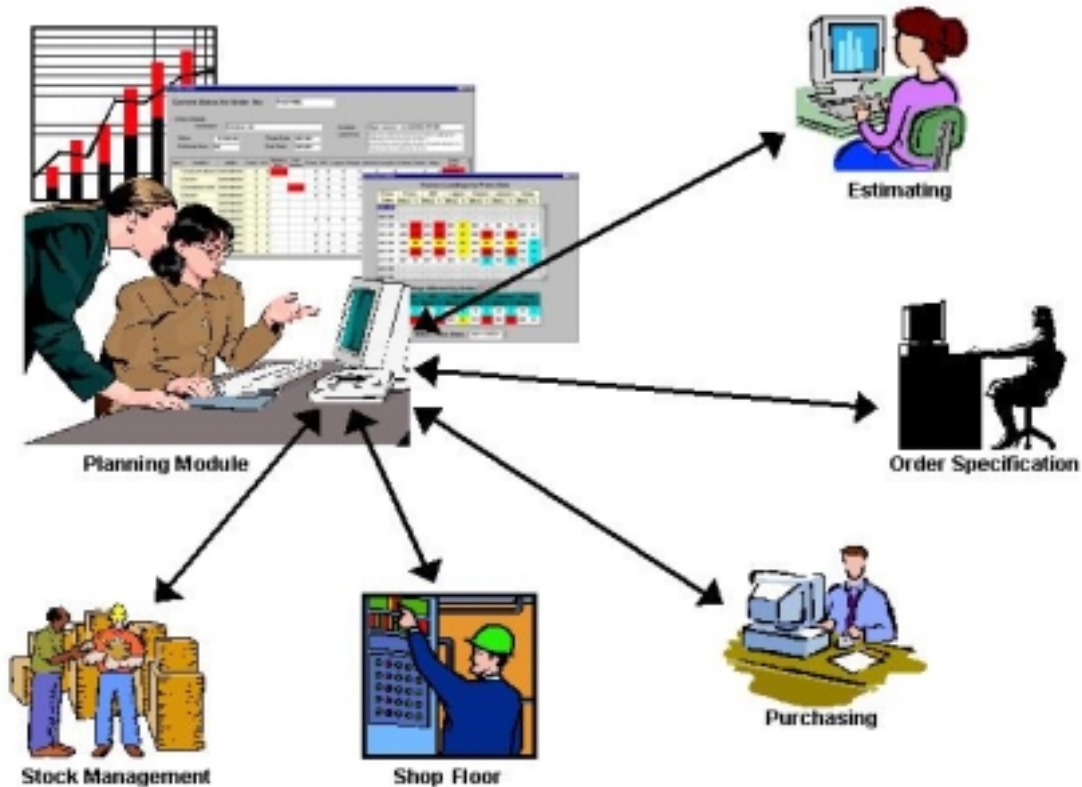
Several time frames can be set up, so that you have:

1. A production plan aimed at organising the immediate factory and warehouse activities
2. A short term forecast to prompt timely purchases of raw materials
3. Longer term forecasting to enable long lead time purchases, or bulk buying

Each of these plans can take any of the above strategies into account

Planning information dependencies

The planning modules effectiveness depends on it receiving sufficient accurate information in order to apply the desired policies. Ideally the information is provided "live" through automatic linking with the other systems. Where this is not possible, the planning module can still provide a useful function in a standalone role, where the required information is collated, and entered manually into the planning system.



Estimating System/Department & Planning Module

Estimating provides information on probable longer-term demands

Planning module provides estimating with constraints and loadings information

Order Specification System/Department & Planning Module

Order Specification provides manufacturing and purchasing requirements and job characteristics

Planning module provides suitable production start date and probable lead time

Purchasing System/Department & Planning Module

Purchasing system provides feedback on material requirement lead times and current PO's

Planning module advises purchasing system of manufacture dates, and forecast medium/long-term requirements

Shop Floor System/Production Department & Planning Module

Shop Floor system provides live factory loadings situation

Planning Module optimises machine and overall factory usage, limits plan to constraints, identifies priority orders, reduces bottlenecks

Stock Control System/Department & Planning Module

Stock Control system provides live stock availability (Raw Materials & finished product)

Planning module optimises production according to Stock Situation