

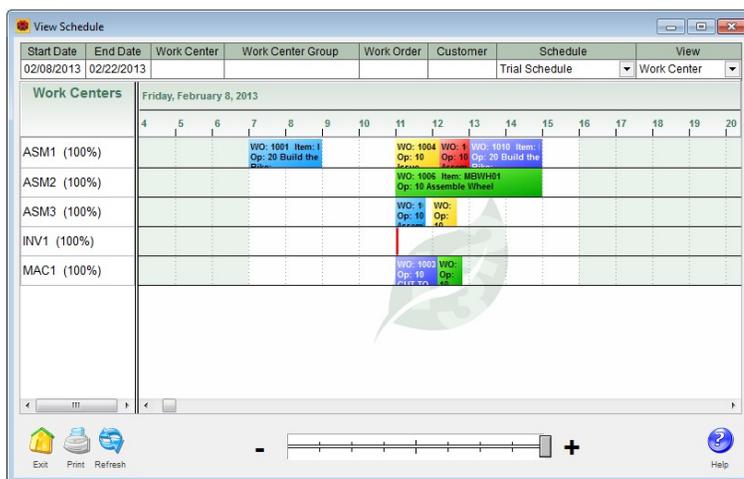
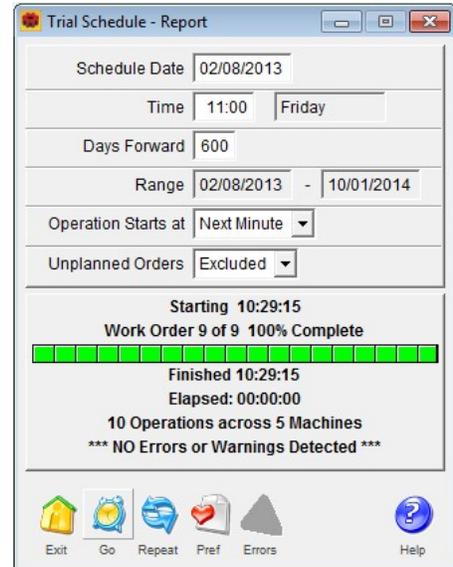
Schedule Module

If you manage dozens or even hundreds of work orders moving across a manufacturing floor, then you understand the challenge of prioritizing and coordinating that activity. In its simplest form, finite capacity scheduling (FCS) takes each work order, assigns it a priority, looks at the route to build it, reserves time on the work centers it will use, and comes up with a date when it is expected be done. With this method there is no need to manage queues as every step on a job has time slots assigned on work centers.

The FCS system supports both “Forward” and “Backward” scheduling. Forward scheduling is most commonly used when you give the order a start date and you want to know when it will be completed. Backward scheduling often occurs when a customer wants the order by a certain date and you want the scheduler to tell you when to start it. Individual orders can be set to use either method. Both forward and backward work orders are simultaneously scheduled.

The scheduler can be set to have a resolution of one minute or one hour. At one minute the next job is scheduled to start within one minute of the ending of the last one. At one hour the next job is scheduled to start within one hour of the ending of the last one. The resolution that will be right for you will depend on the type of jobs that are scheduled. In either case, the scheduler is amazingly fast. Thousands of route steps can be processed per minute.

One of the advantages of using the scheduler is that even if you ignore the recommended start and finish times for the jobs, you still have a listing of those jobs in priority order to follow.



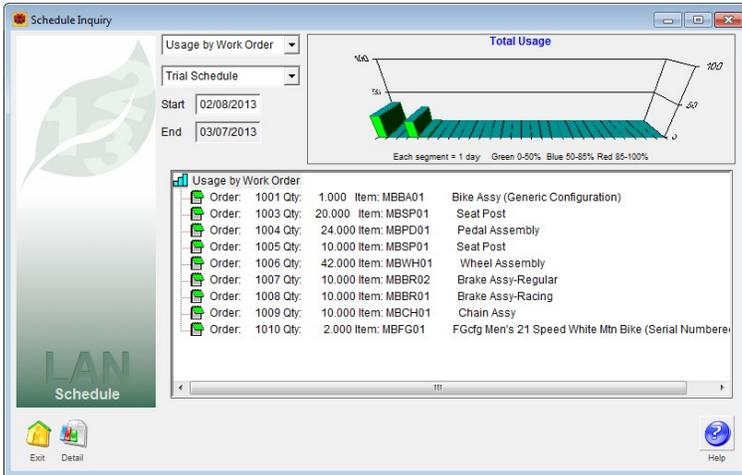
A major feature of the scheduler is that it permits route steps to overlap. What this means is that the next step can start working while the current step is still finishing parts. Used correctly, this can significantly compress the time it takes to process a job and, more importantly, it can increase the utilization of expensive machinery that might otherwise sit idle waiting for an operation step to complete.

The scheduler supports **Synchronous Manufacturing**, a very advanced way of tying the production schedule to MRP planning. The key is that the components on a bill of material can be matched up to the route operation

steps on which they are used. When the steps on work orders are scheduled you are, in effect, also scheduling when the material is needed.

There is a graphical overview of how work orders and work centers are scheduled. A “zoom bar” allows you to view a couple months or a few hours out of a day of the schedule. For example, using the options and filters

provided, you can easily zoom in on how a specific job will proceed through your shop. The color-coded bars representing the operation steps can be rearranged by dragging and dropping them.



Schedule inquiry supports drill down to detailed information on the loads in your shop, the schedule of individual jobs, the number and status of customer orders, and the quantity and projected completion dates of finished goods being manufactured.

All of this information is tied to 3D charts that are dynamically updated to graphically display the information you are viewing. Click on the bars on the chart to pop up a window with further details.

Examine either the trial or implemented schedules starting with any date you set.