

Factory Scheduling

SYSPRO has partnered with Preactor to provide the best expertise and experience in finite and advanced factory scheduling at an affordable price. SYSPRO has developed its own flavor of the Preactor products by configuring them to work seamlessly with SYSPRO. These products will fall under the banner of SYSPRO Factory Scheduling (SFS). The solutions focus on detailed “between the factory walls” scheduling. These products are used in conjunction with other planning tools in SYSPRO e.g. Forecasting and Requirements Planning SFS consists of a range of products to match the required level of sophistication:

- ❖ Graphical Planning Board
- ❖ Finite Scheduler
- ❖ Advanced Scheduler

Integration

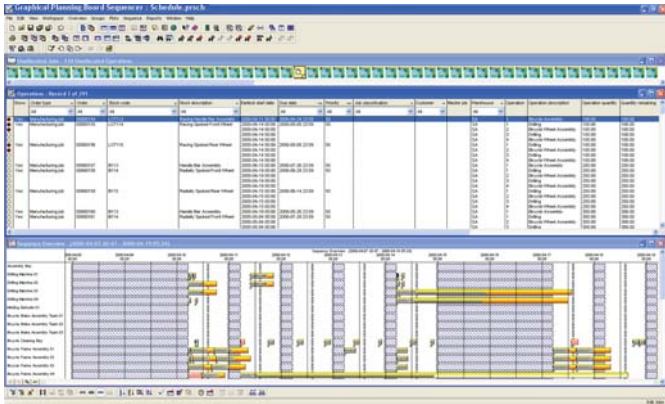
- The scheduling solution is seamlessly integrated with SYSPRO
- The Bill of Material is maintained within SYSPRO, thereby avoiding duplication of effort and out-of-sync information

Graphical Planning Board

SYSPRO Graphical Planning Board is a basic finite capacity scheduler with limited rules and features for automatic scheduling. The schedule is manually manipulated using the graphical Gantt chart view.

The resultant plan can be printed to reports or exported to Excel or other applications for distribution

SYSPRO Graphical Planning Board is powered by Preactor 100



- Forward/Backward and bidirectional sequencing
- Order loading by due date, priority or “first come, first served.”
- Load orders based on product or operation attributes (e.g. color, customer etc)
- Order to be completed late are highlighted
- Drag and drop editing of operations
- Highlight operation flow of orders
- Finite or infinite capacity resources
- Color coding on Gantt chart by product class and order status
- User definable calendars, resources states and efficiencies, breakdown, planned maintenance etc
- Automatic machine selection within work center
- Allow only manual sequencing on selected machines
- Easy identification and highlighting of order and operations
- Resource utilization display
- Ability to save multiple schedules and compare using the comparative views

Factory Scheduling (continued)

Finite Scheduler

SYSPRO Finite Scheduler offers sophisticated features that enable more accurate modeling of the factory. Multiple constraints per operation are considered (e.g. machine, tools, labor etc), as well as features such as transfer batches, sequence dependent setup times, preferred resource selections, maximum operation spans, maximum delay between operations etc.

SYSPRO Finite Scheduler is powered by Preactor 300

- Multiple constraints can be considered per operation
- Furnace type resources using match properties for infinite capacity resources
- Acknowledge jobs on hold
- Sequence dependent changeover times
- Transfer quantities between operations
- Automatic schedule repair
- Subsequent operation machine selection based on current operation machine selected
- Relative efficiencies between machines in a work center
- Preferred resource selection
- Slack time between operation
- Mid-batch updates and progress indicator
- Schedule analysis reports

Advanced Scheduler

SYSPRO Advanced Scheduler allows high quality schedules to be generated using advanced scheduling rules and by considering the availability of components and raw materials

Complex scheduling rules can be defined using filters, a combination of standard and/or defined advanced rules, user defined scripts etc.

Jobs on different BOM levels and stock on hand is pegged based on definable rules, thereby ensuring a feasible schedule

SYSPRO Advanced Scheduler is powered by Preactor 400

- Automatic allocation (pegging) of orders on different BOM levels and to materials or components. User definable pegging rules can be used
- Linking of parent and sub jobs (locked pegging)
- Schedule despite shortages option
- Parallel loading scheduling algorithms
- Preferred sequence rules based on user definable attributes
- Advanced algorithmic rules e.g. Minimize WIP, Selective Bottleneck (TOC) etc.
- Building of custom scheduling rules
- Automatic pegging using Static Material Control (SMC)
- SMC links demand and supply on different bill of material levels
- User definable pegging rules determine which demands will be pegged to which supplies
- The material requirements from imported jobs create the demand that is pegged to a supply in the form of a job or material
- Availability of components (intermediate products or raw materials) is considered when scheduling jobs
- Jobs can be scheduled despite material shortages
- Parallel loading algorithms
- Optionally uses parallel loading algorithms as apposed to the standard sequential loading techniques
- Parallel loading - optimization via dispatching rules
- Other advanced scheduling rules
- Building of custom rules
- The Advanced Scheduler is a truly open system allowing customized scheduling rules to be built to match the unique requirements of the company or plant
- Create custom scheduling rules using the PESP scripting language, to perform filter actions, apply specific scheduling rules to the filtered selection, lock the scheduled operation and apply another scheduling rule to the remainder of operations
- Complex customized rules can be added using any ActiveX Automation compatible programming system, such as Visual Basic
- The development of complex custom scheduling rules will most likely require assistance from a Preactor specialist