Smart software for enterprise-wide optimization.
EFI PrintFlow

The scheduling strategies of today’s printing and packaging enterprises need to do more than simply schedule individual jobs. Gaps between processes must be closed, bottlenecks must be relieved, and companies must be able to adjust to changing conditions in real time to optimize their entire operation.

PrintFlow, an intelligent, rules-based tool, offers savings by optimizing the interaction of all plant activities with real-time calculations, unique ‘what-if’ capabilities, and an enterprise-wide scope. It facilitates an integrated, automated system to increase throughput, minimize costs, and boost profitability.

Beat the Competition!

**Find the Best Spot for Each Job Automatically**

PrintFlow is a true dynamic scheduling system that automatically identifies the optimal path for each job based on the equipment available, current workload and the delivery schedules for all jobs. PrintFlow:

- Fits the sequence of steps required to all other jobs and conditions to produce a job efficiently.
- Sequences the jobs of every cost center to optimize the entire manufacturing process, from prepress through delivery.
- Matches each new job with all other jobs in the plant to reduce make ready time, waste and redundant steps.

**PrintFlow Considers:**

- Machine Capabilities
- Scheduling Constraints
- Employee Availability
- Material Availability
- Job Requirements
- Tooling Availability

**Dynamic, Real-Time Status at a Glance**

PrintFlow gives you an instant view of your current schedule and available capacity by cost center and by day, hour or any time frame you choose. Its unique Gantt chart shows you all the jobs in your plant in a single, configurable working window. Powerful manipulation software lets you click and drag to create summaries, tasks, links, timelines and more. Options let you view data in workflow or tabular form. And as you make changes, PrintFlow instantly updates the schedule scenario to show you the impact of your decisions in terms of scheduling and equipment utilization.

**More Power to Play What-if**

The visual power of PrintFlow is complemented by its ability to perform powerful what-if scenarios that let you evaluate the impact of one or many changes to the schedule. Each time you make a proposed change to the current schedule, PrintFlow immediately re-optimizes, re-synchronizes and provides a new scenario with an impact analysis to compare to your live schedule. You’ll know the effects of any action – good or bad – before you release your new schedule.

**A Digital Magnet Board — and so Much More**

The Gantt chart is where you view and manipulate your schedule. You can see if a job is late or how much slack time you have between operations. The Gantt chart allows manipulation (if necessary) of all tasks while automatically calculating the switchover time between different tasks and controlling all upstream and downstream dependencies.
Fast Answers
PrintFlow is the only true dynamic scheduling tool in the industry with optimization. Think of the time your scheduler and production managers spend trying to synchronize your schedule. PrintFlow gives you instant feedback to questions. In addition, PrintFlow lets you know if you will be incurring additional switchover time by making a change.

Help with Hands-on Scheduling
In addition to robust scheduling automation, PrintFlow gives you powerful tools to assist in manual scheduling activities. For example, as you drag a task across the schedule, switchover time is calculated automatically as PrintFlow compares the properties of one task against another.

Optimize!
Find Your Weakest Link and Eliminate It
PrintFlow allows you to manage production bottlenecks and control jobs. You can identify weak links and see just how much of an impact they actually have on your schedule.

Create a What-if Scenario by Adding a Shift to the Bottlenecked Cost Center
The what-if scenario generator provides the information you need to make better decisions. For example, is it worth changing work patterns over the next few days to ship 20 more jobs on time?

What-if Comparisons
PrintFlow allows you to compare what-if scenarios to see which jobs and customers are affected. You can evaluate which jobs become late because of a rush job and which jobs ship on time with overtime at a certain the work center.

Synchronize!
Capacity at a Glance
PrintFlow includes a powerful, user-customizable Capacity Utilization tool that allows you to look at utilization at the cost center, department, plant and company levels, and across days, weeks and months. Views include idle time, run time, overtime and other parameters.

Smart, Unlimited Manual Scheduling by Job
PrintFlow gives you the tools and flexibility to operate with totally automatically, totally manually – or anywhere in between. Using the PERT diagram, you can view, manage and schedule individual jobs. You can even break up long runs into multiple parts to run across multiple pieces of equipment.

Integrate!
Advanced integration with your EFI MIS/ERP software helps improve your entire workflow. Share job specifications and job status and attack the inefficiencies that undermine your investment in people and equipment. PrintFlow’s automated, integrated approach eliminates the need for re-keying and delivers more accurate data in real time.

Remote Access
PrintFlow is also available in a browser-based format, providing access to remote personnel. Managers, for example, can use the PrintFlow Website to address a second- or third-shift situation without going to the site. Remote users can be given read-only or working time access/edit rights to the PrintFlow Website.
TGO: The Revolutionary Scheduling Strategy Behind PrintFlow.

PrintFlow's strategic advantage is the Theory of Global Optimization (TGO), developed for the industry by Udi Arieli and his team at EFI. TGO applies key manufacturing principles of Dr. Eli Goldratt’s Theory of Constraints to the business of printing and converting. TGO builds profitability by increasing throughput across the entire operation and makes CIM for printing and packaging a reality today. Key principles of TGO include:

- A manufacturing operation is a chain of interdependent links and only a few constraints control the throughput, on-time delivery and cost of the entire operation. Remove the constraints and you increase production and boost the bottom line.
- The wider perspective of the plant takes precedence over the narrower focus of single jobs or cost centers.
- Increasing throughput is far more important than cost accounting.
- Profitability is created by the sum of all jobs, not the theoretical profitability of individual jobs.
- Higher efficiency or productivity in a single cost center does not lead to higher profits.
- On-time delivery is not determined by the most efficient cost center, but by the weakest link.

PrintFlow Advantages:

- Optimizes use of equipment.
- Minimizes make-ready time.
- Increases capacity.
- Increases throughput.
- Increases on-time delivery.
- Makes proactive scheduling decisions.
- Responds more quickly to customer needs.
- Reduces waste.
- Increases profitability.

PrintFlow Highlights:

- Schedules the entire plant based on the Theory of Global Optimization (TGO).
- Optimizes to reduce switchover time and waste.
- Uses what-if scenarios to evaluate potential changes.
- Dynamically evaluates links and dependencies between cost centers.
- Predicts and analyzes events as they occur.
- Presents graphical schedule views by cost center or day.
- Color-codes overtime, idle time and downtime, or any criteria you choose.
- Allows manual overrides, freezing and grouping.
- Automatically calculates production-stage due dates.
- Offers drag-and-drop editing.
- Provides customizable reports.
- Integrates with EFI management systems.

EFI fuels success.

From Fiery to super wide inkjet, from the lowest cost per label to the most automated business processes, EFI has everything your company needs to succeed. Visit www.efi.com/iquote or call 800-875-7117 for more information.