



## Fiber Optics Firm Boosts Production 16% by Integrating Production Planning and Scheduling with MES

Company is recognized leader in optical fiber technologies and solutions for data center, enterprise, and communication networks. Global resources in research and development allow it to listen to customers' needs and respond quickly, "connecting today to tomorrow."

### Results

- Increased production output 16%
- Improved shipment promise dates 8%
- Applied production planning and scheduling to address constraints, solve bottlenecks, handle what-if scenarios, and manage resources to achieve never before seen levels of efficiency

### Even a company with high standards can have bottlenecks

The North Carolina-based global fiber optics company is a major contributor to the billions of bundles of optical fiber that lace the earth in a light-filled network of telecommunication signals. It manufactures amazing pure glass-silica fibers (similar in size to a human hair) for an elite product line of 6,000 different optical cable parts, assemblies, and systems. Communication networks, enterprise networks, and equipment manufacturers would go dark without these strings of modern technology.

The 300-employee company rose to the summit of its industry due, in part, to its long reputation for the highest standards in research and development, design engineering, and manufacturing since 1987. Even still, the organization — a member of a mega family of companies — decided the time had come to eliminate all bottlenecks in production scheduling.

## Promise dates imperative and a challenge

To help understand and improve the factors that drive plant efficiency, the organization turned to an advanced planning and scheduling solution.

“The challenge we faced was a manufacturing imperative: To deliver on accurate promise dates for customized fiber optic infrastructures, and maximize supply chain resources to meet growing product demand,” says the director of manufacturing operations.

The manufacturing operations team underwent an intensive software evaluation and concluded that there was only one solution that met expectations on functionality and cost of ownership. “We needed a high-power scheduling system geared for mass customization. Some companies may find what they need in a basic package. For those of us with massive throughput, the one size fits all approach doesn’t work,” the operations executive claims.

Part of the solution was to integrate the production planning and scheduling solution with the manufacturer’s manufacturing execution system



(MES). In short order, the planning and scheduling team saw the flows of orders throughout the supply chain, which allowed them to address constraints, solve bottlenecks, handle what-if scenarios, and manage resources at a standard of efficiency not known before.



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Director, Manufacturing Operations  
Fiber Optic Cable Company

## Agility rules

The open-face view of the solution’s production planning and scheduling Gantt chart gives the fiber optics manufacturer a quick snapshot of time required for changeover and specific order runs on manufacturing lines. The drag and drop feature provides the means to manage resources in real-time. And multiple schedulers now use the system simultaneously for measurable time and labor-saving benefits.

“Another solution benefit is the ability to integrate preventative maintenance schedules with manufacturing schedules. We can’t meet commitments without maximizing overall equipment effectiveness (OEE); the freedom to block out time for

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preventative maintenance before the schedule is full of orders increases our uptime and capacity,” notes the director of manufacturing operations.

Already, the integration of the production planning and scheduling with the MES has produced two-way real-time communication between plant operations, scheduling, and customer service. Accuracy of shipment promise dates improved by 8%, and production output levels increased by 16%.



## ABOUT ON TIME EDGE

Accelerate digital transformation with On Time Edge for an agile, accurate supply chain and manufacturing operations excellence. We deploy and integrate supply chain solutions and smart manufacturing systems, so they work the way they’re supposed to and your company gets the ROI you expect.