



## Real-Time Knowledge is Power

Strategically improving manufacturing operations with real-time visibility and control

Access to timely information has become paramount to success in the apparel and sewn products manufacturing business. In order to effectively manage, manufacturers require timely information about what is happening on the plant floor. In today's fast-paced and competitive business environment, real-time information gives companies the tools needed to anticipate exceptions and run balanced, efficient facilities. The competitive edge to be gained from having access to timely information is driving a growing number of manufacturers to implement realtime shop floor control (SFC) systems in their factories.

Until recently, most manufacturers relied on low-cost, batch data collection systems to monitor plant productivity. Such systems typically collected information on daily production for review at the end of each workday. Managers were limited by the fact that they could only react to the past rather than act on issues while there was still time to address them appropriately to improve productivity.

The preferred, albeit more costly, alternative is real-time data collection because information on production is collected as it occurs and presented to management and teams on an ongoing basis.

### Cost vs. ROI

Quickly recognizing the return on investment (ROI), hard goods manufacturers readily adopted real-time data collection in the early 1970s. Soft goods manufacturers took longer to jump on the bandwagon. It wasn't until the mid-1980s that the first wide scale adoption of realtime data collection occurred in sewn products.

The first **BlueCherry®** Shop Floor Control (formerly Leadtec®) installations occurred in 1987. Since then, more than 150,000 terminals have been installed. With this new breed of affordable terminals and systems, apparel companies could now commonly achieve an ROI on SFC in a 12 to 18 month timeframe.

### Real-Time vs. Batch

Prior to the availability of real-time data collection in the apparel industry, plant supervisors were restricted by manual batch data collection systems that forced them to wait until the close of the production day to determine operator efficiency and time and overhead expense.

At best, batch systems provide plant management with an administrative assist, handling basic payroll and reporting functions. While some of these systems can provide historic data and usually cost less to implement than a typical real-time system, they do not provide productivity improvement, bottleneck resolution or cost avoidance beyond a possible reduction in clerical personnel.

To learn more about **BlueCherry®**, contact your **BlueCherry®** sales representative at 212-408-3809 or email us at [applications@cgsinc.com](mailto:applications@cgsinc.com). You can also visit us at [www.cgsinc.com](http://www.cgsinc.com).

For over 30 years, CGS has enabled global enterprises, regional companies and government agencies to drive breakthrough performance through business applications, enterprise learning and outsourcing services. CGS is wholly focused on creating comprehensive solutions that meet clients' complex, multi-dimensional needs and support clients' most fundamental business activities. Headquartered in New York City, CGS employs more than 5,200 professionals across North America, Latin America, Europe and Asia. For more information, please visit [www.cgsinc.com](http://www.cgsinc.com).

Computer Generated Solutions, Inc.  
200 Vesey Street  
Brookfield Place  
New York, NY 10281-1017  
212-408-3809  
[www.cgsinc.com](http://www.cgsinc.com)

Real-time data collection, on the other hand, boosts plant productivity in three primary areas:

- By eliminating time clocks, paper tickets and manual recording of information, companies gain an immediate reduction in unproductive administrative time and expense.
- By presenting motivational and pacing feedback directly to each operator or worker, wasted time is minimized and production output increases without requiring additional personnel, facilities or overhead expenses.
- By delivering focused information in a timely fashion, SFC highlights production constraints and suggests solutions for proactively resolving them well before they result in missed production goals.

While batch systems may cost less to implement than a typical real-time system, they simply cannot deliver the productivity benefits and cost-savings of a real-time system. The ability to preemptively and proactively manage the manufacturing process has unparalleled advantages. Examples of some of the other key benefits of real-time SFC include:

#### **Bottleneck Elimination**

When the SFC system forecasts a bottleneck in production output for a particular job, the supervisor can use the system to identify the cause (i.e. an inventory constraint or a capacity constraint) and simulate potential solutions. By taking action to alleviate the constraint before it has throttled the output of the entire line/plant, the supervisor has preemptively eliminated the problem and facilitated more production output for the day.

#### **Increased Productivity**

When an operator's productivity is not up to par, a supervisor can use SFC to identify the cause and work to eliminate the problem before it seriously affects output and operator earnings.

#### **Early Warning System**

By using the system to evaluate current off-standard issues and their costs, supervisors can quickly and easily identify unacceptable conditions and prioritize actions to effectively resolve issues and prevent unnecessary expenditures.

#### **Accurate Cost/Price Comparisons**

Only a real-time SFC system can accurately compile the "actual labor cost" of a product. Armed with this information, management can evaluate product cost vs. price to determine if adjustments are warranted.

## **Shorter Learning Curves**

When it comes to improving operator training, real-time systems can reduce training time on the factory floor by:

- Measuring the performance of each trainee on a training curve appropriate to their job. The system automatically tracks performance against the training curve and graduates the operator to lower levels of training subsidy as learning occurs and productivity increases.
- Providing pacing at productivity levels appropriate for the experience level of each operator. By giving trainees reasonable targets as well as immediate and continuous motivational feedback on how they are performing, they are encouraged to progress.
- Automatically calculating and paying training bonuses appropriate to the job and the operator's performance on that job.
- Permitting trainers to monitor trainees' performance, even down to the individual bundle level, in real-time throughout the day.

## **Advancing SFC Technology**

Messaging capabilities that are built into some SFC systems automate messaging and paging across plant operations. Using these capabilities, operators are able to generate messages from their terminals that highlight emerging issues before they impact productivity. Messages like, "I will need another bundle in 15 minutes," or "I am about to run out of labels," or "My machine needs adjustment" can automatically be routed to the person responsible for handling the situation. Such messages can be automatically directed to wireless devices, LAN connected PCs or e-mail recipients.

## **Bottom Line: ROI**

Manufacturers of apparel and other soft goods as diverse as shoes, luggage, parachutes and furniture are increasingly turning to real-time data collection and shop floor control. Factories that measure and track performance with the unique motivational and pacing features found in the BlueCherry® Shop Floor Control experience a measurable increase in individual production output and overall factory productivity. With savings typically ranging from 5-40 percent, it is easy to see why so many manufacturers are abandoning traditional methods for the unrivaled business advantage to be gained from powerful and effective real-time SFC.