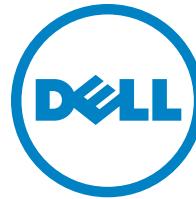B&G Manufacturing shop-floor workers perform their jobs faster using a new SAP MII solution enabling on-demand processing and real-time visibility into operations

DELL

- **Dell Services**
- **SAP MII**

"Key performance indicators are available on iPhones and iPads. Our managers can spot problems and react immediately, keeping the production on time."

Dawn Englehart,
IT Lead for SAP Admin / SAP Basis
B&G Manufacturing

Customer profile

Company:	B&G Manufacturing
Industry:	Commercial and Government
Country:	United States
Employees:	170
Website:	www.bgmfg.com

Business need
B&G Manufacturing wanted to implement a shop-floor SAP MII solution to improve efficiencies and knowledge management of their business operations.

Solution
Working with Dell Services consultants, the company rolled out an integrated SAP MII solution in an SAP R/3 environment to seamlessly consolidate shop-floor user schedules, reporting, and document management to gain improved efficiencies, accuracy, and visibility into overall business operations.

Benefits
- **Real-time schedule and status visibility for the shop floor**
- **On-demand production confirmations inputted directly by shop-floor users communicated directly into SAP**
- **Visibility down to the line-level active orders**
- **Easy access to order relevant technical documentation**
- **Disaster recovery mitigation functionality**
- **Minimal training for company IT, management, and shop-floor staff**
- **Significant data entry efficiency gains**
- **Improved data accuracy**
- **Increased real-time visibility to the shop floor and metrics**
- **Reduced and/or eliminated manual back-office data entry and reporting**

B&G Manufacturing Company is a leading manufacturer and supplier of threaded fasteners and machined parts serving equipment manufacturers and industrial users in the Power Generation, Mining, Transportation, Petro-Chemical, Nuclear, Aerospace, Marine, and Medical industries. Improved shop-floor efficiencies and delivery performance are key to successfully meet the demands of a fast-paced global fastener business.

> "Performing labor confirmations using MII screens simplifies the data entry process and provides real-time updates to SAP production orders instead of delayed updates in batches."
>
> *Dawn Englehart,*
> *IT Lead for SAP Admin*
> *SAP Basis for B&G Manufacturing*

Real-time shop-floor capabilities delivered in 12 weeks

Working with Dell Services, B&G Manufacturing established a shared IT team to deliver a comprehensive SAP MII solution integrated with the SAP ERP environment to seamlessly integrate shop-floor user schedules, reporting, and document management system within its SAP software family. The company was suffering from significant shop-floor inefficiencies that were affecting production. B&G Manufacturing had a system of legacy technologies and non-integrated solutions, resulting in a cumbersome and often manual business process. This often required labor intensive data inputs, investigations, and outputs.

Phase 1 of the project focused on implementing the solution in the Medical segment of the company's business operation. The shared IT team holistically looked at the entire factory networks, servers, and applications and developed a comprehensive plan to execute the solution. Starting with detailed discovery sessions around plant operations, the team identified business goals and key business processes. Workshop sessions outlined requirement priorities, an implementation roadmap, and key project phases. The team methodically and collaboratively built-out a fully integrated technical design for each component of the MII application to fulfill both the business' end-user functional needs and back-end SAP ERP data configurations. In addition, Dell Services brought in a specialized team of Dell Services' experienced professionals to tackle specific challenges with complex order dispatching and work center capacity planning requirements of the integration. After careful planning, designing, and testing, the entire solution was rolled out in just 12 weeks.

"Dell Services provided excellent communication and understanding of the business process," said Dawn Englehart, IT Lead for SAP Admin / SAP Basis for B&G Manufacturing. "Weekly meetings kept everyone on time and under budget."

Information access available on demand

With the MII solution integrated with common business processes and methods, shop-floor workers now use an intuitive operator dashboard to take action on schedule orders, retrieve information, and perform production reporting. Each work center screen is easy to navigate and tailored to workers' essential job functions / data setup and processes on the shop floor. Now real-time confirmations are inputted directly by shop-floor users via the operator's interface, which communicates directly into SAP and provides additional shop-floor visibility down to the line-level active orders. Measurements around estimated versus actual production line run rates, quality status, and real-time performance metrics are made accessible on-demand.

In an effort to fully utilize the value of the Document Management System in the SAP R/3 system, key data points and documents to materials are linked together and integrated directly to orders on the users screen. Thousands of documents are automatically

filtered and available on demand, with information compiled in an easy-to-understand format. In addition, the shop-floor order dispatching process, which previously took up to 90 seconds, is now performed in 2-3 seconds.

"The real-time dispatch list shows only the operations that are ready for the machine instead of jobs that are scheduled but not ready to run," said Englehart. "Performing labor confirmations using MII screens simplifies the data entry process and provides real-time updates to SAP production orders instead of delayed updates in batches."

Order deliveries performed more effectively, less costly, and more rapidly

Workers no longer have to wait for information or deal with manual business processes or labor-intensive data inputs. Work center screens allow fast and accurate input and monitoring of orders with no time lags or paperwork. Users can track and maintain production quantities, scrap and reason codes, setup, and production manufacturing times seamlessly. The new MII solution and ERP applications provide the ability to increase accuracy and timeliness of

manufactured and consumed inventory and related costing impacts to satisfy order deliveries in a responsive manner.

In addition to improved operator effectiveness, managers and supervisors have their own personalized dashboards that provide an overall picture of the real-time shop-floor operations. With central access to shop-floor line, user, productivity, and quality metrics, they can respond and take necessary actions or interventions.

"Managers and shop supervisors now have a real-time view of what production orders are active," said Englehart. "Any operations that are over standard setup and run times can be addressed immediately instead of waiting until the entire job is completed."

Upcoming operation trends and facility demands monitored more effectively to plan workloads and staffing

With the built-in Capacity Planning solution, supervisors have dashboard visibility to view upcoming operation trends and facility demands from one central interface. This allows schedulers to quickly and easily manage staffing loads and balance work planning at each line to meet the production demand. In addition, supervisors also can effectively capture and

seamlessly display real-time operational performance information across the factory floor, and make responsive decisions to improve and maintain business performance targets.

"The work center capacity graphs allow looking at the load from a daily, weekly, or monthly view for one work center or a group of work centers," said Englehart. "This allows for better planning of overtime or additional manpower when it is needed."

Technology at Work

Services

Dell™ Services

Hardware

HP ProLiant DL380 with 2 Quad-Core Intel® Xeon® E5450 processors

HP Smart Array P400

Software

Microsoft SQL Server® 2008 and 2003

Microsoft Windows Server 2003 R2 Enterprise x64 Service Pack 2

SAP MII System Version: MII 12.1.8

Sun Java R6

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