

Metal Fabrication — MES Integration Pilot Project

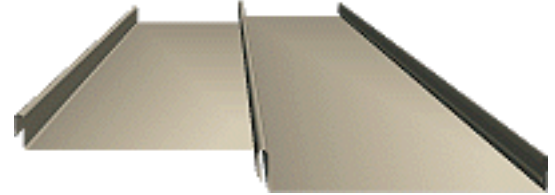
Plantwide Integration

- ✓ MES (Manufacturing Execution System)
- ✓ *BCI SCHEDULER™*
- ✓ Pilot Project

Metal Sales Manufacturing
Sellersburg, IN

Joel McDonald
General Manager
Woodland (CA) Branch
530.668.5690

BCI SCHEDULER™ uses a modular approach to providing services. As the pilot system is rolled out into the other plants, it will be modified to include features and strengths of each facility.



Project Summary

Bachelor Controls, Inc. (BCI) was recruited to provide an efficient solution to managing production orders for Metal Sales Manufacturing Corporation in its Sellersburg, IN headquarters. The pilot project incorporated three types of roll-forming lines controlled by ASC Machine Tools' CNC-500 Generation 3 controllers. This pilot project will then be rolled out to each of the 19 existing plants and incorporate other host controllers, such as The Bradbury Company's CTC controllers.

The system imports orders from the existing IBM AS/400 system, intelligently bundles them based on customer-defined criteria, and separates them into three product categories (purlins, pre-cut panels, or post-cut panels) before assigning them to one of five production lines. After assignment, the system downloads part dimensions and specifications directly to the manufacturing lines, creating a paperless system that allows operators to spend more time running the line and maintaining product quality and less time entering dimensions and recording production and usage.

Objectives / Requirements

Plant Floor Criteria:

- Create paperless operator console
- Minimize operator error by electronic communication to the line
- Verify coil match to ensure correct material is used

Top Floor Criteria:

- Streamline order entry-to-production-to-shipping
- Facilitate one-person operation of plant floor scheduling for all lines and line types
- Automate bundling procedure
- Reduce paperwork by eliminating production entry

Results / Benefits

Using *BCI SCHEDULER™*, BCI met or exceeded the project expectations. Plant floor morale improved as operators were able to focus on producing quality parts and to increase production speeds. By providing a standard interface to all lines, BCI decreased training costs and cross-training time for operators. Coil matching forced operators to load correct material before producing product.

Since moving to the *BCI SCHEDULER™* system, orders are produced in the time it used take to schedule them. The office now has a single point of contact to determine status of orders and doesn't have to interrupt operators for order status. After defining a clear set of bundling rules, the production manager could perform the work of three production supervisors, in a fraction of the time. Coil usage and production reporting from *BCI SCHEDULER™* allows office personnel to shift duties from data entry to order entry.

With the improvement in production, the increased visibility into the system and the seamless connection between the front office and the plant floor, the result has been what I would call a third-generation shop floor control system. We are very happy with the performance of the system.

Gary Martin

Former VP of Manufacturing

BCI SCHEDULER™



Bachelor Controls, Inc.

Systems Integration for Manufacturing

Sabetha • Kansas City • Memphis • 785.284.3482 • sales@bachelorcontrols.com • www.bachelorcontrols.com