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Evaluate & Update for Optimal Production Efficiency by Jim Thomas with Libby Maurer

Is your shop running at optimal efficiency? What could you do to remedy the problem? Consider these tips for smooth sailing in the truss plant.

Plant managers and production staff of manufacturing operations know all too well the importance of continuous evaluation of their internal production processes. The reporting of those evaluations is integral to the overall efficiency of the operation whether your specialty is roof trusses, wall panels or steel components. Jim Thomas of Trussway, Ltd. spoke at BCMC 2002 (full seminar program with audio available for purchase online at www.wtcatko.com) about the importance of measuring your plant's production in a way that reports details that can impact the purchasing and hiring decisions—from buying a saw to whether you should add a third shift—made down the road.

PRODUCTION REPORTS

If you are in management, production reports ought to be your best friend. Why? Simple: while everything might be smooth sailing in design and sales, production could be shipwrecked or lost at sea. Have a production reporting standard in place—daily, weekly and monthly evaluation of your plant makes it easy to define areas that need attention. However you choose to conduct the reporting, Thomas recommended examining areas that can determine where to optimize and enhance already efficient production as well as isolate spots that are not operating efficiently.

Examples of what you might measure include:

- Number of trusses produced
- Amount of footage produced (actual, factored or board)
- Schedule units/expectancies
- Plant labor as a percentage of dollars or as a percentage of footage
- Footage produced per man-hour
- Dollars produced per man-hour
- Man-hours to produce a scheduled unit
- Dollars produced against footage (checks selling price)
- Average rate of pay (a reference for future pricing)

Once you have assigned certain production employees the responsibility of keeping accurate records and have established a dependable system for collecting and recording data, you can begin to interpret the results. These results may indicate lapses in job-specific training, quality control issues, safety and risk management concerns, or run-of-the-mill inefficiencies that slow production and prevent you from operating at full capacity.

One obvious benefit from storing production data and statistics over the long-term is your ability to determine the right equipment to purchase that will maximize the crew's efficiency and suit your production scenario and budget. For example, imagine that you think you have a need for a new saw. You will see an intimidating array of the most and least automated saws at BCMC; and there is no "right" choice, except for the one that accommodates the pocketbook and the operation. Perhaps you'd like an upgrade and are interested in pursuing a model that offers greater capability and precision with the latest technology. A production report with the right information about the plant's production trends can lead you to the most informed decision about the best saw for your needs.

LINE WORKERS BUILD...SAWYERS CUT. KEEP IT THAT WAY!

Thomas pointed to other reasons besides improving efficiency to turn your undivided attention to your production operation: safety, risk management and quality control. For instance, how often does the line stop for a re-cut? Not only does re-cutting at the line hamper the crew's efficiency, but the presence of even one saw on the production line carries unnecessary liabilities and safety issues. Re-cutting at the line clutters the area with superfluous equipment like sawdust, blocks and electrical cords on the floor that presents an instant hazard. Thomas warned, "Workers compensation claims will rise if you continue to allow saws on the line. Keep saws off the line and be adamant and vigilant about it."

The integrity of your operation's quality control program is also at stake when re-cutting pieces at the line becomes too frequent. Thomas noted, "The line supervisor should be aware of every saw error and discuss with the necessary management or quality control supervisor to bring it to their attention."

When cutting at the line is an acceptable practice, it keeps mistakes made at the saw from being identified and corrected. As well, the mistake could point to a design error that may need to be addressed.

LEVELS WE EXPECT ARE LEVELS WE PROJECT

Thomas' production management mantra emphasizes the importance of exuding accuracy in order to breed a culture where quality, safety and pride are practiced. This culture starts with the production management team's accountability in the following areas:

- Review cut lumber with the goal of decreasing line handling.
- Evaluate staging for easy access.
- Pre-establish sequence building.
- Review set-up tooling.
- Eliminate repetitive processes.
- Ensure tables are flush and flat.
- Check for proper plate embedment.
- Check for tight joints.
- Ensure crews are properly trained.

INTERACTION & TRAINING

How often does the management walk the plant? According to Thomas, the answer should be daily, if not more frequently. The more you are in touch with activities and procedures on the floor, the more your employees will be concerned about those same daily operations, instead of just going through the motions.

“Maintaining constant talent keeps output levels constant,” noted Thomas. What he means is that it takes five times longer to repair one truss than it does to build one truss, which makes a strong quality control program that much more important. Thomas guaranteed that if those criteria are met and maintained with unrelenting awareness, it will help “increase output and decrease cost.”

SHIPPING

Don't forget about how the product gets to the customer after it is manufactured and stored. Think about the contact your drivers have with customers. They probably have more contact with customers than anyone else in the facility! As the main contact source with the customer base, are they schooled in company policies? Thomas also warned that truck drivers are not engineers, designers or inspectors, so they should know not to address concerns and problems on the jobsite. Their responsibility is to communicate those problems back to the managers, not to address the concern or fix the problem. Thomas also noted the importance of authorizing drivers to reject any delivery if the jobsite conditions are not conducive to a safe delivery.

“We make sure our drivers uphold the Jobsite Accessibility Policy. That is, if they determine that they are entering an unsafe jobsite, they have full authority to reject the delivery. The last thing we need is to have an injury during delivery because the jobsite was not safe for the driver or the other personnel on site.”

Are your truck drivers prepared with everything they'll need to carry out a safe, efficient and timely delivery? Arming them with the appropriate safety information and delivery documents before they leave the premises will eliminate communication lapses and ensures that the customer will receive the complete package upon delivery. All it takes is a few organizational tactics up front.

- Permits and routing
- Proper delivery tickets
- Maps
- Mobile communication systems and global positioning systems (GPS)
- OSHA safety requirements
- Accident report forms
- Emergency numbers
- Jobsite information packages and crucial WTCA jobsite safety information
- Load picture

Whether you need to step up procedures for data-collecting, eliminate safety hazards, or get a

grip on sloppy quality control procedures, there is always room for improvement in your manufacturing operation. Take a look at the production “big picture” before you make any drastic updates or purchases. You may find small ways to make a big difference.

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