

What Is Your Strategy for Tackling In-Plant Quality? by Tony Piek

One component manufacturer describes the benefits his plant and staff have reaped from In-Plant WTCA QC, not just from a quality standpoint, but also from one of culture. Could this in-plant monitoring process be the answer to your QC needs?

Football season is underway, and I am once again excited about Green Bay Packer football! Speaking of football, every professional team needs a rock solid defense to stop the opposing team in their tracks. A defense needs to learn how to play as a team and understand the fundamentals of the game. One crucial area is tackling: reading the quarterback's eyes to get a beat on the play and then bringing down that elusive running back in the open field as he weaves between huge offensive linemen. Each team in a football game needs a strategy to win the game. Keeping with the theme of developing a strategy, how is your plant "tackling" the crucial area of in-plant quality?

WTCA has been getting the word out about the new in-plant QC inspection program: In-Plant WTCA QC 4.0. The question we ask truss manufacturers is this: What is keeping you from strategically implementing an official in-plant quality control program? I could write a whale of an article with all the bells, whistles and football analogies I can think of to make a case on behalf of WTCA QC. But take it from someone who is actually using In-Plant WTCA QC day in and day out and sees the immense value of it. Here is Dennis Peters' testimonial about his plant's quality:

"For over a year, we have been monitoring our quality with In-Plant WTCA QC. Our plant has been deemed 'Certified' by WTCA since March 2003. We utilize the reports that the In-Plant WTCA QC program generates at our weekly department meetings. These reports show our people what we are doing well and where improvements can be made.

"We inspected trusses and collected data at the required frequency (three trusses per week per set-up location per shift) for about five months before obtaining program certification. Over these initial months, we were able to target specific problem areas and make corrections. Through its ability to graphically represent data, the In-Plant WTCA QC program pin-pointed our main problems: plate placement, large gaps and missing plates.

"Before using In-Plant WTCA QC, we had numerous visits to jobsites to make repairs. Not only was this very costly, but it did not make our customers very happy. Over the last year, all the assemblers have learned that quality comes before productivity. This may sound ludicrous to some—and if senior management is not behind you 100 percent it is.

"Assemblers initially thought it would slow them down to be so 'quality conscious.' After investigating our fabrication practices through the help of In-Plant WTCA QC, we noticed that with a little more awareness and training we were able to rid ourselves of our mistakes.

"Since we began using the program, Hoida/United Building Center-Timber Roots has not had any reportable truss repairs that needed to be done because of poor quality. We feel that this is completely due to our commitment to using the In-Plant WTCA QC program.

"We are taking this extra step for our customers and the assemblers know that their work will be inspected at one time or another. Our assemblers know that we expect quality along with efficiency and they take pride in that. The program provides output to find your problem areas—as a fabricator there is tremendous value in that.

"We as a company have made the worthwhile commitment to quality by using the In-Plant WTCA QC program. After certification, we created a quality tag. This tag is applied to each bundle of trusses.

We also have space on the tag to allow the assembler to sign their name and take the credit for our good quality (see Figure 1 above)."

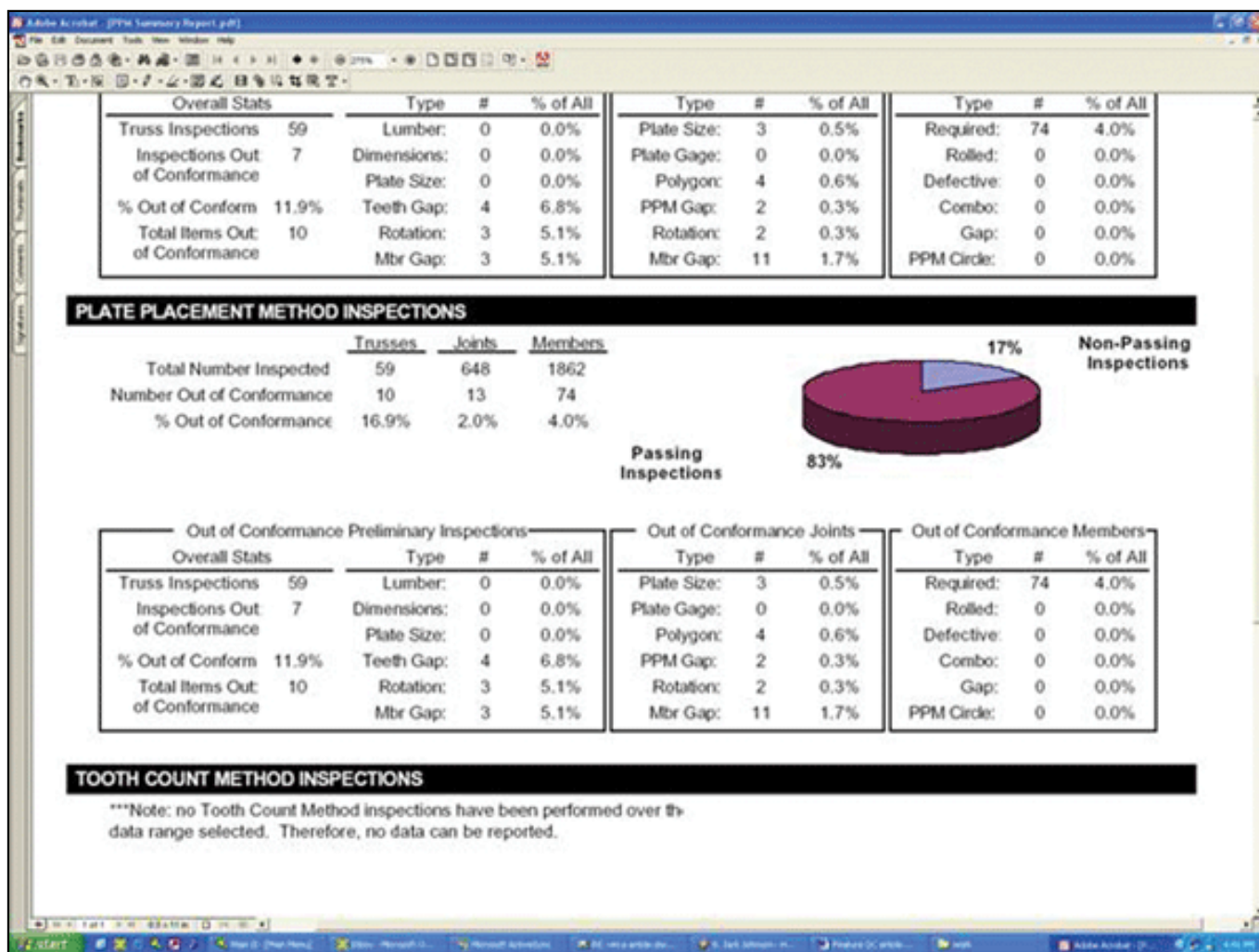
—Dennis Peters, Quality Control Consultant, Hoida/U.B.C.-Timber Roots, De Pere, WI

Could you give the same testimony about your plant? Do you have a plan for maintaining and continuously improving your quality of the finished product, craftsmanship and operations? Consider the following questions:

- Do you have a strategy for monitoring, evaluating and improving quality? Would you like one?
- Do you have an idea of your quality level? Does your plant have an effective system in place?
- Can you evaluate the effectiveness of each crew, line and shift in terms of their precision?
- Do you have a starting point for evaluating equipment, lasers, tables, fixtures and saws for accuracy?
- Would it be helpful to have hard data or reports of quality to discuss at production meetings?
- Would it be helpful to be aware of quality defects and have that data summarized for you?
- Is it important to have people on board, on all levels, in terms of pursuing quality?
- Would it be worthwhile to have assemblers buy-in to your goal for producing a quality product and have them gain a sense of pride with their work?
- Is it worth risking the possibility of having a bad reputation for quality?
- Are you spending time and incurring costs dealing with customer service issues or making repairs?
- Would you like to reduce that risk, and at the same time build a positive reputation with customers?
- Would having a label/tag/stamp that says your trusses are quality certified add value to your product?
- Do you have confidence in the jobs leaving your facility? Would you like to have more?
- Why not get started with a strategic quality control plan today? Why not consider In-Plant WTCA QC?

HOW CAN YOU GET ON THE FAST TRACK TO IMPROVED IN-PLANT QUALITY?

- Begin with a company-wide commitment to quality, with initiative coming from the top down.
- Strategically inspect a representative sample of the trusses in production using the new ANSI/TPI 1-2002 quality procedures found in Chapter 3.
- Collect and record data on WTCA inspection forms, which are merely ANSI/TPI Chapter 3 procedures. These forms can be downloaded by going to the WTCA web site at www.woodtruss.com/projects/woodtruss/wtcagc.php.
- From here it is very easy to:
 - Enter inspections into the latest, most user-friendly software database.
 - Analyze data to develop trends and create reports based on the data collected.
 - Put yourself in position to get a feel for your level of quality.
 - Take this information back to the floor to educate crews on quality, re-evaluate equipment, re-evaluate storage and handling and placement of raw materials.
- Use In-Plant WTCA QC 4.0 to consistently record and keep data on the quality of truss production. It is then easy to analyze where your quality is at and what issues need to be addressed.



SUMMARY REPORTS "BREAK IT DOWN"

Above is an example of a Summary Report, just one of the tools you can use to show empirical data from inspections at production meetings. This report gives you a summary of the trusses, joints, and members inspected, and the number and percentage that are out-of-conformance. A pie chart represents the number of trusses passing inspection. Below those pieces are breakdowns of preliminary inspections, joints, and members, and the category, number, and percentage of why preliminary inspections, joints, or members were out of conformance. If you need more than just the "big picture," you could use the reporting options to dig deeper and look at PPM joints, members, analyze a certain date range, crew, line, shift, or generate a report to look at the comments for why inspections were out of conformance.

You have a lot to consider. The critical issue is that there are many factors that affect your finished product. What are you doing to make sure that the trusses leaving your door meet your specifications? In-Plant WTCA QC 4.0 allows you to inspect a representative sample of trusses at your facility. It provides you with a consistent, well-rounded, effective and efficient approach to making sure trusses leave your door meeting a quality level that is acceptable to you. It clues management into what issues are being noticed that need fixing and the improvements that are made as well as those that need to be strategically addressed to continually meet your plant's quality standard. And perhaps most importantly, it gets your production crew thinking about quality...quality...quality!

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