

R-Anell Gets Lean

Lessons learned while improving lives.

It has been 18 months since modular home producer R-Anell Homes (Denver, NC) began its lean manufacturing initiative. Recently, the company hosted an event to educate others in the industry on how lean manufacturing can transform operations and empower workers at every level of an organization.

Those gathering at the facility included members of the Manufactured Housing Research Alliance (MHRA), the Department of Housing and Urban Development (HUD), Senco Products (the largest fastener supplier in the United States) and Clayton Homes, which is one of the largest home manufacturers. Participants gathered for a two-day program to examine what has changed at R-Anell through lean manufacturing. The goal of the program was to improve the lives of people who build, says Dennis Jones, president of R-Anell.

MOVING FORWARD

As we've previously reported in *Building Systems* in our cover story on the growing trend, lean manufacturing is a systematic approach to identifying and eliminating waste in the factory environment. During



View of part of R-Anell's dormer build area which was one of the first areas of manufacturing to embark upon the lean initiative.

the last two years, R-Anell has hired two people to lead the initiative: Charles Jervais, director of process development, and Cliff Robbins, lean manufacturing engineer.

"We determined that 'lean' was the way to go after examining ways to get our company to the next level," says Dennis Jones, president of R-Anell. "It was apparent that

we had advanced about as far as we readily could with current systems and technology. The building industry tends to think that the way we do things is the only way they can be done. But that thinking is not likely to take us forward. We need something more and we believe that lean is it."

Jervais estimates that the major elements of implementing lean at R-Anell will take an additional 24 to 30 months. "If you go at this as a project, then a project ends," says Jervais. "This is much bigger than that. You reach critical mass when everyone is supporting the change—and the company as a whole owns that change, not just one person. It takes time to make it stick."

R-Anell started in administration first, spending eight months auditing every aspect of operations. One example of a bottleneck they discovered was in the change orders. The old process took as much as three hours to complete and required seven signatures. The new process now takes only minutes and requires one signature.

In the manufacturing plant, the building process was audited as well. One striking example occurred in the dormer build area.

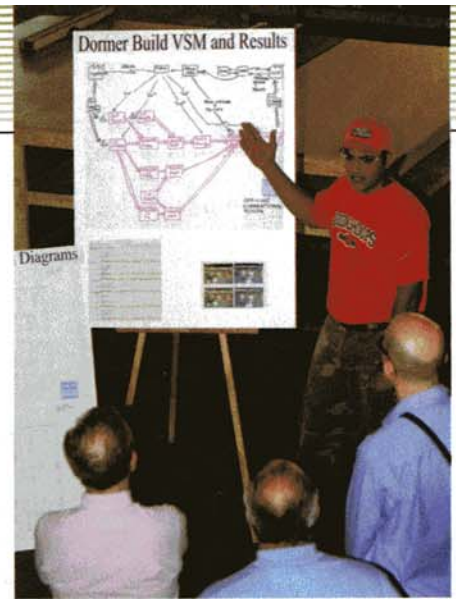
The flow of the process was reconfigured—cutting the time employees spent walking during the process by two full miles per day. The "Dormer Build" lean process was celebrated with a formal event, prominent signage noting the milestone over that section of the plant and positive feed-

back about the changes from employees.

"The dormer area is a good example of the lean process," says Jervais. "There have been three more changes to that area since the first lean initiative, and the changes have come from the employees. This is their area and they know it best."

SHARING STRATEGIES

R-Anell Homes is part of the first group of manufacturers chosen to be in the MHRA



Arturo Aguirre, R-Anell's Dormer Build Lead Person, talks about enhanced work efficiencies and production processes.

lean implementation, a nonprofit organization with the mission of developing new technologies to enhance the value, quality and performance of the nation's factory-built manufactured and modular homes. Dewey Warden, lean manager of Senco Products, has served as the training and guidance expert for all the plants involved in the process through MHRA, including Clayton Homes.

"Dewey has been invaluable to this organization," says Jervais. "He has been a rallying force behind everyone's lean successes. He is an excellent mentor."

As part of the training program, R-Anell's office and plant employees participated in a production simulation event dubbed "The Pipe Factory." The employees had to put together a system during an hour based on instructions given and circumstances that occurred throughout the process. This plastic pipe project was designed to show, on a very small scale, how to look at improving a process and then implementing appropriate changes. It was termed an "eye opener" by participants in illustrating how quickly things could become inefficient or disorganized without a clear process.

R-Anell shares ideas, information and successes with others in the industry such as Clayton Homes. Having a community of people who are involved in and working toward lean initiatives is just another positive in the process, claims Jervais.

"This is about adjusting the culture of the company," says Jones. "The dilemma we had was that we had inefficiencies that we were considering the norm and not a defect. Lean is a method to achieve change." ■