Lean Helps MacGregor Golf Reach the Green

Albany-based MacGregor Golf Co., which employs some 115 workers during peak production, found itself with substantial surplus inventory at year’s end, and it couldn’t discount the inventory without, in effect, competing with its own new designs for the coming season. Manufacturing manager Scott Nix discussed the issue with Art Ford and Ed Hardison of Georgia Tech’s Albany office. That was followed by a preliminary on-site assessment by Ford and colleague John Stephens. A lean approach looked like the proper play.

Following a presentation at the company on lean management, they recommended conducting a kaizen exercise to introduce lean-manufacturing concepts to a cross-section of MacGregor employees, 25 in all.

Next, Stephens devised the nuts-and-bolts of a lean manufacturing program for the firm, the heart of which is a manufacturing cell where everything needed to make a particular product resides in one compact area. Last February, the firm started with a cell to make wedges and irons, then added another for putters and metal woods, and planned a third.

“Products move from one operation to the next easily—you’re just passing the product off as you make it, so basically you’re making one at a time,” says Stephens. “There’s no up-front picking or sorting of materials, so that labor is eliminated. There’s no movement throughout the plant of batches of irons, as there was before.”

The cell is configured in a U shape, which brings tasks and workers closer together. “Consequently, almost any person in the cell can help almost any other person in the cell, because they’re all that close,” he says, adding the cell accommodates the lean principle that an item is not produced until there is an order for it.

“You should never have any finished goods sitting around,” he explains. Lead times may dictate a need to store certain raw materials, “but you don’t put the effort or labor or overhead into producing items and putting them into finished-goods stock.”

The approach is similar to MacGregor’s custom work for touring professionals. Each club is produced individually, and a set is complete and shipped within two days.

One of the keys to rapid turnaround was that club heads were attached to shafts with an epoxy that cured in 15 minutes at room temperature. In MacGregor’s standard procedure, heads were affixed with a glue that had to be cured in an oven for two hours. The epoxy method was adopted for all production.

Says Nix: “John came in and helped us adapt our custom express philosophy over the whole plant. Now everything is made to order.”

Also important is that the product quality for which MacGregor is famous has not been compromised by the cell manufacturing approach.
Results from the lean manufacturing process at MacGregor have been impressive, according to Senior Vice President Joe Rocco. Productivity has increased 50 percent while labor savings of about 25 percent have come from both production and shipping, since clubs leave the cells packaged and labeled, he says.