

A LITTLE LEAN

Lean manufacturing doesn't have to be an all-or-nothing proposition.

BY REBECCA MORGAN, CFPIM

Yours is a small company where employees work hard and wear multiple hats. But your customers don't want to hear sob stories. All they want from you is top performance.

How does a small fish compete when the glass feels half-empty? Lean manufacturing may seem like the consummate strategy for meeting customer demand, but what if you don't have the resources or time to implement lean?

Getting some benefits of lean is better than getting none. Take the story of Neighborhood Manufacturing, an inner-city production facility in Cleveland, Ohio.

Neighborhood is a division of Superior Tool Company, a small privately held Cleveland company that sells plumbing hand tools through retailers.

Neighborhood is aptly named; it employs people from the area, building a sense of family. The work force is predominantly part time, with work schedules usually molded around individual needs.

Ownership required improvement from Neighborhood. Space was needed to grow contract manufacturing operations and reduce reliance on Superior Tool Company sales. Reductions in both inventory and rework were essential for increasing profitability.

Superior partner Chuck Mintz enlisted my services. Superior's Operations Manager Annette Dockus and I determined that implementing lean would work, but we could not follow a standard implementation path.

Dockus had no direct authority at Neighborhood, and Neighborhood had no employees who understood or particularly wanted lean. The onsite engineer was part-time, and the plant manager was busy with personnel, tooling, and sales issues. Neither had much time to actively support any major changes.

Our lean implementation strategy was to:

- Select employees who seemed most adaptable to change;
- Emphasize concepts (e.g., make it clean and organized) rather than terminology (5 S);
- Encourage action;
- Stand with them when the going got rough (and with big changes, it does get rough);
- Differentiate crucial from merely important.

Luis Rosario, bothered by the clutter, led the "throw out the junk and organize what stays" effort. As dumpsters filled, other employees joined in with relish. Debbie Riggs, a working supervisor, was selected to design the cells. With paper cutouts she made herself and an understanding that U-shaped was

desirable and products traveling backwards were not, she designed the first cell.

Mark Earle, the part-time onsite engineer, moved equipment during off hours using Riggs' hand drawings as his blueprint. In an older facility with older equipment, he was forced to solve many equipment and utility problems. Debbie Richardson, another working supervisor, ran Cell 1. She coaxed the workers through the lot size reduction from 1000's to 12 (box quantity), and converted individuals working separately on piles of product into an effective team working in sync. Her training consisted of a brief description of the concept, hands-on help for the first few days, and a simple guide sheet we developed. She made takt boards—these showed the daily and weekly production schedule—calculated staffing, and balanced work to support flow.

In less than four months, Cell 1 was running smoothly, and three additional cells were successfully implemented.

It was time to integrate packaging equipment into the cells, as called for in Riggs' original design. Now the cells produced, packaged, and palletized, all paced by takt.

The benefits lean manufacturing brought to both companies are astounding. Freed space enabled expansion of Neighborhood's contract manufacturing business. Sales to companies other than Superior grew to 15 percent of Neighborhood's business, up from 2 percent. Safety, inventory, quality, and productivity were all significantly improved.

Neighborhood's work in process is zero at the end of the day and close to it during the day. Cycle time is now measured in minutes instead of days, and rework approaches zero. Productivity has increased over 15 percent in under a year. The strategy worked. Neighborhood is now profitable.

Is lean ingrained in the mindset of every Neighborhood employee? No. But key stakeholders—employees, customers, and owners—see the difference. Was it a textbook implementation? No, because it only implemented parts of lean. But anyone with an eye toward process improvement would agree it was successful.

If you can, weave lean into the fabric of your organization with education, training, and a continuous improvement mantra. But if you can't, we have shown here that the principles apply, even when the textbook cannot.

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