

Candlelight Cabinetry, Inc.

Firm Benefits

- 40% increase in monthly sales
- 83% increase in production capacity
- 40% reduction in order backlog
- 35% reduction in manufacturing lead time
- 30% increase in employment

Workflow Analysis Plant Layout

Candlelight Cabinetry, located in Lockport NY, is a manufacturer of custom kitchen cabinets. They employ 115 people and current sales are approximately \$10 million. They have distribution networks in New York, New England, Pennsylvania and Ohio. Primary markets are in home remodeling and new-build construction.



Candlelight employee prepares cabinet pieces for assembly.

Situation

Candlelight was operating out of an older industrial complex consisting of several disconnected structures. After purchasing a modern facility in early 2001, Candlelight approached Insyte Consulting for assistance in improving their work processes and overall efficiency. They saw the move to a new location as an opportunity to improve work practices and achieve their goal of doubling production output in the new plant.

Solution

The project started with the creation of a current state, value stream map analyzing existing material and information flows. Insyte Consulting engineers and a cross-section of Candlelight employees, including supervisors and shop floor operators, comprised the team that created the map. This exercise highlighted opportunities for improvement in the current manufacturing practices. These improvement opportunities were next incorporated into a future state map. Results were used as a guide in

“Insyte Consulting was instrumental in helping us organize and align our managerial staff around developing a new plant layout and move plan. Communication between our team leaders has improved as we all focused on applying lean manufacturing concepts in our new plant. Insyte Consulting helped us recognize the importance of improving 1st time quality in order to consistently achieve our production targets.”

John Yakich, President



developing layout alternatives and to generate action plans for process improvement as operations ramped up in the new facility.

The modern layout incorporated several pieces of new equipment designed to support increased production requirements and improve first-time quality of all manufactured cabinets. The concept of continuous flow was integrated from sanding operations to final shipment to reduce manufacturing lead-time. Cellular Flow concepts were added as existing departments were split up and new groupings were determined based on product families.

Stock part supermarkets were created at the point of use in several departments to insure component availability and improve material control. A single point scheduling system was developed to trigger and manage production at the identified bottleneck. This was done to simplify the scheduling process and allow Candlelight to level the production mix and maximize throughput at this resource constraint.