Bakery Layout Development

Background

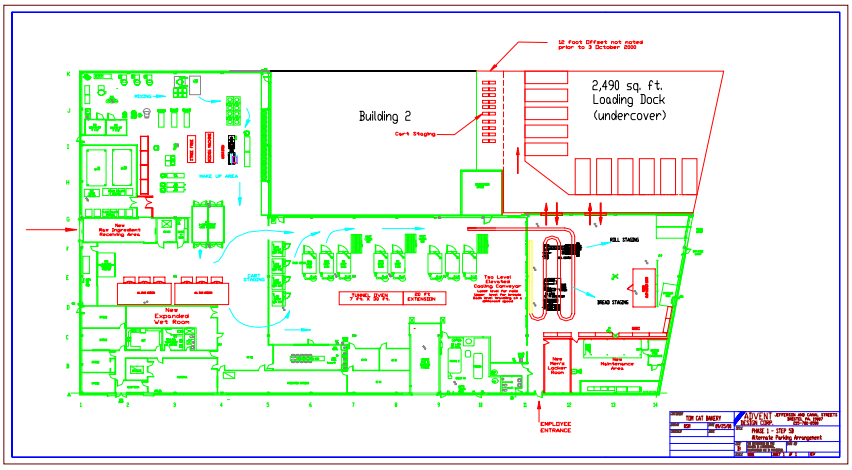
Advent Design was asked to review the operations at the baking facility of a regional baked-goods manufacturer and develop a comprehensive plan for a facility reorganization and expansion. The facility produces breads, rolls, and other bakery products for distribution to restaurants and retailers in a three-state area.

Project Description

Using lean manufacturing techniques, Advent Design reviewed the operations at the facility and developed a value stream map of the current operations. The value stream map detailed the production operations and equipment cycle times and changeover times along with the flow of order and production information. Using the information gathered, Advent Design developed a desired future state value stream map, which identified recommended process changes. New equipment, work area changes, and workflow were all considered in the desired future state map. Some of the major changes proposed were as follows:

- Convert DOS-based production planning and shipping programs to an integrated system using Windows-based software.
- Go to "Product Family" production when an adjacent building becomes available for expansion.
- Improve oven reliability.
- Increase the area available for designated product staging and truck loading.

Advent Design developed recommended layouts for the new equipment that had been and was to be purchased as well as for potential expansion into two adjacent buildings on the same block as the existing baking facility. Advent Design also worked with the customer's architectural firm to develop an estimated cost for the renovation of the adjacent buildings.



Impact

Advent's report provided the customer with a blueprint for future expansion and for the consolidation of operations from other bakeries that they have purchased. Work to date has been limited to equipment and layout improvements within the current facility. Expansion is planned once product demand returns to the higher levels seen previously.

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