

PROJECT BRIEFING

FACILITY PLANNING

"The addition and proper organization of this facility will greatly aid us in our goal of doubling our current business over the next 3 to 5 years. This will be a valuable part of our company's growth strategy."

Vice President
DeLux Dental

Project work completed in partnership with Ben Franklin Technology Partners of Northeastern Pennsylvania, PA Agile program and the Enterprise Systems Center of Lehigh University.



DeLux Dental Laboratory is a fully certified, full-service dental laboratory. The company manufactures a variety of dental products including dentures, partials, implants, crowns, mouth and night guards, orthodontics, and ceramic dentures. Their services also include pick-up, delivery and repair.

PROJECT OBJECTIVES

To identify opportunities for improved productivity.

To develop a new facility layout that incorporated lean manufacturing concepts to realize productivity improvements by reducing cycle time and product handling.



PROJECT SUMMARY

Using a combination of historical production data, interviews, and observational studies, project personnel analyzed operations at DeLux Dental. This analysis provided a yardstick against which to measure the validity and functionality of eventual recommendations.

Working with the company's subject matter experts, ESPI personnel developed value stream maps of selected products. From these maps, the team then identified key improvement opportunities at various stages in the operation.

Based on the operational analysis and the value stream maps, a new facility plan was developed that incorporated the objectives to optimize all work areas with consideration for pods or cells for specific product groups, reduction of employee travel and product handling, improved workstation layout and organization so that production efficiency could be increased, and improved ergonomic conditions to ensure a highly productive and safe work environment. The resulting facility design is both more efficient and productive.

RESULTS

-  Identification of opportunities for productivity improvements.
-  Layout for a more efficient new facility incorporating opportunities for improved productivity.

