

# CYCLE TIME REDUCTION THROUGH MINIMIZATION OF TRANSPORTATION AT DYNASTY PALLETS SYSTEMS INC.



**Nancy P. Mercado,**

**Teresita B. Gonzales**

**Jayson D. Pobar**

## **Abstract**

In the pursuit of profitability and competitiveness, more and more companies are turning to lean manufacturing to reduce or eliminate waste in their production processes. Cycle Time Reduction to increase productivity was the aim of the study. Top two (2) most existing lean manufacturing waste namely transportation and motion were identified and confirmed after observation. Other tools such as time study, interview, survey, and measuring distances were used to obtain the necessary data.

The researcher presented a process activity chart and provided 4 different preferred layouts in order to minimize transportation, hence, reduced the cycle time in making the plywood-based pallet. Interchanging the nailing section after the cutting section (dice & cube), in line with the faceting section and the assembly line had been proposed.

In effect of the proposals, the company will be able to produce 69 units per hour which are equivalent to 552 plywood-based pallets per 8-hour of work.

## **Keywords:**

*cycle time reduction, transportation minimization*

