ABSTRACT

This project is concerned with how to implement JIT to motor manufacturing, especially on Fan coil motor, which is called 74-sleeve bearing motor by using the principle of reducing the production lead time. Thus, this becomes increasingly competitive in delivery value to the customer on price, quality, and on-time delivery.

In theory, JIT system is driven by three main building blocks: Takt time, Continuous Flow (one piece) and cellular layout, and Pull system. Moreover, they also use other tools such as helping modules, which are quick setup, Jidoka, workplace organization, continuous improvement, total preventive maintenance and the people improvement.

However, this project is focused on and analyzed the implementation of only three main building blocks to drive in changing to JIT system at FASCO through the following steps.

(1) Converting stator and assembly line to one-piece-flow.

(2) Create "mini-factories" for component production.

(3) Kanban implementation.

(4) Line integration.

In summary, JIT can absolutely help FASCO to improve their performance fantastically when lead-time is reduced from 14 days to less than 5 days; productivity improved from 1.2 to be 0.7 man-hour; and inventory turnover improved from 3.1 to be 5.4 within one year.