

Sawan Tan 2006: A Manufacturing Planning and Control System Design for Improving Manufacturing Process Efficiency in Palm Oil Factory. Master of Engineering (Industrial Production Technology), Major Field: Industrial Production Technology, Interdisciplinary Graduate Program. Thesis Advisor: Assistant Professor Chatchapol Chungchoo, Ph.D. 98 pages. ISBN 974-16-2807-2

As a result of the price of patrol is rising up , thus the demand of biodiesed consumption is increasing gradually in present day. In order to produce biodiesel from palm oil , the production planning plays an important role on the productivity. The study of preliminary production is due to the line unbalance , and bottom neck in the process .The aim of this research is to study and improve the process efficiency.

The study of preliminary production line has shown large amount of palm oil left in some station , such as screw press , thresher drum separator , settling tank . This is due to the inadequate of machine capacity in each operating. Thus, the additional machines at least one set is required to maintain the line balancing.

The productivity of preliminary production line was found to be 120 tons/day. By adding one set of thresher drum and settling tank , it has been found that the productivity was increased 40% compared to the preliminary production line. The amount of palm oil left in the stations was reduced.

An analysis of economics improved production line shown production cost for second day and third day were reduced 30%from first day.



Student's signature



Thesis Advisor's signature

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