

Industrial Research Project Title	Re-design of Production Process for the Manufacturing of Insecticide Powder
Industrial Research Project Credits	6
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Abstract

The objective of this research project is to redesign a production line of an insecticide powder in order to satisfy the new production demand which is much lower than that of the current design due to less demand from customers. Therefore, the production line experiences earlier production schedule and as a result, workers enjoy idle time during the day and it is not cost effectiveness. In addition, the current design is not well balanced and its balance efficiency is 76.39 percent which is considered quite low. Therefore, it is worthwhile to redesign the production line while improving its balance efficiency. Thus, ECRS (eliminate, combine, rearrange, simplify) is applied with an aim to balance the cycle time of each section. As a result, the production rate relaxes from 2080 to 1200 piece per hour with the balance efficiency of 92.49 percent and a number of workers are reduced from 21 to 11 workers.

Keywords : Balance efficiency/ ECRS / Production improvement