

# **Application of ECRS Technique to Reduce Waste in Case of Detergent Packaging Process**

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## **Abstract**

The objective of this study is to apply ECRS technique to reduce waste in production line of detergent packaging process. The flow process chart has been used to analyze the data for improvement using ECRS. Consequently, the unnecessary workflows in the process are removed and some similar tasks are combined. Apart from this, the rearrangement in working position and re-layout of the production line are also applied. After applying the ECRS concept, the results shown that the number of workers in the process was reduced from 12 to 9 persons which saved the operating cost about 54,000 THB/month. Due to the reduction of the distance of product flow in machine A and B from 31.36 to 24.41 meters and 26.48 to 24.41 meters, respectively, the cycle times of machine A and B was decreased from 397 to 319 seconds and 354 to 319 seconds, respectively. Finally, the line balancing was increased from 72% to 92%.

## **Keywords**

ECRS, detergent packaging process, line balancing

## **Biographies**

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