

Industrial Research Project Title	Improvement of Delivery Performance for Automotive Part
Industrial Research Project Credits	6
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Program	Master of Engineering
Field of Study	Manufacturing Systems Engineering
Department	Production Engineering
Faculty	Engineering
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Abstract

This industrial research project presents improvement of delivery performance for automotive parts. The automotive washer gear parts set is selected for this study. The objective of the research project is to increase man-machine production efficiency and to improve the master production planning and make it more responsive to customer requirements. The methodology applies process activity mapping to analyze man-machine schedules, and plan the master production by factoring in the equipment limitations and the resulting work quality. The results reduce man-machine cycle times from 180 seconds to 112 seconds, a decrease of 37.78 percent. The improvement in master production planning enables all customer orders for 2014 to be delivered as requested. In 2013 the customer delivery rate was 82.22 percent.

Keywords: Man–Machine Analysis / Process Activity / Mapping Master Production Planning