Atiwat Meesomwang 2010: Development of a Production Scheduling in Automotive Lamp Equipment Industry use Hybrid Heuristic Scheduling Method. Master of Engineering (Industrial Engineering), Major Field: Industrial Engineering, Department of Industrial Engineering. Thesis Advisor: Associate Professor Roongrat Pisuchpen, D.Eng. 136 pages.

The objective of this research was to developing the effective scheduling system in order to give highest profit. Automotive Lamp Equipment Industry is a job shop production system because it is produced to meet the customer needs. The automotive lamp equipment have high product variety then the high efficiency of job scheduling is required for lamp manufacturer. The traditional job scheduling is EDD (Early Due Date) then we found that delivery date was often tardiness. This paper proposed the computer simulation software (Arena) to reduce time that used for planning and presents the heuristic approach such as SPT, SPRT, CR , MST, MDD, PT+WINQ, ETR and hybrid heuristic method. After that, the performance of each heuristic method is measured and compared with the hybrid heuristic method to find the best job sequence of Automotive Lamp Equipment production. We found out that hybrid heuristic scheduling is the best method because give maximum profit that increase 57% of total profit from traditional rules.

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