

Thesis Title	An Optimal Job Scheduling in Quality Control Process of Raw Materials and Chemical Pharmaceutical Products
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Abstract

Quality control is one of the important processes in chemical pharmaceutical manufacturing industry. Every type of raw material and chemical pharmaceutical product has to pass all quality tests before continuing to production units and customers. As a result of not only the variety of product types but also the difference of number of jobs, testing procedures, testing machines, testing times and due dates, a large number of job delays has then happened in the present days. It is because of inefficient job scheduling method. This thesis proposes two heuristic approaches for job scheduling in the quality control unit. The Earliest Due Date method and the Shortest Processing Time method are employed to reduce the number of job delays. The study result shows that the number of job delays can be reduced by 100 %.

Keywords: Heuristic approach / Job scheduling / Quality control process / Raw materials and chemical pharmaceutical products