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Mixed Model Sequencing in Painting Production Line

Authors: Unchalee Inkampa, Tuanjai Somboonwiwat

Abstract : Painting process of automobiles and automobile parts, which is a continuous process based on EDP (Electrode position paint, EDP). Through EDP, all work pieces will be continuously sent to the painting process. Work process can be divided into 2 groups based on the running time: Painting Room 1 and Painting Room 2. This leads to continuous operation. The problem that arises is waiting for workloads onto Painting Room. The grading process EDP to Painting Room is a major problem. Therefore, this paper aim to develop production sequencing method by applying EDP to painting process. It also applied fixed rate launching for painting room and earliest due date (EDD) for EDP process and swap pairwise interchange for waiting time to a minimum of machine. The result found that the developed method could improve painting reduced waiting time, on time delivery, meeting customers wants and improved productivity of painting unit.

Keywords: sequencing, mixed model lines, painting process, electrode position paint

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