

An Automatic System of Real-time Cutting Stock Problem

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ABSTRACT

The research will present the applicability of high-speed, large-scale cutting stock problem (CSP). Because orders keep coming in from various clients on-line, a professional cutting company, to stay competitive, has to maintain high production. In other words, operators have to keep the machine running before products are packed and shipped. Therefore, the preparedness for the continuous, large-scale stock cutting problem is proposed to minimize the cutting time and the cutting pattern-changing time to meet the on-line orders demands. We propose a new way to solve the on-line stock cutting problem simply by adjusting cutting patterns. In the proposal, the major advantage of the continuous on-line production is that the program can adjust cutting plans according to floating orders. In our research, we carried out some studies of the large-scale cutting of CSP, and they turned out to be very efficient and reliable .

Keywords : large-scale cutting, optimization, heuristic

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