



Review

Scope for industrial applications of production scheduling models and solution methods



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We dedicate this paper to Prof. Dr. Peter Bongers, who inspired us all and shared his valuable experiences in the border of academia and industry and cannot be with us today to see the final result of this joint effort.

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ABSTRACT

This paper gives a review on existing scheduling methodologies developed for process industries. Above all, the aim of the paper is to focus on the industrial aspects of scheduling and discuss the main characteristics, including strengths and weaknesses of the presented approaches. It is claimed that optimization tools of today can effectively support the plant level production. However there is still clear potential for improvements, especially in transferring academic results into industry. For instance, usability, interfacing and integration are some aspects discussed in the paper. After the introduction and problem classification, the paper discusses some lessons learned from industry, provides an overview of models and methods and concludes with general guidelines and examples on the modeling and solution of industrial problems.

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