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## A Review of Production Planning Models: emerging features and limitations compared to practical implementation

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### Abstract

In the last few decades, thanks to the interest of industry and academia, production planning (PP) models have shown significant growth. Several structured literature reviews highlighted the evolution of PP and guided the work of scholars providing in-depth reviews of optimization models. Building on these works, the contribution of this paper is an update and detailed analysis of PP optimization models. The present review allows to analyze the development of PP models by considering: i) problem type, ii) modeling approach, iii) development tools, iv) industry-specific solutions. Specifically, to this last point, a proposed industrial solution is compared to emerging features and limitations, which shows a practical evolution of such a system.

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