

The Integration of CAPP and Production Planning for Bent Sheet Metal Parts

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Abstract. Both the topics of Computer Aided Process Planning and Production Planning in the context of sheet metal air bending have been presented as standalone topics previously. This paper will focus on the interaction between both modules. Choices made by the CAPP-module seem to influence the possible gains that can be obtained in production planning and vice versa.

The used procedures for both the CAPP module, including process planning and tool selection for air bending, and the Production Planning module, modelling the production planning as a Travelling Purchaser Problem, are described. The different areas of interaction between both modules are also specified. Results demonstrate that the interaction between both modules has a significant impact and should be taken into account in an integrated process and production planning system.