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Modular Design Method for Reconfigurable Manufacturing Systems

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Abstract

Reconfigurable manufacturing systems (RMS) have the potential to reduce investments, time-to-market, and cost of variety in increasingly complex markets. However, tools to support the transition in industry are lacking. One enabler of RMS is modularity, however few methods support the design of modular manufacturing systems, and even fewer modular RMS. This research proposes an adaption of the Modular Function Deployment method to address this issue, and also identifies a number of additional module drivers which are relevant to support the modularization process of RMS.

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