

K. Efthymiou, D. Mourtzis, A. Pagororopoulos, N. Papakostas, G. Chryssolouris, *Manufacturing systems complexity analysis review*

The authors discuss the concepts of manufacturing system's complexity and identify types of mfg. system domains complexity: physical domain complexity (due to uncertainties in the mfg. system content and behaviour) and functional domain complexity (due to uncertainties in the mfg. system design). 5 categories of analysis methods have been identified: Chaos and non-linear dynamics, Information theories, Hybrid, Enumeration, Others. Special emphasis is on approaches based on a framework that provides a quantitative analysis of mfg. systems complexity. Applications to industrial problems are presented.

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