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Investigating the applicability of modular function deployment in the process industry

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Abstract

Modular function deployment (MFD) is a recognized method for designing modular products within the discrete manufacturing industry as a means of accommodating market demands for higher variety, shorter product life cycles and smaller production batches. Nevertheless, while the process industries face similar market demands, product modularity is only sparsely explored. This paper analyzes the five steps of the MFD methodology for their fit to a process industry context based on general industry characteristics and insights from a case company. It is found that several aspects of the method must change before use in a process industrial context is feasible.

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