

Orders dispatching game for a multi-facility manufacturing system

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Abstract

This paper proposes a novel decision algorithm on higher-level work orders dispatching problems under a holistic manufacturing configuration of multiple facilities. The multi-facility work order dispatching problems have been formulated as a stochastic nonautonomous Lotka - Volterra difference game. A closed loop control scheme with discrete event dynamical system is proposed based on the setup of

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b

Abstract

evolutionary game. Our results show the viability and advantage of proposed dispatching scheme.

Keyword : Stochastic nonautonomous Lotka - Volterra difference game; Discrete event dynamical system