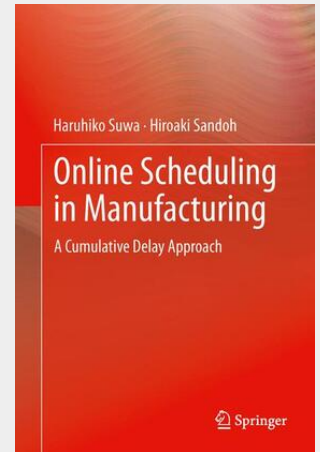


Online Scheduling in Manufacturing

A Cumulative Delay Approach

Online scheduling is recognized as the crucial decision-making process of production control at a phase of "being in production" according to the released shop floor schedule. Online scheduling can be also considered as one of key enablers to realize prompt capable-to-promise as well as available-to-promise to customers along with reducing production lead times under recent globalized competitive markets. Online Scheduling in Manufacturing introduces new approaches to online scheduling based on a concept of cumulative delay. The cumulative delay is regarded as consolidated information of uncertainties under a dynamic environment in manufacturing and can be collected constantly without much effort at any points in time during a schedule execution. In this approach, the cumulative delay of the schedule has the important role of a criterion for making a decision whether or not a schedule revision is carried out. The cumulative delay approach to trigger schedule revisions has the following capabilities for the practical decision-making: 1. To reduce frequent schedule revisions which do not necessarily improve a current situation with much expense for its operation; 2. To avoid overreacting to disturbances dependent on strongly an individual shop floor circumstance; and 3. To simplify the monitoring process of a schedule status. Online Scheduling in Manufacturing will be of interest to both practitioners and researchers who work in planning and scheduling in manufacturing. Readers will find the importance of when-to-revise policies during a schedule execution and their influences on scheduling results.

Online scheduling is recognized as the crucial decision-making process of production control at a phase of "being in production" according to the released shop floor schedule. Online scheduling can be also considered as one of key enablers to realize prompt capable-to-promise as well as available-to-promise to customers along with reducing production lead times under recent globalized competitive markets. Online Scheduling in Manufacturing introduces new approaches to online scheduling based on a concept of cumulative delay. The cumulative delay is regarded as consolidated information of uncertainties under a dynamic environment in manufacturing and can be collected constantly without much effort at any points in time during a schedule execution. In this approach, the cumulative delay of the schedule has the important role of a criterion for making a decision whether or not a schedule revision is carried out. The cumulative delay approach to trigger schedule revisions has the following capabilities for the practical decision-making: 1. To reduce frequent schedule revisions which do not necessarily improve a current situation with much expense for its operation; 2. To avoid overreacting to disturbances dependent on strongly an individual shop floor circumstance; and 3. To simplify the monitoring process of a schedule status. Online Scheduling in Manufacturing will be of interest to both practitioners and researchers who work in planning and scheduling in manufacturing. Readers will find the importance of when-to-revise policies during a schedule execution and their influences on scheduling results.



106,99 €

99,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9781447158271

Medium: Buch

ISBN: 978-1-4471-5827-1

Verlag: Springer

Erscheinungstermin: 09.11.2014

Sprache(n): Englisch

Auflage: 2013

Produktform: Kartoniert

Gewicht: 2642 g

Seiten: 158

Format (B x H): 155 x 235 mm

