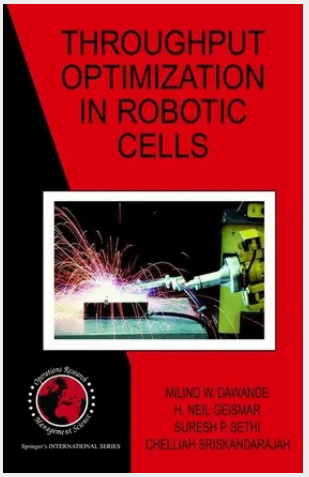
Dawande / Geismar / Sethi

Throughput Optimization in Robotic Cells

Intense global competition in manufacturing has compelled manufacturers to incorporate repetitive processing and automation for improving productivity. Modern manufacturing systems use robotic cells – a particular type of computer-controlled system in cellular manufacturing. Throughput optimization in robotic cells provides practitioners, researchers, and students with up-to-date algorithmic results on sequencing of robot moves and scheduling of parts in robotic cells. It brings together the structural results developed over the last 25 years for the various realistic models of robotic cells. After describing industrial applications of robotic cells and presenting fundamental results about cyclic production, several advanced features, such as dual-grippers, parallel machines, multi-part-type production, and multiple robots, are treated. Important open problems in the area are also identified.

This book is an excellent text for use in a graduate course or a research seminar on robotic cells.

Intense global competition in manufacturing has compelled manufacturers to incorporate repetitive processing and automation for improving productivity. Modern manufacturing systems use robotic cells - a particular type of computer-controlled system in cellular manufacturing. Throughput optimization in robotic cells provides practitioners, researchers, and students with up-to-date algorithmic results on sequencing of robot moves and scheduling of parts in robotic cells. It brings together the structural results developed over the last 25 years for the various realistic models of robotic cells. After describing industrial applications of robotic cells and presenting fundamental results about cyclic production, several advanced features, such as dual-grippers, parallel machines, multi-part-type production, and multiple robots, are treated. Important open problems in the area are also identified.This book is an excellent text for use in a graduate course or a research seminar on robotic cells.



160,49 €
149,99 € (zzgl. MwSt.)

Nicht mehr lieferbar

Artikelnummer: 9780387709871
Medium: Buch
ISBN: 978-0-387-70987-1
Verlag: Springer Us
Erscheinungstermin: 03.05.2007
Sprache(n): Englisch
Auflage: Erscheinungsjahr 2007
Serie: International Series in Operations Research & Management Science
Produktform: Gebunden
Gewicht: 1750 g
Seiten: 420
Format (B x H): 167 x 243 mm

Kundenservice Verlag Dr. Otto Schmidt KG
Neumannstraße 10, 40235 Düsseldorf | kundenservice@otto-schmidt.de | 0221-93738-997 (Inland)