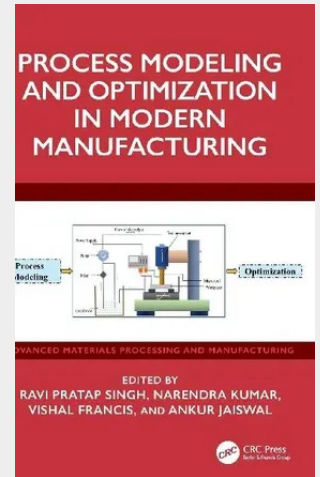


Process Modeling and Optimization in Modern Manufacturing

This book covers modeling and optimization of various modern manufacturing processes such as advanced machining, hybrid manufacturing, and additive manufacturing including related case studies in these domains. Various areas like smart manufacturing, hybrid manufacturing, 3D printing, process modeling and characterization, optimization, and so forth are covered in detail. The focus of this book is on artificial neural network, finite element analysis, firefly/genetic algorithm, particle swarm, and fuzzy-based techniques, which are the main optimization and modeling techniques. Features of the book: - Provides in-depth investigations on prospects of modeling and optimization of modern manufacturing processes. - Detailed overview on different evolutionary and bio-inspired optimization techniques and their implementation. - Provides step-by-step guidance on how to use machine learning for the enhancement of productivity and quality in modern manufacturing processes. - Discusses sustainability and Industry 4.0-based content. - Includes case studies and practical examples. This book is aimed at researchers and graduate students in mechanical, manufacturing, production, and industrial engineering.



170,40 €
170,40 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9781032581897
Medium: Buch
ISBN: 978-1-032-58189-7
Verlag: CRC Press
Erscheinungstermin: 23.10.2025
Sprache(n): Englisch
Auflage: 1. Auflage 2025
Serie: Advanced Materials Processing and Manufacturing
Produktform: Gebunden
Gewicht: 487 g
Seiten: 210
Format (B x H): 161 x 240 mm

