Record Nr. UNINA9910298365103321 **Titolo** Process Simulation and Optimization in Sustainable Logistics and Manufacturing / / edited by Pawel Pawlewski, Allen Greenwood Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2014 **ISBN** 3-319-07347-8 Edizione [1st ed. 2014.] 1 online resource (182 p.) Descrizione fisica Collana EcoProduction, Environmental Issues in Logistics and Manufacturing, 2193-4614 Disciplina 658.5 Soggetti Environmental engineering Biotechnology Sustainable development Production management Industrial engineering Production engineering Environmental Engineering/Biotechnology Sustainable Development **Operations Management** Industrial and Production Engineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references at the end of each chapters. Nota di bibliografia

Nota di contenuto

Manufacturing Operations -- Simulation method for the benefits of a small business in sustainable world -- Operational measurements for evaluating the transformation of production-logistics system and their reflecting in Simulation Software -- Methodology of assortment analysis in companies with a wide range of products for building the flexibility of customer service -- Global sensitivity analysis of heijunka controlled assembly line -- Production operations -- Stability analysis

modeling of acrylic bathtubs production using task-oriented approaches as a tool to improve energy efficiency of thermoforming process -- Simulation analysis of traffic congestions occurring in mineral mining transport -- An Optimization Model in Support of

of the production system using simulation models -- Simulation

Biomass Co-Firing Decisions in Coal Fired Power Plants -- Supply Chain Management -- Using Simulation Modeling and Analysis to Assess the Effect of Variability and Flexibility on Supply Chain Lead Time -- Models of organizing transport tasks including possible disturbances and impact of them on the sustainability of the supply chain -- Cross-Disciplinary Methodologies -- IDEF0 as a project management tool in the simulation modeling and analysis process in emergency evacuation from hospital facility - a case study -- Transforming a Student Project into a Business Project: Case Study in Use of Simulation Tools.

## Sommario/riassunto

The aim of this book is to present qualitative aspects of logistics operations and supply chain management which help to implement the sustainable policy principles in the companies and public sector's institutions. Authors in individual chapters address the issues related to reverse network configuration, forward and reverse supply chain integration, CO2 reduction in transportation, improvement of the production operations and management of the recovery activities. Some best practices from different countries and industries are presented. This book will be valuable to both academics and practitioners wishing to deepen their knowledge in the field of logistics operations and management with regard to sustainability issues.