

Karl G. Kempf • Pinar Keskinocak • Reha Uzsoy  
Editors

# Planning Production and Inventories in the Extended Enterprise

A State of the Art Handbook, Volume 1

 Springer

# Contents

✓ uow

<b>1 Preface</b> .....	1
Karl G. Kempf, Pinar Keskinocak, and Reha Uzsoy	
<b>2 The Historical Foundations of Manufacturing Planning and Control Systems</b> .....	21
Kenneth N. McKay	
<b>3 Advanced Planning and Scheduling Systems: The Quest to Leverage ERP for Better Planning</b> .....	33
Irfan M. Ovacik	
<b>4 The Transition to Sustainable Product Development and Manufacturing</b> .....	45
Robert C. Carlson and Dariush Rafinejad	
<b>5 Uncertainty and Production Planning</b> .....	83
Stephen C. Graves	
<b>6 Demand Forecasting Problems in Production Planning</b> .....	103
Jonathan R.M. Hosking	
<b>7 Production Capacity: Its Bases, Functions and Measurement</b> .....	119
Salah E. Elmaghraby	
<b>8 Data in Production and Supply Chain Planning</b> .....	167
Laura Dionne and Karl G. Kempf	
<b>9 Financial Uncertainty in Supply Chain Models</b> .....	185
Aliza Heching and Alan King	
<b>10 Field-Based Research on Production Control</b> .....	205
Kenneth N. McKay	

<b>11 Collaborative Supply Chain Management</b> .....	233
Feryal Erhun and Pinar Keskinocak	
<b>12 Sequencing Strategies and Coordination Issues in Outsourcing and Subcontracting Operations</b> .....	269
Tolga Aydinliyim and George L. Vairaktarakis	
<b>13 Inventory Management: Information, Coordination, and Rationality</b> .....	321
Özalp Özer	
<b>14 Pricing, Variety, and Inventory Decisions for Product Lines of Substitutable Items</b> .....	367
Bacel Maddah, Ebru K. Bish, and Brenda Munroe	
<b>15 Managing Perishable and Aging Inventories: Review and Future Research Directions</b> .....	393
Itir Z. Karaesmen, Alan Scheller-Wolf, and Borga Deniz	
<b>16 Optimization Models of Production Planning Problems</b> .....	437
Hubert Missbauer and Reha Uzsoy	
<b>17 Aggregate Modeling of Manufacturing Systems</b> .....	509
Erjen Lefebber and Dieter Armbruster	
<b>18 Robust Stability Analysis of Decentralized Supply Chains</b> .....	537
Yanfeng Ouyang and Carlos Daganzo	
<b>19 Simulation in Production Planning: An Overview with Emphasis on Recent Developments in Cycle Time Estimation</b> .....	565
Bruce E. Ankenman, Jennifer M. Bekki, John Fowler, Gerald T. Mackulak, Barry L. Nelson, and Feng Yang	
<b>20 Simulation-Optimization in Support of Tactical and Strategic Enterprise Decisions</b> .....	593
Juan Camilo Zapata, Joesph Pekny, and Gintaras V. Reklaitis	
<b>Author Index</b> .....	629
<b>Subject Index</b> .....	643