

CALL FOR PAPERS**Special Issue on
Quantitative Approaches for
Production Management****Special Issue Editors:** Stefan Helber, Ton de Kok, Heinrich Kuhn,
Michael Manitz, Andrea Matta, Raik Stolletz**Extended submission deadline: February 28th, 2018**<http://www.springer.com/291>

Production Management is still a fast developing application area in Operations Research. Industry 4.0, Digitalization, Smart Factory, Big Data, the Internet of Things and the ongoing trend in production automation and customization of products lead to new emerging challenges and opportunities for OR researchers to develop appropriate analytical approaches for production management. The objective of this special issue is to accelerate the development and application of quantitative approaches for problem-solving and decision-making in manufacturing, its supporting areas and the associated supply chains considering these newly emerging challenges. The special issue will present contributions dealing with quantitative methods and applications for the manufacturing industry with a special focus on multi-level production structures and planning systems, scarce resources, as well as stochastic and/or dynamic modeling approaches. This also includes approaches supporting real-time decision making. Topics that are of interest for this special issue include but are not limited to:

- Design of Manufacturing Systems: Flexible Production Systems, Flow Lines, Cellular and Job Shop Production Systems
- Performance Analysis of Production Systems
- Make-to-Order and Make-to-Stock Production Concepts
- Hierarchical Production Planning Systems and Advanced Planning
- Production Planning and Control: Capacitated Master Production Scheduling, Lot Sizing
- Integrated Procurement and Production Planning
- Integrated Production and Distribution Planning
- Control of Material Flow: Production Authorization Systems, ConWIP, Kanban
- Inventory Management: Safety Stock Allocation, Lead Time Control, Performance Measures of Inventory Systems

Submission Guidelines and Review Process: Papers must be submitted at <http://www.editorialmanager.com/orsp/> under the category "S.I. QA for Production Management" by December 31, 2017. All papers submitted to this special issue should report original work and make a clear contribution to the topics by using OR methodologies. According to the aims of OR Spectrum, high quality OR papers are wanted that are relevant to the scope of the journal, show rigor in applying state-of-the-art OR techniques, are innovative, and promise to have an impact on future work of the scientific OR community. Each paper will be screened by the Editor-in-Chief and one special issue editor. If the paper is deemed to be of sufficient quality, it will be reviewed according to the standards of OR Spectrum by at least two experienced reviewers and an editor. We will adopt a rapid and fair review process striving to provide reviews within three months of submission. Accepted papers will be available online prior to the publication of the special issue.

Special Issue Editors

Stefan Helber
Leibniz University
Hannover
stefan.helber@pro.uni-hannover.de

Ton de Kok
University of
Technology
Eindhoven
A.G.d.Kok@tue.nl

Heinrich Kuhn
Catholic University
Eichstadt-Ingolstadt
heinrich.kuhn@ku.de

Michael Manitz
University
Duisburg/Essen
michael.manitz@uni-due.de

Andrea Matta
Politecnico di
Milano
andrea.matta@polimi.it

Raik Stolletz
University of
Mannheim
stolletz@bwl.uni-mannheim.de