

Materials

This section includes additional material of selected publications.

2019 / I. A Branch-and-Cut Algorithm for the Multi-Compartment Vehicle Routing Problem with Flexible Compartment Sizes.

The materials under this link correspond to the following publication:

- ▶ Henke, T.; Speranza, M.G.; Wäscher, G. (2019): A Branch-and-Cut Algorithm for the Multi-Compartment Vehicle Routing Problem with Flexible Compartment Sizes.

2017 / III. A Hybrid Algorithm for the Vehicle Routing Problem with Three-dimensional Loading Constraints and Mixed Backhauls.

The materials under this link correspond to the following publication:

- ▶ Koch, H.; Schlögell, M.; Bortfeldt, A. (2017): A Hybrid Algorithm for the Vehicle Routing Problem with Three-dimensional Loading Constraints and Mixed Backhauls.

2017 / II. Hybrid Algorithms for the Vehicle Routing Problem with Pickup and Delivery and Two-dimensional Loading Constraints.

The materials under this link correspond to the following publication:

- ▶ Männel, D. (2017): Hybrid Algorithms for the Vehicle Routing Problem with Pickup and Delivery and Two-dimensional Loading Constraints.

2017 / I. Order Picking in Narrow-Aisle Warehouses: A Fast Approach to Minimize Waiting Times.

The materials under this link correspond to the following publication:

- ▶ Hahn, S.; Scholz, A. (2017): Order Picking in Narrow-Aisle Warehouses: A Fast Approach to Minimize Waiting Times.

2016 / III. An Exact Solution Approach to the Single-Picker Routing Problem in Warehouses with an Arbitrary Block Layout.

The materials under this link correspond to the following publication:

- ▶ Scholz, A. (2016): An Exact Solution Approach to the Single-Picker Routing Problem in Warehouses with an Arbitrary Block Layout. Working paper.

2016 / II. A Genetic Algorithm for the Multi-Compartment Vehicle Routing Problem with Flexible Compartment Sizes.

The materials under this link correspond to the following publication:

- ▶ Koch, H.; Henke, T.; Wäscher, G. (2016): A Genetic Algorithm for the Multi-Compartment Vehicle Routing Problem with Flexible Compartment Sizes. Working paper.

2016 / I. A New Mathematical Programming Formulation for the Single-Picker Routing Problem.

The materials under this link correspond to the following publication:

- ▶ Scholz, A.; Henn, S.; Stuhlmann, M.; Wäscher, G. (2016): A New Mathematical Programming Formulation for the Single-Pick Routing Problem.

2015 / III. The Pickup and Delivery Problem with 3D Loading Constraints.

The materials under this link correspond to the following publication:

- ▶ Männel, D.; Bortfeldt, A. (2015): A hybrid algorithm for the vehicle routing problem with pickup and delivery and 3D loading constraints. *Working Paper No. 15/2015*, Fakultät für Wirtschaftswissenschaft, Otto-von-Guericke University Magdeburg.

2015 / II. The Multi-Compartment Vehicle Routing Problem with Flexible Compartment Sizes.

The materials under this link correspond to the following publication:

- ▶ Henke, T.; Speranza, M.G.; Wäscher, G. (2015): The Multi-Compartment Vehicle Routing Problem With Flexible Compartment Sizes. *European Journal of Operational Research* 246 730-743.

2015 / I. A Solution Approach for the Joint Order Batching and Picker Routing Problem in a Two-Block Layout.

The materials under this link correspond to the following publication:

- ▶ Scholz, A.; Wäscher, G. (2015): A Solution Approach for the Joint Order Batching and Picker Routing Problem in a Two-Block Layout. *Working Paper No. 04/2015*, Fakultät für Wirtschaftswissenschaft, Otto-von-Guericke University Magdeburg.

2014 / I. The Multi-Compartment Vehicle Routing Problem with Flexible Compartment Sizes.

The materials under this link correspond to the following publication:

- ▶ Henke, T.; Speranza, M.G.; Wäscher, G. (2014): The multi-compartment vehicle routing problem with flexible compartment sizes. *Working Paper No. 06/2014*, Faculty of Economics and Management, Otto-von-Guericke University Magdeburg.

2012 / II. The Order Batching Problem in Manual Order Picking Systems.

The materials under this link correspond to the following publications:

- ▶ Henn, S.; Koch, S.; Doerner, K.F.; Strauss, C.; Wäscher, G. (2010): Metaheuristics for the Order Batching Problem in Manual Order Picking Systems. *BuR - Business Research* 3, 82-105.
- ▶ Henn, S.; Wäscher, G. (2012): Tabu Search Heuristics for the Order Batching Problem in Manual Order Picking Systems. *European Journal of Operational Research* 222, 484-494.

2012 / I. SLOPPGEN: A Problem Generator for the Two-Dimensional Rectangular Single Large Object Placement Problem With Defects.

The materials under this link correspond to the following publication:

- ▶ Neidlein, V.; Scholz, A.; Wäscher, G. (2012): SLOPPGEN: A Problem Generator for the Two-Dimensional Rectangular Single Large Object Placement Problem With Defects. *Working Paper No. 28/2012*, Faculty of Economics and Management, Otto von Guericke University Magdeburg.

2008 / I. The Two-Dimensional, Rectangular, Guillotineable-Layout Cutting Problem with a Single Defect - An AND/OR-Graph Approach.

The materials under this link correspond to the following publication:

- ▶ Neidlein, V.; Vianna, A.C.G.; Arenales, M.N.; Wäscher, G. (2008): The Two-Dimensional, Rectangular, Guillotineable-Layout Cutting Problem with a Single Defect - An AND/OR-Graph Approach. *Working Paper No. 35/2008*, Faculty of Economics and Management, Otto von Guericke University Magdeburg.

2007 / II. Tourenplanung für den Menübringdienst des Deutschen Roten Kreuzes Magedburg - Eine Fallstudie.

The materials under this link correspond to the following publication:

- ▶ Haußner, H.; Knauel, J.; Wäscher, G. (2007):Tourenplanung für den Menübringdienst des Deutschen Roten Kreuzes Magedburg - Eine Fallstudie. *Working Paper No. 8/2007*, Faculty of Economics and Management, Otto von Guericke University Magdeburg.

Contact: > Prof. Dr. Gerhard Wäscher (<mailto:mailto:gerhard.waescher@ww.uni-magdeburg.de>)

2007 / I. An Improved Typology of Cutting and Packing Problems.

The materials under this link correspond to the following publication:

- ▶ Wäscher, G.; Haußner, H.; Schumann, H. (2007): An Improved Typology of Cutting and Packing Problems. In: *European Journal of Operational Research* 183, 1109-1130.

Contact: > Prof. Dr. Gerhard Wäscher (<mailto:mailto:gerhard.waescher@ww.uni-magdeburg.de>)

2004 / I. Heuristische Lösungsverfahren für das Multiprocessor Scheduling-Problem mit reihfolgeabhängigen Rüstzeit (P | sij | Cmax).

The materials under this link correspond to the following publication:

- ▶ Heuer, J. (2004):Heuristische Lösungsverfahren für das Multiprocessor Scheduling-Problem mit reihfolgeabhängigen Rüstzeiten (P | sij | Cmax). Wiesbaden: Deutscher Universitäts-Verlag.

Contact: > Dr. Jörg Heuer (mailto:joerg.heuer@online.de)

2003 / I. Reif für das virtuelle Unternehmen? Ergebnisse einer Befragung von kleinen und mittleren Logistikunternehmen in Sachsen-Anhalt.

The materials under this link correspond to the following publication:

- ▶ Wäscher, G.; Meißner, D. (2003):Reif für das virtuelle Unternehmen? Ergebnisse einer Befragung von kleinen und mittleren Logistikunternehmen in Sachsen-Anhalt. *Working Paper No. 8/2003*, Faculty of Economics and Management, Otto von Guericke University Magdeburg.

Contact: > Dipl.-Kffr. (FH) Doreen Schwinger (mailto:doreen.schwinger@ww.fh-merseburg.de)