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Th.R. Festen ***Strategic container flow planning: computational test implementation of a model.***
Computer program, Report 93.3.LT.4101, Transport Technology, Logistic Engineering.

This report has been written as sequel to the preceding report "Strategic container flow planning: a concept for simultaneously optimizing flows of full and empty containers" [Report 93.3.LT.4029, Transport Technology / Logistic Engineering, Mechanical Eingineering and Marine Technology, Delft University of Technology]. It entirely focuses on the computational implementation of the model as it has been developed in the before mentioned report. The mathematical formulation of this model is briefly recapitulated.

The primary objective of the implementation is to gain insight in the actual computation times corresponding to several possible optimization strategies, when applied to network problems with varying characteristics. Most of the testing was conducted, using the IBM Optimization Subroutine Library.

Commercial optimization software usually supports input in a special industry format, commonly known as the MPS-format. The procedure of generating test data in this special format is discussed in this report.

An analysis of the results is presented, as well as a brief comparison between several optimization software packages and different platforms.

Reports on Logistic Engineering (in Dutch)

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