universidade de aveiro
theoria poiesis praxis

GOVCOPP

Gestão de Operações e Lean Management

Seminário sobre Aplicação de Métodos Quantitativos a Problemas de Gestão da Produção e Logística

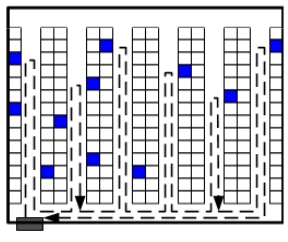
Por: Professor Doutor Gerhard Wäscher

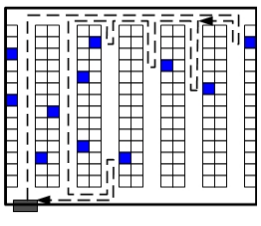
Otto-von-Guericke-Universität Magdeburg

27 de Novembro de 2009

Order Picking Operations - Planning Issues and Solution Approaches

Order picking is a warehouse function critical to each supply chain. Underperformance results in unsatisfactory customer service (long processing and delivery times, incorrect shipments) and high costs (labor costs, costs of additional and / or emergency shipments), both being a significant threat to the total chain. Despite of its criticality, order picking is not really a topic of major interest, neither in industrial practice, nor in academic Research. Like other warehouse functions, it appears to be one of the most frequently overlooked, underfunded, and inadequately Planned corporate functions (cf. Tompkins et al. 1996). Both researchers and managers seem to be unaware of advanced planning techniques and their potential with respect to reducing costs and improving customer service (Petersen 1999).The aim of this presentation, therefore, is to review these planning techniques and demonstrate what benefits can be expected from their use in practice. We will focus on manual order picking systems and particularly address problems of tem location and (customer) order batching.





Short Curriculum Vitae

Gerhard Wäscher is a Professor and Chairman of Management Science.
His main research work focus on the development and application of quantitative methods for management problems in production and logistics, in particular in the areas of Warehouse Management and Control and Cutting and Packing. Throughout his career he has developed and taught courses at all study levels (including MBA courses) on a number of subjects, of which in this instance he should highlight *Operations Research* (Linear and Integer Programming, Graphs and Networks, Meta Heuristics, Simulation, Decision Analysis, Stochastic Decision Problems) and *Production* (Strategic Management of Production, Production Theory, Production Planning and Control, Quantitative Methods in Production, Internationalization of Production. He has a large experience in the domain of Operations Research, and of Production Planning and Control.