AN APPROACH FOR THE DETERMINATION OF THE IMPACT OF PRODUCTION LOT SIZE AND SEQUENCE ON LOGISTIC OBJECTIVES IN HYBRID MANUFACTURING SYSTEMS

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ABSTRACT

The main issue of todays manufacturing companies is to plan their production according to the customer needs to be competitive on market. The prevailing problems of lot size and sequence planning in business, reflected by an expert survey and literature study, lead to the conclusion that the development of models and approaches is necessary to improve the situation on lot size and sequence planning in industrial environment. The in this paper presented 3-phase concept of procedural model supports companies in optimizing their production line and reaching their business goals. Thus the findings present an integrated improvement approach for production planning (with focus on lot size and sequence planning), which considers both economical aspects and manufacturing specific attributes. In all the model represents an approach which will support manufacturing companies in future to choose a lot size and sequence which lead to reach a higher production efficiency. However, this model is not restricted to hybrid manufacturing systems and could be applied in any production systems in future.

Keywords: *production lot size and sequence planning/optimization, hybrid manufacturing system, assessment model, procedural concept*