ABSTRACT


In order to be successful on the global market, an enterprise should be able to maintain short and accurate delivery deadlines, while keeping the prices low. An enterprise with high volume production capacity, specialized in low level standardization and producing small quantities has to implement ERP software to be able to make effective and accurate production plans.

The objective of this thesis is to demonstrate how the ERP software program Microsoft Navision Axapta 3.0 can be used to improve the production planning procedures and other delivery chain linked procedures in Tarmetec OÜ.

The current thesis includes an overview of the ERP software and it's developmental history, main functions and usage in production planning and production management; introduces current production structures, procedures of planning in Tarmetec OÜ; all the aspects of using ERP software for production planning in Tarmetec OÜ; a thorough analysis of the benefits of using ERP software in a modern enterprise – including solutions for material stock planning, master production scheduling, capacity planning, forecasting demand, purchasing; possible future recommendations for achieving even more improved production planning through involving machinery and human resources planning in master production scheduling using software solutions like the dynamic production plan and changing the structure of the definitions of machinery and human resources in the ERP. In addition, possibilities for enhancing productivity with introducing task groups, properties and alternative materials to the software are brought out.

Key words: enterprise requirements planning, production planning, capacity planning, Axapta, software, material requirements planning, production management