

SUMMARY

The topic of this thesis is „Improvement of warehouse processes by implementing Lean principles in Ruukki Products AS“.

The main goal of the thesis was to find and reduce wastes in Ruukki Products AS additional parts warehouse processes using Lean Management tools and make suggestions for improvements. Specifically, picking, checking and packaging processes were observed.

The main idea behind Lean thinking is that it helps to provide a way to specify value, line up value-creating actions in the best sequence, conduct these activities without interruptions whenever someone requests them, and to perform them more and more effectively. In short, Lean thinking is Lean because it provides a way to do more and more with less and less – less human effort, less equipment, less time and less space – while coming closer and closer to providing customers with exactly what they want. There are two other important factors to waste elimination – unevenness and overburdening people and equipment. These aspects must also be considered when applying Lean tools.

The company that was analyzed and in which the Lean tools were implemented, was Ruukki Products AS, located in Pärnu, Estonia. The factory specializes in producing steel-based roofing panels from color-coated coils. Ruukki is most well-known supplier of steel roofs in Estonia and a market leader in that sector. But to maintain that position and to have the edge over the competitors, there is a need for continuous improvement. Ruukki Pruducts AS is a part of Ruukki Construction.

By implementing Lean tools it was possible to identify the wastes in more detail level and most importantly, make suggestions and offer solutions to avoid them.

Simulations helped to determine that by changing the layout of the warehouse and implementing Lean tools, process times decreased, and the total number of completed orders increased.

Through this study, the objectives were fulfilled, and the research questions were answered.

In this thesis, a unique overview is offered of a production company’s warehouse processes. Wastes were identified and suggestions were offered to reduce them. The author of this thesis suggests continuing the path of Lean thinking in the future and adopting these techniques to other processes as well as they can provide ways to cut costs and being more effective.