

## SUMMARY

The main goal of thesis was to start measuring and improvement of the production efficiency in the PU-foam production in the company Krimelte Ltd. The first step was to research Key Performance Indicators and to choose the most relevant one for the PU-foam production department. Through analysis OEE method was chosen for the main KPI and Global Reader was identified as a tool for the line efficiency measurement system. After the efficiency measurement period 4 improvement projects were implemented in Krimelte Ltd.

The efficiency measurement was conducted from November to December 2018. The average OEE during that period on all Foam production lines was 43,7 %. The share of undefined interruptions in total interruptions was 46,5 % and two main interruptions were can counting and product changeover. Improvement projects were started in January 2019. The projects were - new bonus system based on OEE levels, can counting system, standard work optimization and implementation of Technical Helpdesk. The average OEE in April 2019 on all Foam production lines was 50,2 %. The average OEE was increased by 14,5 %. With implementation of Global Reader system and continuous training the share of undefined interruptions was decreased by 86 %. Can counting prototype system helped to decrease the can counting interruption by 62 %. After standard work optimization and implementation of Technical Helpdesk moderate changeover time was decreased by 21 %.

Economical calculations show that the quantity produced per hour was increased 13 % in the first 4 months of 2019 compared to first 4 months in 2018. The result was achieved with less process hours and smaller number of full-time employees. At the same time the average production order quantity from January to April 2019 was approximately 500 pieces smaller than in the same period of 2018.

The findings of the thesis prove that the measurement and improvement projects of production efficiency in PU-foam department have been successfully implemented. Ideas and recommendations for further development based on the thesis are provided for the company.