SUMMARY

As a result, all the objectives of the research work were fulfilled. The most effective position of the cranes was found so that, the maximum lifting capacity of the cranes was achieved, which is equal 510 tonnes. The weight of the below the hook components were collected in one data sheet. The data sheet can be modified after, depending on the cranes that will be available at the moment and lifting procedure.

After strength calculations the dimensions of the plate were found, the safe dimensions are 2500 x 2388 x 180 mm, which means that the plate can be used as a crane mat and as a load for testing. The plate dimensions satisfy overall cargo requirements, so the testing can be performed in other countries, which makes this method flexible.

The anchor plate type was selected and the safe diameter for welding were calculated. Many people from different companies were interviewed to get required information, since the information was not available in the open sources.

For calculations S – math plugin was made, so that all calculations can be rechecked and changed, depending on the task and crane combination.

As a result of the research it was determined, that testing with two cranes and anchor plate is not efficient in long term. However, the SCALE UP did not had any spreader testing at the moment, so for getting customer base, that might be a good temporary solution.

I hope, that I will have the chance to continue with this project and see implication of this method in real life.