

## I. IDENTIFICATION DATA

<b>Thesis title:</b>	<b>Manufacturing and control of engine sealing rings and its improvements</b>
<b>Author's name:</b>	<b>Dylan Roulin</b>
<b>Type of thesis:</b>	master
<b>Faculty/Institute:</b>	Faculty of Mechanical Engineering (FME)
<b>Department:</b>	Department of Automotive, Combustion Engine and Railway Engineering
<b>Thesis reviewer:</b>	Ing. Lukáš Kazda
<b>Reviewer's department:</b>	Department of Automotive, Combustion Engine and Railway Engineering

## II. EVALUATION OF INDIVIDUAL CRITERIA

<b>Assignment</b>	<b>easy</b>
<i>How demanding was the assigned project?</i>	
The assignment consists of multiple smaller tasks that were scope of work during student's internship in the company. It mostly meant simple calculations and design.	

<b>Fulfilment of assignment</b>	<b>fulfilled</b>
<i>How well does the thesis fulfil the assigned task? Have the primary goals been achieved? Which assigned tasks have been incompletely covered, and which parts of the thesis are overextended? Justify your answer.</i>	

<b>Methodology</b>	<b>correct</b>
<i>Comment on the correctness of the approach and/or the solution methods.</i>	
Student always correctly defined problems, consulted with colleagues or external manufacturers and proposed solutions.	

<b>Technical level</b>	<b>C - good.</b>
<i>Is the thesis technically sound? How well did the student employ expertise in the field of his/her field of study? Does the student explain clearly what he/she has done?</i>	
The first part of the thesis contains good technical drawings and schemes. The second part (shock absorber) is much worse. The problem isn't well described because of insufficient schemes – there's just one photo of a machine with unclear position and function of shock absorbers and one very simple scheme with lack of context to the machine. This has consequences throughout the rest of the thesis (calculations, design etc.). Also, the determination of CoG can be quite inaccurate although the principle was correct. I don't imply that the work that has been done was wrong, but the student's explanation is unclear.	

<b>Formal and language level, scope of thesis</b>	<b>D - satisfactory.</b>
<i>Are formalisms and notations used properly? Is the thesis organized in a logical way? Is the thesis sufficiently extensive? Is the thesis well-presented? Is the language clear and understandable? Is the English satisfactory?</i>	
The text itself is easy to read and understand the information well. There's a lot of missing capital letters at the beginning of the sentences. What troubled me more were formulas that weren't written as formulas but as plain text, which is uncomfortable to interpret. Also using screenshots of spreadsheets is not the best way to present data. Excel spreadsheet may be a good working tool, but bad for presentation. It consists of a content that is not important (drawing numbers etc.) and distracts from the important information. A simple table is recommended.	

<b>Selection of sources, citation correctness</b>	<b>B - very good.</b>
<i>Does the thesis make adequate reference to earlier work on the topic? Was the selection of sources adequate? Is the student's original work clearly distinguished from earlier work in the field? Do the bibliographic citations meet the standards?</i>	
Some figures are missing sources, I assume that they are the same as those in the corresponding text, but the citations should be at figure description as well.	

**Additional commentary and evaluation (optional)**

*Comment on the overall quality of the thesis, its novelty and its impact on the field, its strengths and weaknesses, the utility of the solution that is presented, the theoretical/formal level, the student's skillfulness, etc.*

**III. OVERALL EVALUATION, QUESTIONS FOR THE PRESENTATION AND DEFENSE OF THE THESIS, SUGGESTED GRADE**

*Summarize your opinion on the thesis and explain your final grading. Pose questions that should be answered during the presentation and defense of the student's work.*

Mr. Roulin had an opportunity to work with advanced equipment, and the work that he experienced in the company was diverse including designing formal and organizational processes that every engineer should also master. Technical tasks were simple and reflected everyday working process in the company. All of them were executed well. My objections pointed mostly towards formal issues such as schemes and clear explanation of problems that were solved.

The grade that I award for the thesis is **C - good**.

Date: **23.8.2022**

Signature: