

I. IDENTIFICATION DATA

Thesis title:	Modeling and Sizing of Static GMP hybrid and electric seals
Author's name:	Antoine Lanos
Type of thesis :	master
Faculty/Institute:	Faculty of Mechanical Engineering (FME)
Department:	Dept. Automotive, Combustion Engine and Railway Engineering
Thesis reviewer:	Miroslav Malý
Reviewer's department:	Technical university of Liberec, Dept. of Vehicles and Engines

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment	ordinarily challenging
<i>How demanding was the assigned project?</i>	
The assignment was made in cooperation with Renault, it is focused on modeling and dimensioning of sealing elements in vehicle transmissions.	

Fulfilment of assignment	fulfilled with minor objections
<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>	
The submitted diploma thesis fulfills the assignment - the text part supplemented by a number of pictures and tables is quite extensive. The student coped relatively well with the assigned task. However, more attention could be paid to the elaboration, especially to the discussion of own methods and results.	

Methodology	correct
<i>Comment on the correctness of the approach and/or the solution methods.</i>	
The student apparently followed the instructions of the consultant, dividing the text part into several chapters, which he called somewhat untraditionally, but still dealt with the solution:	
1 Bibliography	
2 E-PWT / TH-PWT sealing constraints differences	
3 Benchmarking	
4 Study case: PEC 5A gen 3	
Reminders:	
More detailed comments on analyzes and partial results are often missing. Some parts of the text (as well as the pictures) were used from other sources. It is necessary to consistently state sources (missing links) and use the correct technical terminology. The list of used symbols and abbreviations is not complete (eg FIPG, GMP)	

Technical level	D - satisfactory.
<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 chosen method and procedure of the solution is given in the text part, but in some parts the orientation is difficult. There are inaccuracies and errors in the work. The origin of some parts of the text is not clear - citations of sources are missing.	

Formal and language level, scope of thesis	C - good.
<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 author's mother tongue is probably not English, so the language side of the work written in English can be assessed with a certain degree of tolerance. Nevertheless, for further possible publication, more attention should be paid to the control of the text (equations, description of figures, selection and use of symbols), but also to the terminology used.

Selection of sources, citation correctness

D - satisfactory.

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?

The author lists 9 sources in the list of used literature, of which 5 are companies (Renault). Work of this nature should be based on a larger number of sources, respectively. The bibliography could also contain resources focused on the description of similarly addressed issues. Also, more attention should have been paid to authorship - citations are not consistently quoted, it is difficult to determine the originality in some parts of the thesis - dipl. work.

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.

The final part of the thesis (overall conclusion of the diploma thesis) usually contains a summary or discussion of the results achieved by the author. This part of the overall evaluation would certainly benefit the work.

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.

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

Date: **8.9.2020**

Signature: