I. IDENTIFICATION DATA

<table>
<thead>
<tr>
<th>Thesis name:</th>
<th>Powertrain Component Topology Optimization.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author’s name:</td>
<td>Kimmerlin Florian.</td>
</tr>
<tr>
<td>Type of thesis:</td>
<td>master</td>
</tr>
<tr>
<td>Faculty/Institute:</td>
<td>Faculty of Mechanical Engineering (FME)</td>
</tr>
<tr>
<td>Department:</td>
<td>Department of Automotive, Combustion Engine and Railway Engineering</td>
</tr>
<tr>
<td>Thesis supervisor:</td>
<td>Jindrich Horenin.</td>
</tr>
<tr>
<td>Supervisor’s department:</td>
<td>Department of Automotive, Combustion Engine and Railway Engineering.</td>
</tr>
</tbody>
</table>

II. EVALUATION OF INDIVIDUAL CRITERIA

**Assignment**

Evaluation of thesis difficulty of assignment.
The assignment is innovative and very extensive.

**Satisfaction of assignment**

Assess that handed thesis meets assignment. Present points of assignment that fell short or were extended. Try to assess importance, impact or cause of each shortcoming.
The student was very familiar with the procedures and programs used in the Jaguar Land Rover development center.

**Activity and independence when creating final thesis**

A - excellent.
Assess that student had positive approach, time limits were met, conception was regularly consulted and was well prepared for consultations. Assess student’s ability to work independently.
During the internship, the student studied the technical procedures used in the development center and became familiar with the use of development programs.

**Technical level**

A - excellent.
Assess level of thesis specialty, use of knowledge gained by study and by expert literature, use of sources and data gained by experience.
The student has very well applied the procedures.

**Formal and language level, scope of thesis**

B - very good.
Assess correctness of usage of formal notation. Assess typographical and language arrangement of thesis.
The work is well organized and comprehensible.

**Selection of sources, citation correctness**

E - sufficient.
Present your opinion to student’s activity when obtaining and using study materials for thesis creation. Characterize selection of sources. Assess that student used all relevant sources. Verify that all used elements are correctly distinguished from own results and thoughts. Assess that citation ethics has not been breached and that all bibliographic citations are complete and in accordance with citation convention and standards.
Citation is very poor. There is only one article from the magazine, there are no sources of manuals that are mentioned in the work.

**Additional commentary and evaluation**

Present your opinion to achieved primary goals of thesis, e.g. level of theoretical results, level and functionality of technical or software conception, publication performance, experimental dexterity etc.
The thesis deals with the innovative development process of topological optimization. During the internship, the student studied the technical procedures used in the development center and became familiar with the use of development programs.
III. OVERALL EVALUATION, QUESTIONS FOR DEFENSE, CLASSIFICATION SUGGESTION

Summarize thesis aspects that swayed your final evaluation.

The topic of topological development of powertrain components is very extensive. The student had to study a lot of technical information and learn to use many development programs. The student has done this very extensive topic very good.

I evaluate handed thesis with classification grade B - very good.

Date: 3.9.2018
Signature: Jindrich Horenin