

## I. IDENTIFICATION DATA

<b>Thesis title:</b>	<b>Numerical simulation of flow in the inlet chamber of an automotive air conditioning condenser</b>
<b>Author's name:</b>	<b>Egor Kalmykov</b>
<b>Type of thesis :</b>	bachelor
<b>Faculty/Institute:</b>	Faculty of Mechanical Engineering (FME)
<b>Department:</b>	Department of Fluid Dynamics and Thermodynamics
<b>Thesis supervisor:</b>	Ing. Michal Schmirler, PhD.
<b>Supervisor's department:</b>	Department of Fluid Dynamics and Thermodynamics

## II. EVALUATION OF INDIVIDUAL CRITERIA

<b>Assignment</b> <i>How demanding was the assigned project?</i>	<b>challenging</b>
The assignment of the bachelor's thesis was, in my opinion, <b>challenging</b> , mainly because of the wide range of areas that the student had to study.	

<b>Fulfilment of assignment</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>fulfilled</b>
The assignment was completely fulfilled.	

<b>Activity and independence when creating final thesis</b> <i>Assess whether the student had a positive approach, whether the time limits were met, whether the conception was regularly consulted and whether the student was well prepared for the consultations. Assess the student's ability to work independently.</i>	<b>B - very good.</b>
I rate the student's activity and self-reliance as very good. Mr. Kalmykov actively communicated with me as a supervisor of the thesis as well as with the technical advisor, Dr. Jiri Stodůlka (Num Solution). Mr. Kalmykov was always well prepared for our meetings and always actively and faithfully included my comments in his bachelor thesis. Unfortunately, I was not asked to view and comment on each section of the final version of the bachelor's thesis before submission.	

<b>Technical level</b> <i>Is the thesis technically sound? How well did the student employ expertise in his/her field of study? Does the student explain clearly what he/she has done?</i>	<b>B - very good.</b>
Mr. Kalmykov's bachelor's thesis was written to a high standard. Unfortunately, some of the problems were addressed just before the submission of the thesis and this unfortunately had a negative impact on their solution. I am referring, for example, to the determination of the pressure drop of individual channels and the evaluation of the mass flux distribution in the condenser. As I have already mentioned, I did not have the opportunity to see the work with such processed results before submission.	

<b>Formal level and language level, scope of thesis</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>	<b>A - excellent.</b>
Mr. Kalmykov's undergraduate thesis is very well organized and easy to read for the reader. All chapters are adequately and clearly described. The English is of a very high standard.	

<b>Selection of sources, citation correctness</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>	<b>A - excellent.</b>
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The sources of information were very well chosen and enabled the writing of a very good bachelor thesis. All sources are well cited at the end of the thesis.

**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.*

No comments.

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

*Mr. Kalmykov's work is written to a high standard and his results will certainly be used in the future in the design of the inlet geometry of air conditioning condensers.*

*Mr. Kalmykov's approach to completing tasks related to the bachelor's thesis was proactive and correct.*

*Mr. Kalmykov's bachelor thesis meets all the required criteria.*

As the thesis supervisor, I recommend a grade of **B – very good**.

Date: **3.6.2024**

Signature: