

I. IDENTIFICATION DATA

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| Thesis title: | OPTO-MECHANICAL MOUNT FOR LASER BEAM DIRECTING |
| Author's name: | Selvam Jeeva Paneer |
| Type of thesis : | master |
| Faculty/Institute: | Faculty of Mechanical Engineering (FME) |
| Department: | Automatization and Control Engineering |
| Thesis reviewer: | Ing. Bc. Šárka Němcová, Ph.D. |
| Reviewer's department: | Automatization and Control Engineering |

II. EVALUATION OF INDIVIDUAL CRITERIA

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| Assignment | ordinarily challenging |
| <i>How demanding was the assigned project?</i> | |
| A standard opto-mechanical mount design, with a special requirement of the use in low vacuum. | |

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| Fulfilment of assignment | fulfilled with major 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 analysis of requirements and the consequence on the tolerances was not done. The remote control is only partial, not for all motions. The vertical mirror has no adjustment motions, it's correct position relies on machining and assembly tolerances that are not discussed. | |

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| Activity and independence when creating final thesis | E - sufficient. |
| <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> | |
| The student needed continuous guidance and support in all parts of the task, he was often well behind the schedule. He consulted regularly, but with two long breaks. | |

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| Technical level | E - sufficient. |
| <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> | |
| The technical level meets the master thesis requirements only just. | |

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| Formal level and language level, scope of thesis | D - satisfactory. |
| <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 structure of the text is not logical at some places. The language is correct when other sources are cited, poorer where the student wrote from scratch. | |

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| Selection of sources, citation correctness | F - failed. |
| <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> | |
| The sources are mainly websites of optomechanical parts' vendors. Only one is a scientific paper – provided by the institution that brought the thesis topic. | |

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| Additional commentary and evaluation (optional) |
| <i>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.</i> |

Please insert your comments here.

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

The author chose a topic where he could benefit from the readiness of the cooperating institution to manufacture and test the design. Even though he worked on the design for more than a year, the result is an assembly with a limited possibility of adjustment and without the tolerance analysis. No parts were manufactured. The student needed repetitive explanations of the requirements and goals of the work. The review was at first just a copy and paste of technical notes at vendors' websites, with no citations.

Eventually, the student designed an assembly that meets most of the requirements and improved the review part.

The grade that I award for the thesis is **E - sufficient**.

Date: **7.6.2022**

Signature: