

# SUPERVISOR'S OPINION OF FINAL THESIS

#### I. IDENTIFICATION DATA

Thesis name: Design of immersive cooled 12V and 400V Lithium-Ion Battery

Author's name: Kanishka Mathur

**Type of thesis:** master

**Faculty/Institute:** Faculty of Mechanical Engineering (FME)

**Department:** Department of Automotive, Combustion Engine and Railway Engineering

Thesis supervisor: Assoc. prof. Pavel Mindl

**Supervisor's department:** Electric Drives and Traction FEL

## **II. EVALUATION OF INDIVIDUAL CRITERIA**

Assignment challenging

Evaluation of thesis difficulty of assignment.

Please insert your commentary. Theme of the thesis is relatively complex with respect to previous study orientation. There are need more detailed knowledge concerning of construction and technological problems.

### Satisfaction of assignment

fulfilled

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.

Please insert your commentary. All points of assignment were satisfactory fulfilled.

#### 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.

Please insert your commentary. Student made his work in cooperation with Corbelatti factory under local cosupervisor. But some problems and needed measurements were done with supervisor. Our cooperation has been very good.

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.

Please insert your commentary. Mr. Mathur studied corresponding literature sources, concerning to diploma thesis theme. He used relevant information related to problem to be solved. Presented theoretical analysis and mathematical model was sufficiently verified by simulation. After that has been made functional specimen of accu-battery.

## Formal and language level, scope of thesis

A - excellent.

Assess correctness of usage of formal notation. Assess typographical and language arrangement of thesis.

Please insert your commentary. Without remarks

#### Selection of sources, citation correctness

A - excellent.

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.

Please insert your commentary. All literature sources are regularly cited in the text and on the end of the work are presented on the summary.



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## 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.

Please insert your commentary (voluntary evaluation). **Diploma thesis assignment has been in general fulfilled.**After theoretical introduction and problem analysis author realized design of two packing blocks for 12 V and 400 V accu battery in accordance with ASSIGNMENT. The work has practical application in automotive industry.

### III. OVERALL EVALUATION, QUESTIONS FOR DEFENSE, CLASSIFICATION SUGGESTION

Summarize thesis aspects that swayed your final evaluation.

I evaluate handed thesis with classification grade A - excellent.

Date: 27.8.2021 Signature: Pavel Mindl