



DIPLOMA THESIS EVALUATION

Student's name and surname: Sawant Saurabh Subhash

Name of the diploma thesis: The optimization of the automated logistic system of the battery assembly line.

Supervisor of the thesis: Ing. František Koblasa, Ph.D.

1. Diploma thesis evaluation

Evaluation	excellent	excellent minus	very good	very good minus	good	failed
Meeting the goal and fulfilling task of the thesis	X					
Quality of conducted survey	X					
Methodology of solutions		X				
Expert level of the thesis	X					
Merit of the thesis and its potential applicability of results		X				
Formal and graphic level of the thesis		X				
Student's personal approach	X					

Mark x in the corresponding box.

Supervisor's final evaluation is based on his/her overall subjective evaluation.

Grading is stated literally in the article no. 5, neither by a number, nor by a letter.

2. Comments and remarks on the diploma thesis:

The thesis, which focuses on designing proper capacities of the current and designed logistic system of car battery manufacturing lines, consists of five major chapters. The first is the Literature review, which strictly focuses on methods used in the thesis. The second focuses on analyzing current AGV systems used in ŠA in order to select the most appropriate AGV vehicle to be applied in the designed system. It also contains an analysis of the material and information flow in order to design a new logistic system. The model definition chapter contains both model creation, design of the logistic system, and simulation results. This chapter (chapter 4) could be structured better—split into more main chapters (Simulation model, Simulation experiment, Results, and discussion). However, it is only a formal note that does not neglect the professional quality of the presented work.

The presented work has a high level of formal quality, except for a few cases of figure resolution, which are caused by the low quality of the original figure (Figure 5) and the necessary decrease of layout detail (Figures 10 and 11) to follow NDA rules.

3. Questions about the diploma thesis:

- It is usual to have a warmup period in the simulation model to neglect the initial instability of the system. This setting is not presented in your work. Please explain why.
- What will be the economic impact of selecting 6 AGV instead of 7.

4. Supervisor's statement on the results of the inspection carried out by the anti-plagiarism program in the STAG system:

All findings are properly cited from seemingly original sources or are part of the assignment.

5. Supervisor's grading of the diploma thesis:

Excellent – I do recommend a thesis for defense.

Date: 31.05 2024 , in Liberec

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Supervisor's signature