

## EXTERNAL EXAMINER'S REPORT ON DIPLOMA THESIS

**Name and Surname of Diploma Thesis Writer:** Linda Phanová  
**Topic of Diploma Thesis:** Lean logistics in axle production  
**Name and Surname of Supervisor:** Eva Štichhauerová  
**Name and Surname of External Examiner:** Thorsten Claus  
**External Examiner:** - name of a company: TU Dresden / IHI Zittau  
 - position: Director  
 - email address/phone number: thorsten.claus@tu-dresden.de  
 0049 3583 612 4001

	Excellent	Very good	Good	Failed
<b>I. Assessment of the thesis topic and its writing:</b>				
Thesis topic completion		x		
Application of implemented methods			x	
Analysis performed and its profundity			x	
<b>II. Assessment of thesis content and structure:</b>				
Clarity and coherence of thesis		x		
Currency of the topic, appropriate sources		x		
Processing of sources and acquired data			x	
Comprehensible and adequate conclusions			x	
Phrasing of writer's points of view			x	
<b>III. Assessment of thesis style:</b>				
Formal layout of thesis (i.e. text, tables, graphs)		x		
Style of thesis (i.e. use of formal language)		x		
Application of academic sources in the native language, including bibliographic references and citations		x		
Application of academic sources of foreign authors, including bibliographic references and citations		x		

The evaluation for the diploma thesis in terms of meeting the thesis objectives, the application of implemented methods as well as suggestions for measures taken including formal layout shall be stated in written (see the following page).

### Questions and comments related to the diploma thesis defence:

- 1) In your thesis you mention lean methods such as 5S, JiT, JiS, TQM. You do not mention other methods, such as SIX Sigma or Kanban. How do you justify your choice?
- 2) Which lean method did you use in your thesis?
- 3) What is the central insight of your work?

**I recommend the diploma thesis for defence.**

(\*delete if not applicable)

**Grade for the diploma thesis:**                      **good**

**Date**

.....  
**Signature of thesis external examiner**



## General Evaluation of the Thesis:

provide your text (at least 10 lines)

In her diploma thesis, the author would like to apply the methods of lean management to improve logistics in axle production at ŠKODA AUTO a.s., Mladá Boleslav. For this purpose, the relevant areas of application in logistics and the relevant methods of lean management are discussed first. After a detailed presentation of the processes of the area under investigation, the charging of the batteries of the material handling vehicles is identified as a weak point. The proposed improvement is to replace the conventional batteries with lithium-ion batteries. The author elaborates the implementation and calculates the economic advantage.

### Criticism

Only a selection of lean methods is presented. A rationale for this is missing. The identified problem in manufacturing is not identified with the help of the lean methods, but based on a conversation of the author with a logistics manager of the company (p. 61). The lean methods are therefore not applied to a concrete situation.

The central statement of the thesis is that new technologies lead to economic advantages. However, this finding is not surprising.

The formulas for calculating the economic advantage of the new technology are partly trivial and contain small errors (formula 11: "\*" instead of "+"). The author does not sufficiently justify why basic staff training has to be financed annually for all employees. The average time employees stay in the company should have been taken into account.