

I. IDENTIFICATION DATA

Thesis name:	Test Stand for Measurement and Sampling of Brake Wear Particle Emissions.
Author's name:	Arjun Chettiyattil Pankaj
Type of thesis :	master
Faculty/Institute:	Faculty of Mechanical Engineering (FME)
Department:	Department of Automotive, Combustion Engine and Railway Engineering
Thesis supervisor:	Ing. Jindrich Horenin
Supervisor's department:	Department of Automotive, Combustion Engine and Railway Engineering

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment	easy
<i>Evaluation of thesis difficulty of assignment.</i>	
The assignment contains all the components of the engineering work: construction and calculations.	

Satisfaction of assignment	unfulfilled
<i>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.</i>	
Work is not complete. The consultant's main comments were not included.	

Activity and independence when creating final thesis	E - sufficient.
<i>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.</i>	
The student went to consultations sporadically. The student fulfilled the assignment with minimal self-activity	

Technical level	F - failed.
<i>Assess level of thesis specialty, use of knowledge gained by study and by expert literature, use of sources and data gained by experience.</i>	
The work is unfinished. The student did not even respect the fundamental comments of the consultant. The drawings are extensive, but they do not even respect the basic design principles. Documentation is completely confusing. On the drawings, are completely different drawing numbers and part numbers. The drawings do not contain essential information such as part material. The sheetmetal parts drawings do not have sheet thickness. These data must be found in the text of the thesis. Dimensioning is incomplete and confusing. The drawings do not contain dimension tolerance and machining. There are not performed the basic weight calculation of the entire structure. There are not performed the basic check of the fasteners.	

Formal and language level, scope of thesis	C - good.
<i>Assess correctness of usage of formal notation. Assess typographical and language arrangement of thesis.</i>	
The work is poorly oriented, not paged. Chapters and subchapters are not marked according the standard. There are many typing errors and unclear formulations.	

Selection of sources, citation correctness	C - good.
<i>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.</i>	
The citation is extensive, but does not fully comply with standards, for example, in the [17] the year of issue is placed in the middle of the title. Some links are broken for example [38].	

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.

The student did not even respect the fundamental comments of the consultant. These following for example:

- 1) The work is completely missing what adjustments need to be made to the existing brake station
- 2) The chamber collides with the existing brake station
- 3) Unfinished chamber construction does not fit the parts together
- 4) Unsolved chamber parting - a flat parting surface is recommended, which can guarantee the tightness of the joint
- 5) The centering of the chamber and the drive shaft is not solved
- 6) No check of the strength and stiffness of the chamber attachment
- 7) Unresolved connection of the chamber with the subsequent piping and its placement so as not to violate the chamber alignment due to the weight and dilatation of the pipeline
- 8) No check of speed on the shaft seal
- 9) Wrong caliper position relative to the chamber outlet - particles will be driven into the filter by centrifugal force
- 10) Failure to respect the drawing documentation. Completely confusing creation of various weldment subassemblies

III. OVERALL EVALUATION, QUESTIONS FOR DEFENSE, CLASSIFICATION SUGGESTION

Summarize thesis aspects that swayed your final evaluation.

The student went to consultations sporadically. The student fulfilled the assignment with minimal self-activity.

The work is unfinished. The student did not even respect the fundamental comments of the consultant. The drawings are extensive, but they do not even respect the basic design principles. Documentation is completely confusing.

I evaluate handed thesis with classification grade **E - sufficient**.

Date: **29.8.2019**

Signature: Ing. Jindrich Horenin