

I. IDENTIFICATION DATA

Thesis name:	Crank angle resolved piston temperature measurement
Author's name:	Prathik Neelavara
Type of thesis :	master
Faculty/Institute:	Faculty of Civil Engineering (FCE)
Department:	Department of Automotive, Combustion Engine and Railway Engineering
Thesis supervisor:	Ing. Miloslav Emrich, Ph.D.
Supervisor's department:	Department of Automotive, Combustion Engine and Railway Engineering

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment	challenging
<i>Evaluation of thesis difficulty of assignment.</i>	
This work was realized with the support of Scania CV AB. The thesis is focused on the literature research of available systems of measuring the temperatures of the piston, supplemented by real experiments on the combustion engine. This type of measurement is narrowly specialized field of research and development of combustion engines. Due to this fact, I consider the assignment as challenging.	

Satisfaction of assignment	fulfilled with minor objections
<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>	
All tasks were fulfilled. Measurement uncertainties were described theoretically. Calculating measurement uncertainty for one selected point would be beneficial (missing type B evaluation of standard uncertainty in calculation on page 77).	

Activity and independence when creating final thesis	B - very good.
<i>Assess that student had positive approach, time limits were met, and conception was regularly consulted and was well prepared for consultations. Assess student's ability to work independently.</i>	
Student worked independently with positive approach.	

Technical level	A - excellent.
<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 thesis has a good technical level. Literature research comment on the current state of technical knowledge on this field. Experimental results and conclusions are written with high knowledge of problematics.	

Formal and language level, scope of thesis	B - very good.
<i>Assess correctness of usage of formal notation. Assess typographical and language arrangement of thesis.</i>	
Typographical and language arrangement of the thesis is on high level. The student did not take the opportunity to give less important information to the attachment.	

Selection of sources, citation correctness	A - excellent.
<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>	
Literature research is main part of the thesis. Student has used 39 appropriate sources. Citation are used according to the standards.	

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.

Thesis give very good overview to the current state of art on the field of the piston temperature measurement methods.

III. OVERALL EVALUATION, QUESTIONS FOR DEFENSE, CLASSIFICATION SUGGESTION

Summarize thesis aspects that swayed your final evaluation.

I evaluate handed thesis with classification grade **B - very good**.

Date: **31.8.2018**

Signature:

