I. IDENTIFICATION DATA

Thesis name:	Development of SCADA Concept for Doosan Bobcat Engineering & Manufacturing for Assembly Process (Pilot Project)
Author's name:	Raunak Chhajer
Type of thesis :	master
Faculty/Institute:	Faculty of Electrical Engineering (FEE)
Department:	Cybernetics
Thesis supervisor:	Premysl Nemec, Ing., Ph.D., EWE
Supervisor's department:	Manufacturing Enegineering EMEA, Doosan Bobcat EMEA

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment   **easy**
Evaluation of thesis difficulty of assignment.
Thesis was establish based on clear scope and known solution for traceability and SCADA in the industry with main focus on proper application in the process and environment.

Satisfaction of assignment   **fulfilled with minor objections**
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.
Pilot is ready for start although the thesis conclusion is not complete evaluated result and HMI programming part was not done by student and on time. Root of cause of this issue coming also from problematic attendance of student at work.

Activity and independence when creating final thesis   **E - sufficient.**
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.
Thesis logically started up from study of existing solution and concepts and sequence of steps is as well logical but level of independency was very low and mainly part of programing and preparing of visualization (HMI) was already prepared by supplier (Rockwell Automation).

Technical level   **E - sufficient.**
Assess level of thesis specialty, use of knowledge gained by study and by expert literature, use of sources and data gained by experience.
There is no deep analyses & measures presented in the thesis.

Formal and language level, scope of thesis   **D - satisfactory.**
Assess correctness of usage of formal notation. Assess typographical and language arrangement of thesis.
Form is correct with note of some typing error probably as student under time stress at the end.

Selection of sources, citation correctness   **D - satisfactory.**
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.
Student use adequate resources to the study. Citations are correct.

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.
Note – during the thesis development one of supplier had delay of hardware what created time press at the end.

III. OVERALL EVALUATION, QUESTIONS FOR DEFENSE, CLASSIFICATION SUGGESTION

The Thesis is according assignment but with very limited conclusion to explain the result and value added. Part of HMI programming was delivered by supplier in stead of student.

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

Date: **28.8.2017**   Signature: