

Diploma Thesis Examination Report

“Accuracy enhancement of the fuel level sensor checkpoint”

***This Diploma Thesis was realized in joint Double Degree Program
Master of Materials and Production Engineering established between CTU and ITB.***

Author of thesis : Bc. Petr Royt

Examiner : prof.Dr.Ir.Mulyo Widodo Kartidjo as Supervisor from ITB - Indonesia

Background : Before I have taken the the responsibility as a supervisor of the work and thesis of Petr Royt, I know him as my student attending my class on Industrial Automation at ITB. Therefore, I know him quite good, as an intelligent and hard working student resulting an excellent mark I have given to him.

During his work and writting his thesis, we have conducted an intense communication by e-mail, where we have exchange ideas and learning together on this very interesting subject.

Evaluation : The thesis covering a complete study on certain object in the form of FLS (fuel level sensor) used to be installed inside a fuel tank of car, to give indication to the driver about the amount of fuel in that tank. What it means by a complete study because it gives a complete engineering understanding starting from the design aspect, such as principle of operation, principle of design, tolerance of error of the indicated values by two different method i.e. Tolerance Box Method and Nominal Height Method. The study covering also a deep analysis on some important parts determining the performance of the FLS i.e. resistor card and wire arm.

Further, the thesis work analysing the source of error resulting from the imperfectness of those two important components, and some suggestions have been proposed to enhance the accuracy of the FLS. Very interesting part of the thesis is validating the design theory with the actual data taken from the production i.e. assembly line, resulting in new finding about the possible source of error as well the possible corrections on that errors.

Small corection as I have suggested that is not done on this thesis is about the numbering of the citation of the reference that it should be sistematically in a right sequences, i.e. the first cited reference should been numbered [1] and then [2] and so on, and should be listed accordingly in the list of reference.

Overall the study, the work and the writting of the thesis are excelllent.

Mark : Excellent

Date: 24 January 2015

Examiner Signature: