Opponent's review of the Diploma Thesis

Title: Plasma spraying of ceramics coatings for high temperature tribological

applications

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The diploma thesis deals with an interesting topic focused on abrasion resistant coatings at high temperatures. The student has done a lot of time-consuming experiments. She successfully conducted experiments on the high-temperature tribometer. She analyzed alone the samples on an optical profilometer and optical microscope. Experimental work has been done at a good level.

It is therefore surprising that the evaluation of the results and processing of the diploma thesis is at a very low level. There are a lot of formal errors in the text. The terms in chapter Anotace are not uniform: plasma / plazma. Steels are labeled sometime without a technical standard. Page numbering start from number 1 in chapter Introduction but this page is number 8. The citations at the end of the sentence does not end with a dot, the dot is before the citation. The figures are labeled as Pic. instead Fig. The slpm gas flow units are not converted to SI units. Chapter 3.3 Summary should be called Discussion. Citation 84 follows citation 14, citations 17, 32 and 76-83 are not listed in the text etc.

In the practical part of the thesis, student only commented the progress of the results without comparison with other publications. Own analysis of results based on citations is only in two cases (citation 28 and 64). Samples were prepared and analyzed by people from several institutes (plasma spraying - Institute of plasma physics, optical profilometer - Department of control engineering, SEM, hardness and machining of base material - Department of Material Engineering). However, the student did not consider it appropriate to mention this fact in the text or an acknowledgement.

The work contains a lot number of formal errors that significantly reduce its overall level. Discussion of results is based only on commenting of experimental outputs. The results are not compared with results from other publications. The student ignored the comments of the supervisor and it is evident that the writing of the thesis was not given enough time. Otherwise, the work could be evaluated at a higher level. My classification of the diploma thesis is marked as SUFFICIENT (E).

Ing. Ladislav Cvrček, Ph.D.