

**I. IDENTIFICATION DATA**

<b>Title of thesis:</b>	<b>CFD simulation of heat transfer in an agitated vessel with a pitched six-blade turbine impeller</b>
<b>Author:</b>	<b>Namburi Gokul Sai</b>
<b>Thesis type:</b>	Diploma
<b>Faculty/department:</b>	Faculty of Mechanical Engineering
<b>Department:</b>	Department of Process Engineering
<b>Opponent:</b>	Ing. Stanislav Solnař
<b>Opponent affiliation:</b>	Czech Technical University in Prague, Dept. of Process Engineering

**II. EVALUATION OF THE PARTICULAR CRITERIA**

<b>Assignment</b>	<b>average</b>
It is a relatively simple assignment of numerical simulation with heat transfer in a mixed vessel with given geometry. The assignment is extended by the calculation of additional geometries by changing the distance between the impeller and the bottom of the tank. A very subtle task has been done in earlier years and the mesh has been used from this work.	

<b>Fulfilling the assignment</b>	<b>fulfilled</b>
The assignment was fulfilled and the student with the given geometry created numerical simulations with heat transfer. Shortcomings or inaccuracies have been corrected since the last defense.	

<b>Selected solution procedure</b>	<b>correct</b>
The student has found in literature the possibilities of modeling such a problem and based on a solution. He has also found in the literature habits regarding the transfer of information in the field of heat transfer and recommendations for its modeling. The computational network preparation is described relatively well, however, it refers to earlier work. The model creation process seems to me to be appropriate. On the enclosed CD are inserted autosave items from which it is more or less possible to trace the solution procedure.	

<b>Professional level</b>	<b>C - good</b>
The professional level of this work has improved since the last. The student determined the correlation relations according to the custom from numerically calculated data. Correlation relations have changed since the previous work, which I find very interesting.	

<b>Formal and language level, scope of work</b>	<b>C - good</b>
There are several formal, linguistic and typographical errors in this work. The Nomenclature is not complete and contains errors in units -> surface S is not in meters, simulation time is not in 1 / s, heat transfer rate is not squared meters and so on... The language of the work has improved rapidly since the last defense.	

<b>Source Selection, Correct Quotation</b>	<b>C - good</b>
The thesis contains 20 sources mainly from scientific literature or from the manuals of the used program for numerical simulation. However, in the bibliography I did not find a quote for these works: Chapman (1964), Nagata (1972) and Edward (2003). As the student compares his / her results with the first two of these works, I would expect their presence in this list.	

More comments and ratings

### III. TOTAL EVALUATION AND PROPOSAL FOR CLASSIFICATION

The work has undergone numerous changes and improvements since the last defense. Due to the second defense I have no additional questions, most of which we discussed last time.

**Two recommendations were added to the work:**

- (1) Rewrite the text to improve the language level – **CHECK**
- (2) Improve the citation and reference list in the text - I would expect a better job but **CHECK**

I evaluate the submitted final thesis with the grade C - good

Date:

Signature: