ČVUT
ČESKÉ VYSOKÉ
UČENÍ TECHNICKÉ
V PRAZE

I. IDENTIFICATION DATA

Thesis title:	**CFD Simulation of Heat Transfer in an Agitated Vessel**
Author's name:	**Luis Alberto Torres Tapia**
Type of thesis :	master
Faculty/Institute:	Faculty of Mechanical Engineering (FME)
Department:	Process Engineering
Thesis supervisor:	doc. Ing. Karel Petera, Ph.D.
Supervisor's department:	Process Engineering

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment   ordinarily challenging

How demanding was the assigned project?

Fulfilment of assignment   fulfilled

How well does the thesis fulfil the assigned task? Have the primary goals been achieved? Which assigned tasks have been incompletely covered, and which parts of the thesis are overextended? Justify your answer.

Methodology   correct

Comment on the correctness of the approach and/or the solution methods.

Technical level   B - very good.

Is the thesis technically sound? How well did the student employ expertise in the field of his/her field of study? Does the student explain clearly what he/she has done?

Formal and language level, scope of thesis   B - very good.

Are formalisms and notations used properly? Is the thesis organized in a logical way? Is the thesis sufficiently extensive? Is the thesis well-presented? Is the language clear and understandable? Is the English satisfactory?

Selection of sources, citation correctness   A - excellent.

Does the thesis make adequate reference to earlier work on the topic? Was the selection of sources adequate? Is the student's original work clearly distinguished from earlier work in the field? Do the bibliographic citations meet the standards?

Additional commentary and evaluation (optional)
Comment on the overall quality of the thesis, its novelty and its impact on the field, its strengths and weaknesses, the utility of the solution that is presented, the theoretical/formal level, the student's skillfulness, etc.
Despite the MRF approach used in the thesis, the results are in better agreement with available experimental data then the results based on Sliding Mesh approach used by a former student. The main reasons lies probably in the simulated time interval which can be much larger because the computational requirements are substantially smaller with MRF approach (larger time steps can be used).

III. OVERALL EVALUATION, QUESTIONS FOR THE PRESENTATION AND DEFENSE OF THE THESIS, SUGGESTED GRADE

Summarize your opinion on the thesis and explain your final grading.

The methods and procedures used in the thesis seems to be correct. The author showed very good abilities of individual work. The language level as well as formal aspects of the thesis are also very good.

I evaluate the thesis by grade | B - very good. |

Date: 21.8.2019   Signature: