Budapest University of Technology and Economics

Faculty of Mechanical Engineering

Department of Fluid Mechanics

http://www.ara.bme.hu/

FINAL PROJECT ASSIGNMENT

CLASSIFIED

Identification

Name: **Pashayev Ramil**		ID: **73353718560**	
Code of the Curriculum: 2NAMW0	Specialisation:		Document ref. number:
Curriculum: Master Program in Mechanical Engineering Modelling	2NAMW0-FM		GEÁT:2021-T:2NAMW0:T4WG91
Final Project issued by: Department of Fluid Mechanics	Final exam organised by: Department of Fluid Mechanics		
Supervisor: Tamás Benedek (76511246251), senior lecturer			

Project Description

Title

CFD Study of Pump Air Entrainment

Szivattyú légbeszívás CFD szimulációja

Details

1. Overview of the literature special regards on pump air entrainment and its CFD simulation!

2. Based on the literature overview, prepare the CFD model of a well-documented air entrainment case study.

3. Perform CFD simulations in order to find the best simulation setup!

4. Prepare the CFD model of Flowserve's air entrainment test equipment!

5. Perform CFD simulations on the prepared model!

6. Evaluate the results, and summarize the work in the required document format!

Advisor

Advisor's Affiliation:

FlowServe Hungary Services Kft.

4034 Debrecen, Vágóhíd utca 2.

Advisor: Frank Visser, simulation engineer

Final Exam

1st subject (group)	2nd subject (group)	3rd subject (group)	4th subject (group)
ZVEGEÁTMW02 Computational Fluid Dynamics	**ZVEGEÁTMW03** Flow Measurements	**ZVEGEÁTMW08** Building Aerodynamics	**ZVEGEÁTMW19** Aerodynamics and Its Application for Vehicles

Authentication

Handed out: 8 February 2021		Deadline: 14 May 2021	
Compiled by: Tamás Benedek (76511246251) Supervisor	Verified by: *Dr. János Vad* (signed) Head of Department		Approved by: *Dr. Péter Bihari* (signed) Vice-Dean

The undersigned declares that all prerequisites of the Final Project have been fully accomplished. Otherwise, the present assignment for the Final Project is to be considered invalid.

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Pashayev Ramil