

Department of Fluid Mechanics

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FINAL PROJECT ASSIGNMENT

CLASSIFIED

| | Name: Pashayev Ramil | | | | | ID: 73353718560 | | |
|---------|---|---|---------------------------------|-----------------------------|-------------------------------|------------------------|---------------------------|--|
| uo | Code of the Curriculum: 2NAMW0 | | 2NAMW0 | Specialisation: | | Document ref. number: | | |
| ificati | Curriculum: | | Master Program Engineering M | n in Mechanical odelling | 2NAMW0-FM | | GEÁT:2020-1:2NAMW0:T4WG91 | |
| enti | Final Project issued by: | | | | Final exam organised by: | | | |
| Ide | Department of Fluid Mechanics | | | l Mechanics | Department of Fluid Mechanics | | | |
| | Supervisor: Dr. Tamás Benedek (76511246251), as | | | | stant professor | | | |
| | [| | | | | | | |
| | itée | CFD Study of Fump Air Entrainment | | | | | | |
| | H | Szivattyu legdeszivas CFD szimulacioja | | | | | | |
| ription | 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. | | | | | | |
| | | 4. Prepare the CED model of Elewserve's air entrainment test equipment! | | | | | | |
| esc | | 5. Perform CFD simulations on the prepared model! | | | | | | |
| t D | | 6 Evaluate the results and summarize the work in the required document format | | | | | | |
| ojec | | o. Evaluate the results, and summarize the work in the required document format: | | | | | | |
| Pro | | | | | | | | |
| | Advisor | Advisor's Affiliation: | | | | | | |
| | | Flowserve Hungary Services Kft | | | | | | |
| | | 4028 Debrecen, Vágóhíd utca 2. | | | | | | |
| | | Advisor: Frank Visser, engineer | | | | | | |

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

| | Handed out: 15 September 2020 | | Deadline: 11 December 2020 | | |
|----------------|---|------------------------|----------------------------|---------------------------|--|
| | Compiled by: | Verified by: | | Approved by: | |
| | Dr. Tamás Benedek (76511246251) | Dr. János Vad (signed) | | Dr. Péter Bihari (signed) | |
| Authentication | Supervisor | Head of Department | | Vice-Dean | |
| | The undersigned declares that all prerequisites of th have been fully accomplished. Otherwise, the present the Final Project is to be considered invalid. | ect for | | | |