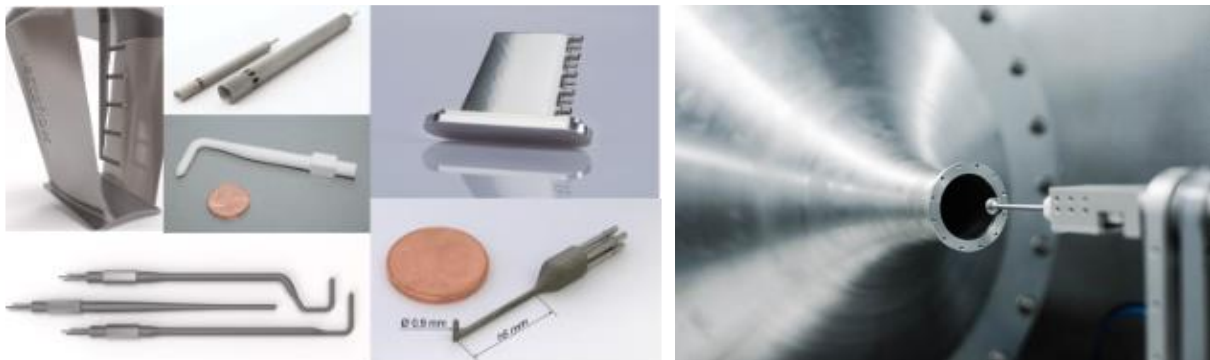


Master Thesis – Experimental investigation of pressure sensors for use in a fast response probe

About us:

What do Formula 1 racing cars, aircraft engines, drones and wind turbines have in common? In all these applications and many more the aerodynamics are optimized and controlled by products from us - Vectoflow. From an individual probe to a complete system: using 3D printing and smart software solutions, we develop individual flow measurement technology that adapts perfectly to the area of application and delivers reliable results even under difficult conditions.

Vectoflow is a young, innovative, and creative company. We value creativity, team spirit and the courage to break new ground. As a driver of innovation in the field of probes and measurement technology for promising industries such as drones, aerospace, wind energy and aerodynamics, we are already active in our target markets worldwide. Based in Gilching, we serve customers in Europe, Asia, and North America. Who are we looking for? People who think like we do and who want to make a difference! Because we offer them the opportunity to develop in flat structures and to advance our company together. Our team is diverse, international, and passionate. With us, attitude counts just as much as experience and the will to succeed!



Topic

Vectoflow offers a topic for a Master thesis in the field of fast response aerodynamic probes (FRAP). FRAPs are used to experimentally determine unsteady flow features, such as flow separation or vortices. Such probes are already available in our portfolio. Nevertheless, we wish to keep pace with recent developments, and we also wish to continuously

improve our products. The successful candidate will benefit from our in-depth knowledge and will also contribute to the development of future products. This is a win-win situation.

Main activities:

- Get familiar with unsteady measurements using FRAPs
- Literature research on FRAPs, pressure sensors and probe/sensor calibration
- Collection of literature in a database
- Collection of available & suitable sensors in a database
- Derivation of test concepts & evaluation criteria for pressure sensors
- Experimental evaluation of pressure sensors by means of scientific & reproducible methods
- Documentation of procedures and results

Your profile:

- Degree in aeronautical engineering or comparable.
- Good knowledge of fluid mechanics and especially aerodynamics
- Ideally experience with measurement methods in experimental aerodynamics and the measurement techniques used in this field
- Independent and structured way of working, but at the same time a team player
- Open to new ideas – Can-do attitude
- Fluency in written and spoken German or English

Your benefits:

- Working in a young, dynamic, and creative team
- Working on actual scientific topics under professional supervision
- Being on the pulse of an innovative & technology leading company
- Flexible working hours for your work-life balance
- Attractive salary for students

Infos:

Date of job posting	January 5 th , 2024
Start date	Immediately/ April 2024 latest
Contact	tobias.ebus@vectoflow.de