

Stockholm, March 18, 2025

Final report ÅForsk 18-498

The project ÅForsk 18-498 was granted before the COVID-19 pandemic. Since then, we have experienced some staff turnover, and the external company in Austria (*FWT*) that was going to manufacture the pipe section needed time to recover from the pandemic. Every year, we have asked for an extension of the project, and we have been delighted that the Foundation has accepted our reasons for the delay.

Pipe test-section for advanced TURBULENCE measurements

In 2024, I visited Neunkirchen, south of Vienna, where the *FWT-Composites & Rolls* factory is located, in order to inspect the pipe before the final delivery to the experimental facility CICLoPE of Bologna University. The pipe test-section of the CICLoPE facility has now been delivered safely to the CICLoPE Laboratory in Predappio, outside Forlì, in Italy. The pipe section can initially only be used by KTH but later also in collaboration with other international research teams. Currently, we are planning our first experiments in the CICLoPE facility, which is very exciting. In the mounting of the windows and fine-tuning of joints inside the pipe section, we will also add the ÅForsk logotype on the pipe section, showing our appreciation for the funding received that could enable the manufacturing of the test section.



Photos of the KTH pipe test-section for the CICLoPE facility in Italy.

Work progress

- Design of the pipe test-section that allows for optical access for laser-based measurement techniques of turbulent flow. KTH has two very advanced Laser-Doppler Velocimetry measurement systems that can measure all three velocity components. In the new test section funded by

ÅForsk, we will be able to perform measurements that no other research team has ever done so far.

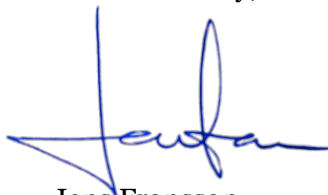
- Procurement at KTH in order to be able to place the order.
- Extensive dialogue with the company *FWT-Composites & Rolls* before starting manufacturing the pipe section.
- Inspection of the pipe section on sight in Neunkirchen, Austria.
- Final delivery of the pipe section to the CICLOPE Laboratory in Italy.

Reporting of costs in the project

Bidrag	970 000,00
Bidrag betalas ut efter godkänd rapport	27 000,00
Lönekostnad	325 195,71
Resor	8 849,18
Lokaler	69 842,52
Utrustning	286 948,36
Verksamhetsmaterial	302 389,54
Övrigt	8 327,20
OH	125 274,84
Samfinansiering av OH	-125 274,84
Ej giltigt	-288,50
Totalt att rapportera	1 001 552,51

We hope that the final 27 000 SEK can be paid out to KTH before the project is closed.

Yours sincerely,



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