The Team

The combined effort of three competent complementary organisations make up a strong team.

1 Måløy Verft AS

Company

Contact: Kristian Lundebrekke

Måløy Verft AS is a shipyard with roots dating back to 1970. The yard has 16 employees. Måløy Verft has extensive experience with glass and carbon fibre composites. Our electricians, mechanics, structure builders, and engineers have the long maritime experience to help this project. Our role will be to build and assemble the structure and systems.

Key Personel

Kristian Hove Lundebrekke

Profile: Managing Director
Duties: Project management

Håvard Løkkebø

Profile: Engineer

Duties: Engineering, documentation

Henning Nielsen

Profile: Electrician

Duties: Planning of electrical structure and system lay-up

2 Stadt Towing Tank

Company

Managing Director: Vegard Åstebøl Larssen

Contact: Vegard Åstebøl Larssen

Stadt Towing Tank AS was established in 2007 to deliver experimental hydrodynamical tests to the national and international marine industry. An extensive laboratory is operated by 8 employees to do practical tests on almost any physical object operating on or in the ocean.

Numerical simulations are a part of almost all projects and the company delivers computation fluid dynamic (CFD) simulations as well as simulation using other software tools.

During 2013 a major equipment upgrade was made to take on larger and more complex projects. Upgrades and equipment development has been performed continuously since the establishment.

Key Personel

Vegard Åstebøl Larssen

Profile:

- Master of Science; Engineering Cybernetics/Marine Cybernetics. Guidance Navigation and Control.
- Managing director since the company was established in 2007. Responsible for establishing a new experimental hydrodynamic laboratory (Stadt Towing Tank AS). Outline the new facility, find investors.
- Designer of sensoring system, mechanical system, post processing tools during build-up of the laboratory.

Duties:

- Automar project manager
- Hydrodynamical and mechanical design of turbine blades.
- Design of power take off system.
- Design of surface vessel.
- Plannng for the testing and verification program of Automar.

Karl Christian Strømsem

Profile:

- Doctor of Engineering; Hydrodynamics/Hydromechanics, 1990, Master of Engineering; Civil Engineering/Hydromechanics, 1984.
- Naval architect /Hydromechanics engineer with in-depth practical, analytical, mathematical, and computational skills to be employed on all types of problems.
- Specialist within hydrodynamic- riser- and mooring design but with solid background in civil and structural engineering.
- Worked extensively with flexible risers and moorings design for various types of platforms and FPSOs.
- Technical DD and technology assessments for companies and public organisations
- Expertise in advanced IT projects and computer systems development.
- Basis as civil engineer with knowledge of concrete and steel structures.

Duties:

- Hydrodynamical simulations of complete system.
- Setup of test and verification program.
- Remote data storage system. Database for system surveilance.

Simen Strømsøyen

Profile:

Master of Science, Marin Technology with specialisation in marine cybernetics with weight on hydrodynamics.

Professional skills:

- Project management
- Hydrodynamics
- Hull design and optimisation
- Computational Fluid Dynamics (CFD)
- Mathematical modelling
- Data analysis

- Mechanical design

Publications:

Co-author, **NTNU 2017**: Modelling and propulsion methods of underwater snake robots.

Duties:

- Hydrodynamical and mechanical design of the Waveco turbine blades.
- Design of surface vessel.
- Testing and verification of systems.

Håvard Midtgård

Professional skills:

- Project management
- Experimental methods, model testing and full-scale extrapolation.
- Computational fluid dynamics
- Hull lines, fairing and optimisation of hull designs
- Development of scientific test equipment
- Development of analysis software
- Mechanical design, advanced surface design and production design (2d and 3d CAD)
- FEM and structural analysis
- Structuring and organising of large data and laboratory/workshop inventory

Duties:

- Hydrodynamical and mechanical design of the Waveco turbine blades.
- Design of surface vessel.
- Testing and verification of systems.

Costel Iosub

Profile:

- Welder, mechanical.
- The man that can build anything.
- Mechanical assembly. Metal welding (MIG TIG, electrode), manual lathe and mill, building installation work, woodworking, model building, HVAC installation.
- Build machining stock for CNC milling of ship hull models.
- Fit instrumentation to test models.
- Produce required equipment for making custom parts for use during testing.
- Install sensor cables on test models.
- Installation of drive systems for propellers.
- Preparation of test models by markings, weiging and ballasting.
- Build internal offices and workshops.

Duties:

- All practical work related to the physical part of the project.
- Production, machining, assembly finish.

3 Waveco AS

Company

Managing Director: Inge Bakke

Contact: Inge Bakke

Waveco AS is a technology innovator dedicated to the global green energy transformation. During six years of innovation and development, various applications have been suggested based on a new turbine blade concept as the common element. Waveco AS has no employees yet.

Key Personel

Inge Bakke

Profile:

- Master of Science.
- Inventor of the Subwave turbine and the Waveco turbine blade.
- Founder and Managing Director of Waveco AS (founded November 2015).
- Working chairman.
  Inge Bakke (78) receives a retirement pension from the Norwegian state. This means that during the last six years he has been able to work full time with the development of Waveco's innovations, without pay. During these years, he has acquired extensive knowledge and overview of this complex and interdisciplinary field.
- Inge Bakke has invested in Waveco. The majority of the investments have been converted into a subordinated loan. The rest is smaller short-term loans.

Publications:

Co-author, **European Wave and Tidal Energy Conference 2021**: Development of the Waveco passively adaptiv twisting rotor blade.

Duties:

- Coordination of all activities during the project.
- Prepare applications for public support.
- Reporting to team, board and investors.
- Ongoing contact with potential customers in scientific and non-scientific ocean-related activities to ensure a design of the system adapted to market needs.

Arne Kaland Sværen

Profile:

- Board member since 2020.

Duties:

- Accounting.
- Contact with the auditor.