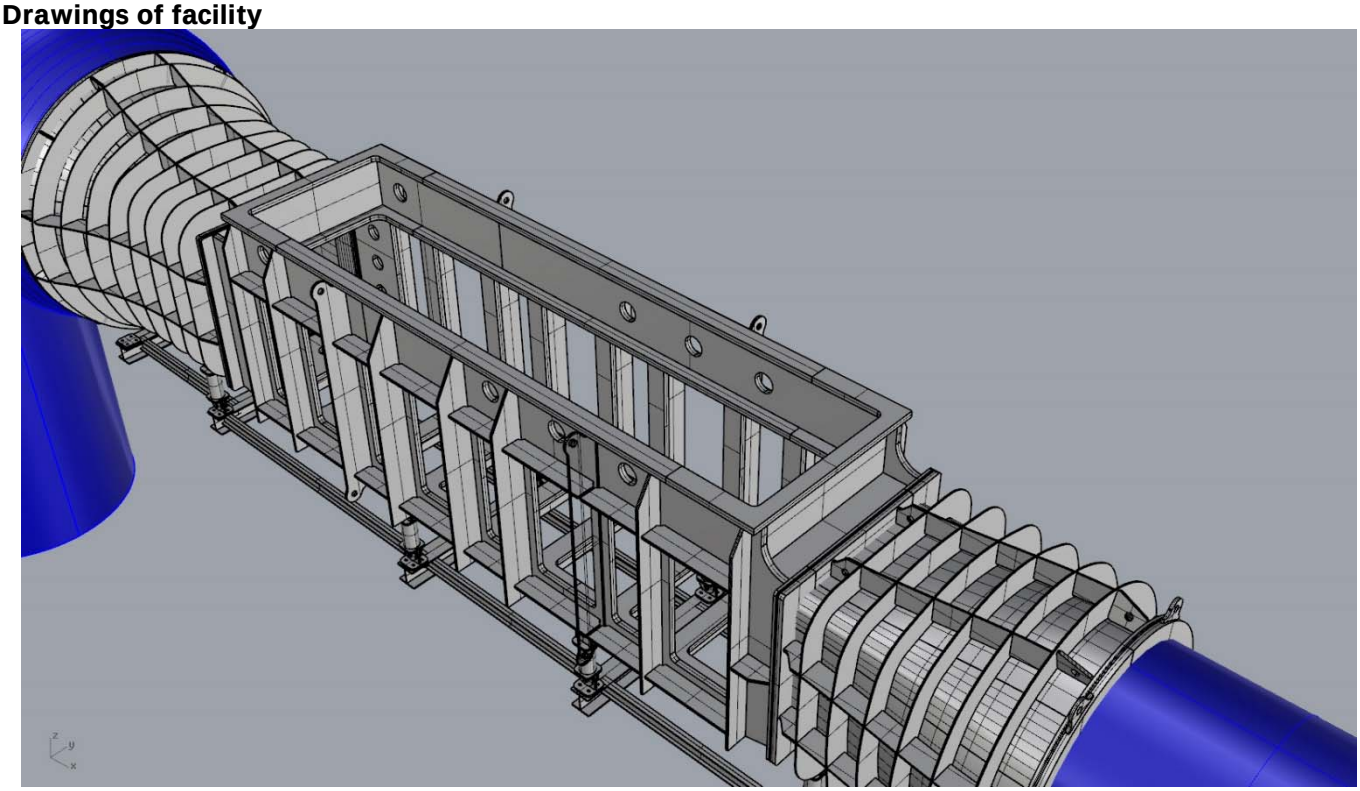
Name of organization SINTEF Ocean (Formerly MARINTEK)	**Year of information updating** 2018
Year established 1939	**Year of joining the ITTC**
Address Otto Nielsens Veg 10, P.Box 4762 Sluppen, 7465 Trondheim, Norway	**Status in the ITTC**
Contact details (phone, fax, e-mail) Phone: +47 464 15 000 Fax: +47 7359 5776 E-mail: ocean@sintef.no	**Website** www.sintef.no/ocean

Type of facility Towing tank	**Year constructed / upgraded** 1967 / 2018
Name of facility Cavitation laboratory	**Location** (if different from the above address)

Main characteristics (dimensions of tank/basin/test section; for simulators: full mission, part task or desk top)
Dimension of the cross section 6 x 1.3 x 1.2 m (Length, Width, Height)

Drawings of facility



Detailed characteristics (carriages, wave/current/wind generators, instrumentations, etc.)

Maximum water velocity:	12 m/sec.
Maximum propeller RPM:	3000
Propeller motor power:	15 kW
Maximum working pressure:	2.5 atm.abs.
Minimum working pressure:	0.1 atm.abs./σv~0.2
Impeller motor power:	1150 kW

Applications (Tests performed)

Test activities

- Open water tests with propeller (and duct) in axial or oblique flow
- Behind hull condition with single, twin or triple screw installations
- Azimuth thrusters
- Z-drive installations
- Waterjets
- Tidal turbines
- Underwater vehicles (submarines, ROV's etc.)
- Hydrofoils with or without remotely controlled flaps
- Hydroelasticity of wings and propellers

Measurements and observations

- Cavitation observation (sketches, photos and high speed video)
- Cavitation erosion detection by paint technique
- Measurements of propeller induced pressure fluctuations in the aftbody
- Measurements of propeller induced noise
- Propeller blade loading measurements
- Six-component propeller loading measurements
- Six-component force measurements
- Particle image velocimetry (PIV), Laser doppler velocimetry (LDV), Digital image correlation (DIC)

Published description (Publications on this facility)

Savio L., Sileo L., Muthanna C., Steen S., Spence S., Berget K., "**The Upgrade of the Large Cavitation Tunnel of the Marine Technology Centre in Trondheim",** Fifth International Symposium on Marine Propulsors smp'17, Espoo, Finland, June 2017