Name of organization **Centrum Techniki Okrętowej S.A. (CTO S.A.)**	**Year of information updating** 2019
Year established 1971	**Year of joining the ITTC** 1973
Address 65 Szczecińska St., 80-392 Gdańsk, Poland	**Status in the ITTC** Advisory Council member
Contact details Tel. +48 58 511 63 17 Fax. +48 58 553 16 43 modbas@cto.gda.pl	**Website** www.cto.gda.pl

Type of facility Cavitation tunnel	**Year constructed/upgraded** 1979
Name of facility Cavitation Tunnel	**Location** (if different from the above address)

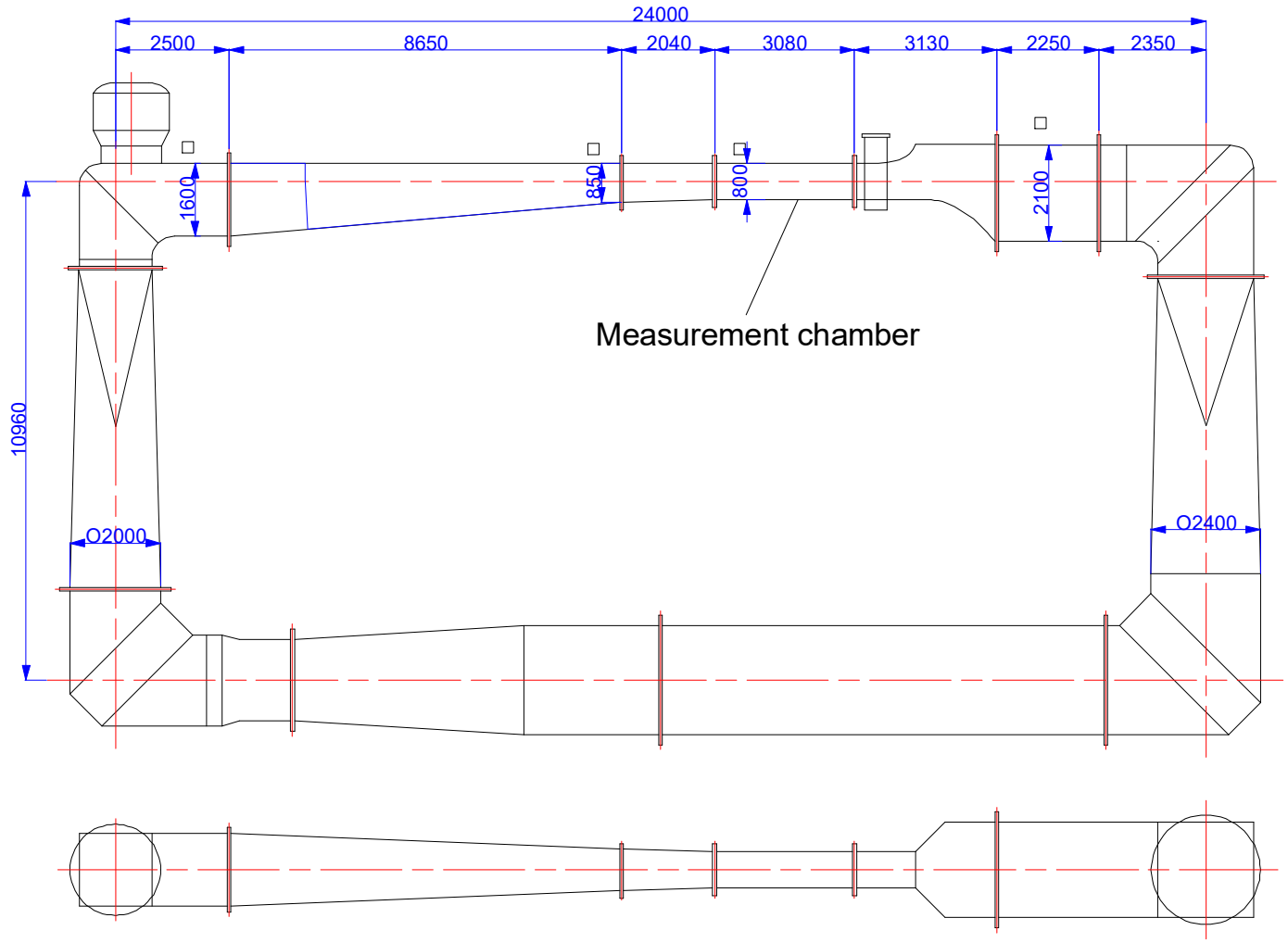
Main characteristics

Measurement chamber length: 3080 mm

Measurement chamber cross-section: 800mm x 800mm

Max. velocity: 20m/s

Drawing of facility



Detailed characteristics

Measurement chamber cross-section 800mm x 800mm; cavitation tests carried out with the use of 3D flow simulator ("dummy body") and mesh of adjustable density for modelling axial flow velocity distribution.

Velocity measurements: Laser-Doppler Anemometer.

Cavitation analysis methods:

- stroboscopic light;
- high speed camera – Photron;
- hydrophones - hydroacoustic signature – Reson.

Applications

- cavitation tests (incl. cavitation margins) - propellers, tunnel thrusters, renewable energy devices, hydrofoils; measurements of pressure pulses;
- erosion tests;
- detailed flow measurements (e.g. vortex structures generated by foils);
- low pressure tests;
- hydroacoustic tests;
- calibration of a measuring equipment (e.g. pressure probes for 3D wake measurements).

Published descriptions

www.cto.gda.pl