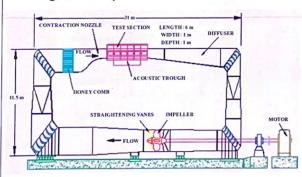
| Name of Organization  NAVAL SCIENCE AND TECHNOLOGICAL  LABORATORY                                | Year of information updating 2023                            |  |
|--|--|--|
| Year Established<br>1969   | Year of joining ITTC  Status in ITTC  Membership renewal due |  |
| Address<br>Vigyan Nagar, NAD Kotha Road, Visakhapatnam -<br>530027                               |  |  |
| Contact Details<br>Tel: +91 891 2586170 Fax: +91 891 2559464<br>Email : manu.korulla.nstl@gov.in | Website www.drdo.gov.in  Year constructed/ upgraded 2000     |  |
| Type of facility Hydrodynamic Testing Facility   |  |  |
| Name of Facility<br>Cavitation Tunnel  | Location Same as above                                       |  |

## **Main Characteristics**

Closed circuit variable speed variable pressure tunnel, Test section length  $\,6m$ , cross section  $\,1\,m$  X  $\,1m$ , and Flow speed  $\,15\,m/s$ .

## **Drawings of Facility**











| Detailed Characteristics |   |  |
|--------------------------|---|--|
| Test Section             | : | 1.0 m X 1.0 m X 6.0 m  |
| Flow speed               | : | 15 m/sec   |
| Pressure Range           | : | $0.1 - 3.0 \text{ kg/cm}^2$  |
| Instrumentation          |   | Dynamometers like multi-component propulsion dynamometer, single and contra-rotating open water dynamometer mounted on removable test section covers, multi-component wake rake, acoustic sensors, acoustic trough of 5.2 m length, aeration and de-aeration, fine filtering, stroboscopes and videography |

## **Applications**

- Cavitation studies on hull and propeller in open water & behind condition
- Acoustic studies at both cavitating and non-cavitating condition
- Wake measurement
- Propeller open water and behind condition performance characteristics measurement
- Measurement of forces and moments on submerged bodies (6 components) and surface bodies (3 components) at specified angle of attack

Published Description (Publications on this facility)

None