

Allegato 1

Propeller model for cavitation tunnel and open water tests

This document describe the main characteristics of the supply of a propeller model for cavitation and noise tests in the cavitation tunnel of the University of Genova. The supply must include the measurements of the Open Water characteristics of the propeller in a towing tank, according to ITTC standards [1]. The provision must include a report with the results of the open water tests.

The main characteristics of the propeller are described in Table 1.

Table 1: propeller and duct main particulars.

Propeller diameter [mm]	218.18
Propeller type	Fixed pitch
Blades number	6
Hub diameter [mm]	~45
Material	Brass

The complete geometry of the propeller will be provided by UNIGE along with the shaft details.

The propeller model must be compliant with accuracy and tolerances indicated by relevant ITTC guidelines [2]. The model can be manufactured as a unique part or with dismountable blades as a controllable pitch propeller if this simplifies the manufacturing (blades are not needed to rotate).

[1] ITTC Recommended Procedures and Guidelines – Open Water Tests 7.5-02-03-02.1

[2] ITTC Recommended Procedures and Guidelines – Model Manufacture, Propeller models, Propeller model accuracy 7.5-01-02-02