

Technical Specification for Experimental setup for self-propelling hydrofoils

Supply and installation of mechanical anguilliform experimental setup for self-propelling hydrofoils.

1) Bidder eligibility condition:

S. No	Bidder eligibility condition	Complied/ Not complied	Reference Catalogue Page No
1	The bidder/OEM should have executed scientific equipment related to hydrodynamic tests of value not less than INR 2.5 lakhs to IITs, NITs, IISERs, CSIR Labs or other Govt. organizations in the last 1 year, PO copies or installation certificates along with contact details of end user need to be submitted as the proof of supply. IIT Madras reserves its right to verify the claims submitted by the bidder and the feedback from the previous customers will be part of technical evaluation.		

2) Technical Specification

The scope of work involves the following:

S. No	Items	Quantities	Complied/ Not complied	Reference Catalogue Page No
1	Fin pattern and mold (NACA0020 C450mm S90mm)	1		
2	Flexible fin (Flexible fine 40&20 Shore A)	1		
3	Synchronized motors (Phase and Amplitude specified independently)	4		
4	Mechanism for Anguilliform (Material, machining and assembly)	1		
5	Fabrication of metal frame (Frame for mounting the setup in Glass flume)	1		
6	Load cells beam type 5kg Accuracyclass C2 (Combined error $\leq \pm 0.035$)	2		
7	Load cell fixture	1		
8	Design and commissioning	1		
9	Motor driver hardware	1		
10	Motor controller program	1		