**Booking Details**

**TOWING TANK WITH CARRIAGE SYSTEM**

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|  | **Name of the equipment:** TOWING TANK WITH CARRIAGE SYSTEM**Make & Model:**Allied Engineering company**I-Stem Registration ID-** 3222331**Category of Instrument**Testing **Types of Analysis / Testing**Fabrication**Application:** * **Wave Behaviour:** Reflection and transmission analysis.
* **Model Testing:** Scale models of wave energy converters and coastal protection structures.
* **Structural Impact:** Pressure and force studies on coastal structures.

**Description of Instrument**Wave flume dimensions 40m\*2m\*2m , Paddle unit holding frame , Plunger unit height maintain unit ,Capable of generating regular waves with wave height from 3 to 8 cm and period ranging between 0.7 to 1.4 s |

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| **Book through I-STEM:** <https://www.istem.gov.in/>**Slot Booking Link**[I-STEM Slot Booking link for External User](https://www.istem.gov.in/equipment-info/22331/Wave-Flume-cum-Towing-Tank-110m-x-4m-x-4m) | **Booking available for**Internal and External Both**Requisition form for** [Internals](https://randc.nitc.ac.in/pdf/instruments/civil/CED-REQUISITION_FORM_Internal.pdf)[Externals](https://randc.nitc.ac.in/pdf/instruments/civil/CED-REQUISITION_FORM_Internal.pdf) |

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**Features, Working Principle and Specifications**

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| **Features of the equipment**✔ **Large Towing Tank (100m × 4m × 4m)** for hydrodynamic testing✔ **Robust Carriage System** (4.3m × 3m) with precision wheels on a round track✔ **Dual Siemens Motors** ensuring smooth operation✔ **Variable Speed Control** up to **3.5 m/s** | **Unique features/Measurement capabilities, if any**➤ Ship manoeuvring & stability studies➤ Hydrodynamic performance analysis➤ Propeller model testing |
| **Instrument Technical Description and Major Specifications (This Specifications Limited to Major 5)*** **Tank Size:** 100m × 4m × 4m
* **Carriage Frame:** 4.3m × 3m
* **Drive System:** Siemens IE2 series TEFC motors
* **Max Speed:** 3.5 m/s
 | **Measurement/Sample specifications:** * **Testing Capability:** Scale model testing
* **Instrumentation Setups:** Must be arranged based on testing requirements

**Type of Sample Required for Analysis / Testing (Quantity, Pre-Preparation, State etc.) Guidelines for Sample Submission – User Instructions** |

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| * **Sample Type:** Scaled hydrodynamic models
* **Pre-preparation:** Must be structurally stable
* **User Instructions:** Submit instrumentation plans before testing
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**User Charges Rs. (GST Extra)**

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| **Sl no** | Type of Analysis / Testing | **Internal** | **External Academic Institutes** | **National R&D Lab** | **Industry** |
| 1 | Testing | 2000/day | Rs 1500/hr | Rs 2000/hr | Rs 5000/hr |
| 2 | Pre-testing installations | NA | Rs 2000/day | Rs 5000/day | Rs 10000/day |
| 3 | Post testing removal of models and other setup (no charge for first 3 working days) | Rs 2000/day | Rs 5000/day | Rs 5000/day | Rs 10000/day |