

INTERNATIONAL TOWING TANK CONFERENCE - CATALOGUE OF FACILITIES
TOWING TANKS, SEAKEEPING AND MANOEUVRING BASINS

<p>OSAKA UNIVERSITY DEPARTMENT OF NAVAL ARCHITECTURE AND OCEAN ENGINEERING 2-1 YAMADAOKA SUITA, OSAKA 565. TEL.(06)877-5111 FAX.(06)878-5364</p>	<p>JAPAN</p>
<p>TOWING TANK (1970)</p>	
<p>PLAN</p> <p>WAVE MAKER</p> <p>SUB-CARRIAGE</p> <p>CARRIAGE</p> <p>WAVE BREAKER</p> <p>BEACH</p> <p>PIER</p> <p>100m</p> <p>SECTION</p> <p>4.35 m</p> <p>7.8m</p> <p>DETAIL OF BEACH</p> <p>6m</p>	
<p>DESCRIPTION OF CARRIAGES: 1 manned, motor driven TYPE OF DRIVE SYSTEM AND TOTAL POWER. SCR power source with automatic speed regulator, 15 kw×4 MAXIMUM CARRIAGE SPEED: 3.5 m/s OTHER CAPABILITIES: vertical and horizontal PMM can be fitted</p>	
<p>WAVE GENERATION CAPABILITY: regular, length 1.5-12 m, height 0-0.5 m WAVEMAKER TYPE AND EXTENT: plunger, 7.8 m wide BEACH TYPE AND LENGTH: rectangular bars on inclined straight plates, 6 m length WAVE MEASUREMENT: resistance wire type, servo type probes and super sonic type on carriage and tank walls METHOD OF IRREGULAR WAVE GENERATION: magnetic tape control</p>	
<p>INSTRUMENTATION: off-line minicomputer with 16 channels A-D convertor up to 1000 samples per second per channel MODEL SIZE RANGE: ship lengths from 2 to 5 m floating structures from 0.1 to 2 m diameter MODEL TRACKING TECHNIQUES: propeller rpm adjusted manually, towing forces measured by resistance dynamometer TESTS PERFORMED: resistance, self-propulsion and wave analysis in calm water and waves open water propeller tests and 3-D wake surveys hydrodynamic forces on ships and submerged bodies wave induced motions and loads on ships and floating and moored structures upright and heeled sailing yacht tests stopping and manoeuvring test of ships</p>	
<p>PUBLISHED DESCRIPTION: 13th ITTC</p>	