## INTERNATIONAL TOWING TANK CONFERENCE CATALOGUE OF FACILITIES TOWING TANKS, SEAKEPING AND MANOEUVRING BASINS

JAPAN NAGASAKI EXPERIMENTAL TANK, NAGASAKI RESEARCH AND DEVELOPMENT CENTER MITSUBISHI HEAVY INDUSTRIES, LTD. 3-48 BUNKYOU-MACHI, NAGASAKI 852 PHONE: NAGASAKI (0958)46-4661 TELEX: 0752451 MHINGAJ FAX: NAGASAKI(0958)45-7701 SMALL TOWING TANK (1943) 285 m 120 m 165 m E S Large tank Small tank Wave maker Wave maker ( movable ) DESCRIPTION OF CARRIAGE: 1 manned, motor driven, digital control. TYPE OF DRIVE SYSTEM AND TOTAL POWER: Thyrister static Leonard system, 15 kw x 4. MAXIMUM CARRIAGE SPEED: 4.5 m/s. WAVE GENERATION CAPABILITY: regular; length 1 10 m, max. wave height 0.2 m. WAVEMAKER TYPE AND EXTENT: flap type, motor driven, 6.1 m wide. BEACH TYPE AND LENGTH: rugged panel on circular arc, 5 m. WAVE MEASUREMENT: electric resistance type probes on carriage and tank walls. INSTRUMENTATION: minicomputer on carriage for data acquisition and on-line analysis. 16 analog and 6 digital channels, maximum sampling speed up to 100 kHz for analog channel. MODEL SIZE RANGE: ship length from 2 to 7 m ( standard 4.2 m ), max. propeller diameter 300 mm. MODEL TRACKING TECHNIQUES: propeller rpm adjusted by thyrister static Leonard system at propeller open-water and propulsion test. TESTS PERFORMED: (1) resistance and self-propulsion tests in calm water and regular waves (2) propeller open-water tests (3) flow measurements around ship (4) wake survey tests (5) flow visualization tests PUBLISHED DESCRIPTION: Journal of S.N.A. of Japan, vol.96 (1955) Mitsubishi Juno Giho, vol.14, No.1 (1977)