

Catalogue of Facilities

OCEAN BASIN

LABOCEANO, OCEAN TECHNOLOGY LABORATORY

BRAZIL

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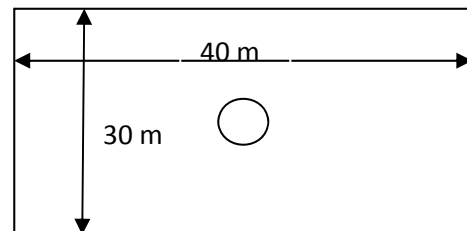
OCEAN BASIN (2003)

MAIN DIMENSIONS:

Length: 40 m Width: 30 m Depth: 15 m

CENTRAL PIT:

Diameter: 5 m Depth: 25 m



WAVE GENERATION CAPABILITY: Regular and irregular, long and short-crested seas

WAVEMAKER TYPE AND EXTENT: 75 wet-back hinged flaps on one side (30 m)

BEACH TYPE AND LENGTH: concrete, parabolic shape with 8 m

WAVE MEASUREMENT: Conductive and capacitive probes

INSTRUMENTATION: Data acquisition system up to 192 channels; max. sample rate up to 2 Mhz; resolution up to 18 bits;

MODEL TRACKING SYSTEM: Video motion system composed of fixed cameras capable to track up to five bodies (each body, six degrees of motion)

TESTS PERFORMED:

(1) motions and loads on moored and floating structures

(2) dynamic positioning tests

(3) subsea units launching

OTHER CAPABILITIES:

- Movable floor from the bottom up the free surface
- Inertial platform (Stewart Platform) with 6 DOF and 1.5 tonf of payload for sloshing tests
- Virtual simulator for maneuvering during oil recovery operations

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