

Deep Ocean Pressure Simulation Testing

KEYWORDS

API-17D Tests

Performance
Verification

Hydrostatic Pressure

Stress Analysis

Design Verification

Subsea Actuators

Subsea Housings

Subsea Pressure
Vessels

Subsea Valves

Umbilical Tests

Cable Tests

Underwater Cameras

XHP-HT Tests

With more than 50 years of experience in offshore and marine technologies, Southwest Research Institute® (SwRI®) offers a wide variety of services to meet the need for deep ocean pressure simulation testing. These services provide a final check of quality and operational integrity for clients including oil producers, manufacturers of subsea components, pipeline manufacturers and the U.S. Navy.

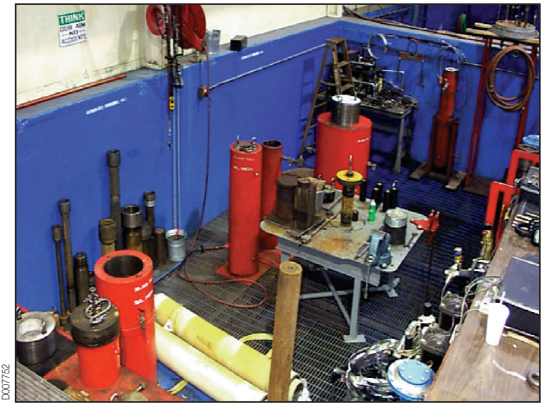
The SwRI Ocean Engineering and Structural Testing Laboratory has more than 10,500 square feet of climate-controlled laboratory space, with additional outdoor test facilities. Deep ocean pressure simulation test chambers range from 90 inches inside diameter, 20 feet deep to 16 inches inside diameter, 30,000 psig.

Services

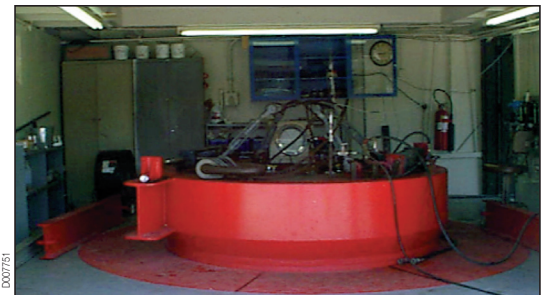
- Engineering design verification
- Product evaluation
- Prototype construction
- Design and fabrication of special test fixtures for client-specified requirements
- High-speed and still underwater photography

Testing

- Internal and external hydrostatic pressure tests
- Stress analysis and acceptance tests
- Operational tests requiring electrical and hydraulic penetrations
- Collapse and burst tests on API steel pipe casing, fiberglass pipe, titanium and stainless steel pipe
- Testing of prototype equipment, pressure housings, subsea instrumentation, cables, connectors, oil field production and safety equipment



The main pressure laboratory houses more than 10 deep ocean pressure simulation chambers which are used for static, cyclic and destruct testing.



Test chamber 20 feet deep with 90-inch inside diameter



Diving suit subjected to hydrostatic pressure test



Mini-submarine being tested for ABS recertification

