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
### DEEP OCEAN PRESSURE SIMULATION TEST CHAMBERS

<table>
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<th>Maximum Pressure (psi)</th>
<th>Simulated Ocean Depth (feet)</th>
<th>Maximum I.D. (inches)</th>
<th>Inside Length (inches)</th>
<th>Minimum Temperature (°F)</th>
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Southwest Research Institute is an independent, nonprofit, applied engineering and physical sciences research and development organization using multidisciplinary approaches to problem solving. The Institute occupies 1,200 acres in San Antonio, Texas, and provides more than 2 million square feet of laboratories, test facilities, workshops and offices for more than 3,200 employees who perform contract work for industry and government clients.

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