SwRI adds five chambers for deep water simulation testing

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SwRI has added five, 13-inch-diameter chambers in its Ocean Simulation Laboratory for deep water simulation testing. The chambers are capable of attaining pressures of 30,000 psig at a rated temperature of 650 degrees F.

Five additional chambers for high-pressure, high-temperature testing are now available for use at Southwest Research Institute (SwRI).The deep water ocean chambers are capable of attaining pressures of 30,000 psig at a rated temperature of 650 degrees F. The chambers complement a suite of test facilities in SwRI's Ocean Simulation Laboratory.

Measuring just over 15 feet in length with a 13-inch inner diameter and a 6.5-inch wall thickness, the cylindrical simulators are crafted of HY 100 steel with a tensile strength of 126,000 psi.

The chambers are rated to 30,000 psig, enabling SwRI to perform high collapse tests on oil country tubular goods (OCTG) casing and to perform testing for subsea technologies requiring proof-test pressures beyond ocean depths.

"These vessels will be used for various purposes including long-term simulated service testing of items that must withstand harsh undersea conditions, such as subsea connectors, cable assemblies, valves, pipe joints and other equipment for the oil and gas industry," said Joseph Crouch, manager of the Marine and Offshore Systems Section in SwRI's Mechanical Engineering Division. "The chambers will also be used to test components for manned and unmanned submersibles."

More information: www.swri.org/4org/d18/struceng/marine/pressim/

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