

NER Dual Purpose Saturation and Jacket Seating Vessel

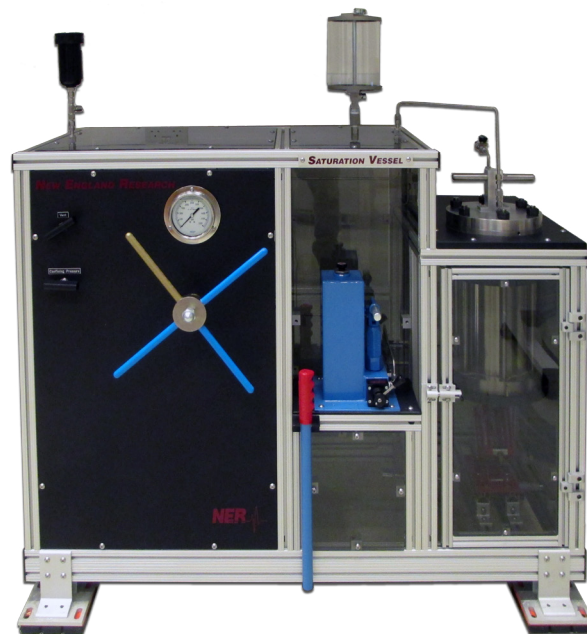
NER's Dual Purpose Saturation and Jacket Seating Vessel is a stand-alone system for sample preparation, specially designed to handle corrosive fluids. The vessel can be used for both saturating the sample and seating copper jackets against the sample.

The saturation system allows the user to vacuum a dry sample in the vessel, then introduce de-aerated fluid into the vessel and pressurize the sample up to 5,000 psi. This method results in better saturation than traditional wet-vacuum techniques. Multiple samples may be saturated at the same time to increase workflow.

The system can also be used to seat a copper jacket around a sample in preparation for a deformation experiment using strain gauges. It is possible to do this with multiple samples at the same time. Using the saturation fluid as the confining fluid for seating copper jackets decreases risk to sample integrity. If there is a jacket leak while seating, there is no corruption of the sample. This gives the opportunity for repairing the jacket and seating again without losing a sample or having it cleaned.

The system is designed for quick and easy access to the vessel. There are no tools required to get samples in and out. The fluid reservoir can be removed from the system for easy cleaning and changing of fluids.

The basic system consists of a hand-pump, pressure vessel, fluid reservoir, pressure gauge, high-pressure tubing, a sample basket for easy removal from the vessel, and corrosion-resistant end-caps. Corrosion-resistant spacers are also included to take up dead volume in the vessel. An optional vacuum pump may be added if none are available on-site.



Specifications

- Vessel ID: 3.0 Inches
- Vessel Length: 15 inches
- Max Pressure: 5,000 psi
- Saturation Fluids: Water, Brine, Oil
- Wetted Materials: 316 SS, Titanium

Optional Vacuum Pump

- Incorporate a rugged high vacuum pump capable of reaching vacuum pressure < 0.001 Torr
- This pump will be built into the apparatus for a clean, professional look