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One Device + Multiple Modules = Multiple Test Functions

The **Grace Instrument M7500 Ultra HPHT Rheometer** offers an ultra-high-pressure, high-temperature test environment that provides automatic, highly-repetitive tests. It does all this at a competitive price and even fits on a desktop.

The M7500 is also designed to accommodate a wide variety of testing requirements via optional functionality modules. These are comprised of both hardware and software components and are either replacements for M7500 components or modifications of the M7500 itself. Some can be added to an existing M7500 unit, and some require a customized M7500 hardware configuration.

Each added module potentially replaces stand-alone testing apparatus. This increases lab efficiency by reducing setup, cleanup and maintenance times. It saves space by consolidating diverse test functions into one instrument, and saves training and operation time by reducing the number of different devices and software applications that must be learned and managed.

Here are some of the features available:



Cement Cell Module:

The M7500 can be used to test fluids such as well cements which are highly vulnerable to contamination with pressurization fluid. The patented design of the M7500 Cement Cell reduces contact between test sample and pressurization fluid to a bare minimum.



PVT Pycnometer Module:

The M7500PVT pycnometer module provides a means for testing liquid density changes under simulated downhole conditions, such as those found in deep oil or geothermal wells. The M7500PVT module is also designed to test solid samples such as cements, cores, or other solids.



LSM Linear Swell Meter Module:

The M7500LSM linear swell meter module provides a high pressure and temperature environment for single-core swell tests, with pressures up to 30,000 psi and temperatures up to 600 $^{\circ}$ F.



M7500DAQ PC software PVT test



M7800 Ultra HPHT Hematite Rheometer:

The M7800 design modifies the M7500 cell tower hardware to enable test pressures of up to 40,000 psi. It also eliminates any contact between the test samples and the magnets, allowing for testing magnetically-sensitive fluids that cannot be reliably tested using standard industry hardware.



M8500 Ultra HPHT Dynamic Sagging Tester:

The M8500 is a modification of the M7500 hardware to allow the cell tower to be tilted up to 80° and includes three sample collection cells for sag testing. The optional rheometer module will allow the M8500 to be configured to run viscosity tests and can accommodate any M7500 test module.



M7500DAQ PC software real-time test selection