Grace INSTRUMENT
SCIENTIFIC INNOVATIONS • INDUSTRIAL SOLUTIONS

M7800
Ultra HPHT Hematite Rheometer

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Designed to test magnetically-sensitive fluids
The patent-pending design allows the testing of magnetically-sensitive fluids, such as those containing hematite, by preventing contact between the sample fluid and the drive magnet.

Engineered for ultra-high pressure testing & easy operation
The M7800 HPHT Hematite Rheometer can apply pressure to the pressure chamber as high as 40,000 psi, giving the researcher a pressure environment range greater than any competing instrument, while providing easy operation and simple maintenance.

The Grace Instrument M7800 Ultra HPHT Hematite Rheometer is intended for use in rheological testing of magnetically-sensitive fluids such as those containing hematite.

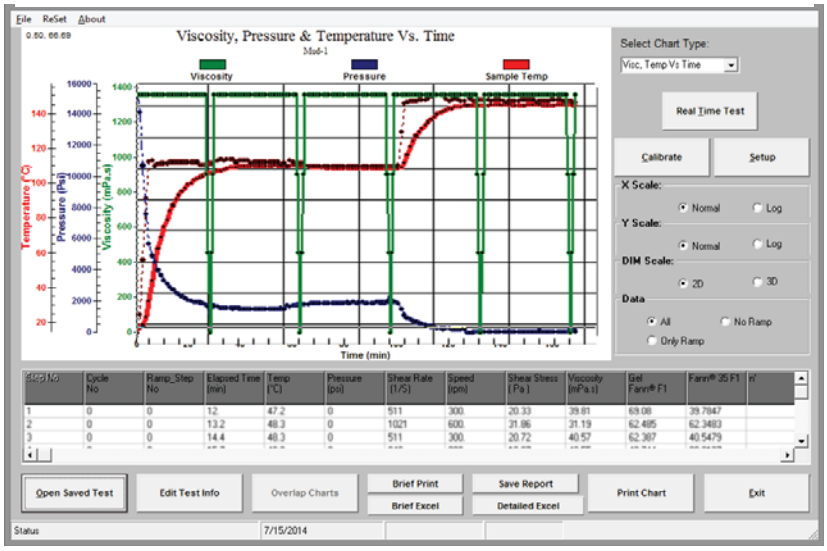
Unlike the standard operation of a rheometer which operates via magnetic coupling, the M7800 is configured to keep the magnets completely separated from the tested fluid. This helps ensure that test results are free of magnetically-induced errors.

The M7800 is built with a thick-walled steel pressure cell, surrounded by a fail-safe steel containment vessel, to ensure operator safety.

M7800 cell tower & M7500 control unit.
Patent Pending

M7800 pressure cell
Patent Pending

M7800DAQ control/data acquisition software (included)



Measurement Range (B1, B5 bob):

Sample Size:	Approx. 132 mL (depending on size of bob)
Speed:	0.01 to 600 rpm continuous
Shear Rate:	0.0082 to 1020 S^{-1}
Temperature:	Ambient (20 °F w/chiller) to 600 °F
Pressure:	Atm to 40,000 psi
Viscosity:	0.5 to 5,000,000 Centipoise
Torque:	7 µN.m to 10 mN.m
Shear Stress:	2 to 10,000 dyne/cm^2
Resolution:	0.3% of full scale range or better
Repeatability:	±1% of torque span or better

Mechanical Specifications:
Dimensions / Footprint:
22" tall x 12 wide x 24" deep (tower)
20" tall x 14" wide x 25" deep (cab)

Electrical Supply:
Voltages: 120 VAC or 240 VAC