

The only HPHT dynamic linear swell meter currently made in the USA

The M4600 HP HT Dynamic Linear Swell Meter (LSM) is the only LSM in the USA capable of high-pressure, high-temperature dynamic test operations.

The Grace Instrument M4600 HPHT Linear Swell Meter is an automated, dual core, high pressure and high temperature linear swell meter (up to 2,000 psi and 500 °F). It is engineered to measure the volumetric expansion (or contraction) of a core/wafer sample under simulated downhole conditions while saturating it with a drilling fluid sample.

Engineered to achieve highly repeatable test results

The patented design of the M4600 hardware allows core samples to expand in only one direction, making test results extremely repeatable.

The Grace Instrument M4600 HPHT Linear Swell Meter provides the most repeatable test results on the market today. The patented design allows core samples to expand in only one direction, making test results very repeatable.

Complimentary 2,850 psi hand pump is included with each compactor.

Unit Specifications:

Sample Size:	75 mL
Pressure Range:	Atm to 2,000 psi
Core/Wafer Diameter:	1.00 inch
Core/Wafer Length:	0.4 to 1.00 inch
Maximum Linear Displacement:	±0.6 inches
Linear Resolution:	0.1% of full scale range
Temperature:	Ambient to 500 °F

Optional Compactor Specifications:

Pellet Compacting Force:	10,623 lbs. at 2,000 psi Source Pressure <i>(Pellet size is 1.0" OD. To compact at 10,000 psi on pellet, set compactor gauge pressure to 1,478 psi.)</i>
Included:	Complimentary 2,850 psi Hand Pump

Mechanical specifications:

Height:	21" tall
Width:	20" wide
Depth:	14" deep
Construction:	304/316 stainless steel wetted material

Utility requirements:

Electrical Supply Voltage:	110-120V AC <i>(220-240V AC with Step-Down Transformer, Supplied if Required)</i>
Line Frequency:	50-60 Hz
Power Consumption:	600 W
Pressure Supply:	Nitrogen: Atm - 2,000 psi

Linear Swell Meter



The **M4600** is engineered for laboratory HPHT testing of solids and fluids interactions

- PC interface
- digital data
- easy operation
- safe operation
- test flexibility
- repeatability
- low maintenance
- automatic data collection

Core/Wafer Compactor



Compactor Includes Complimentary 2,850 psi Hand Pump