Specifications

Horiz. Movement	2" (50.mm) maximum
Horiz. Shear Force	HM-2560A: 2,000 lbf (10kN) HM-2550: 1,500 lbf (6.7kN)
Vertical Load	HM-2560A: 2,000 lbf (10kN) HM-2550: 1,500 lbf (6.7kN)
Speed Range	HM-2560A: 0.00001 to 0.49999 in/min. 0.00001 to 12.99999 mm/min. HM-2550: 0.0001 to 0.3 in/min. 0.0025 to 7,6200 mm/min.
Voltage	110/220 VAC 50/60HZ
Current	6.5 Amps
Analog to Digital	16 bit
Data Storage	4000 Readings
Data Collection Rate	100 ms
Computer Port	RS232
Dimension (W x D x H)	30 x 15.5 x 22" (L x D x H) (760 x 368 x 558mm))
Weight	140 lb (64 kg)
Shipping Weight	168 lb (76 kg)

Direct/Residual Shear Typical Setups:

Part #	Qty	Description
Pneumatic, Computer Control w/ Analog Instrumentation		
HM-2560A.3F	1	ShearScan 10, w/ Analog Inputs
HM-2701.XX(S/D)	1	Shearbox Assembly
HM-2702.XX(S/D)	1	Shearbox Cutter
HM-2703.XX(S/D)	1	Dolly/Tamper
HM-2300.020	1	S-Type Load Cell 2,000 lbf (10.0 kN)
HM-2310.10	1	Strain Transducer 1" (25mm)
HM-2310.04	1	Strain Transducer 0.4" (10mm)
HM-2310BR	2	Strain Transducer Bracket
HM-2700SW	1	HMTS Direct Shear Reporting Software
Pneumatic with Manual Control		
HM-2550	1	Pneumatic Direct Shear Set
HM-2701.XX(S/D)	1	Shearbox Assembly
HM-2702.XX(S/D)	1	Shearbox Cutter
HM-2703.XX(S/D)	1	Dolly/Tamper

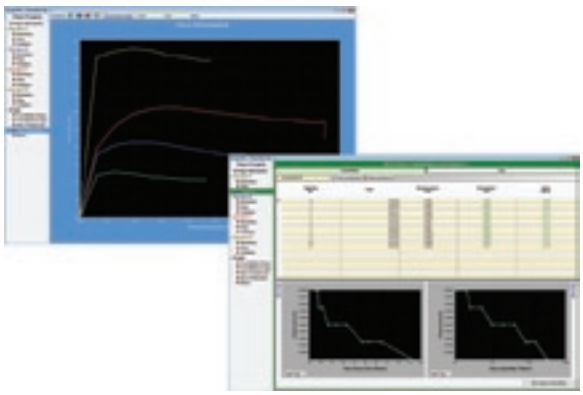
Part Numbers ending in .XX require a size code to be entered referring to the sample size to be tested.

For Direct/Residual Shear samples, sizes are: .20 = 2.0"; .242 = 2.42"; .25 = 2.5"; .40 = 4.0"; .50 = 50mm; .60 = 60mm, and .100 = 100mm.

NOTE: For Direct/Residual Shear, also, use "S" for square and "D" for round samples.

Pneumatic Direct/Residual Shear, Basic Version— HM-2550 220-240V 50/60Hz— HM-2550.4F

Similar in design to the HM-2560, this economical version is perfect for laboratories not requiring data acquisition or reporting functions. The HM-2550 has a 1,500 lbf (6.7kN) vertical load and horizontal shear force capacity, and, has built-in digital readouts for pressure and load. These are used for setting the vertical load and for the measurement of shear forces. Horizontal and vertical shear displacement values are measured by means of two mechanical dial indicators, which are included, as well as a S-Type Load Cell 2,000 lbf (10.0 kN). Shearbox assemblies and related accessories are not included and must be ordered separately. Meets ASTM D3080, AASHTO T236 and BS1377 standards.



HMTS Reporting Software, Direct/Residual Shear Module— HM-2700SW

Humboldt Material Testing Software (HMTS) provides a complete solution for the acquisition, recording and presentation of test data, as well as controlling testing operations when used in conjunction with compatible Humboldt testing equipment. HMTS works in conjunction with Microsoft Excel to present test data in easy-to-read Excel workbook format files, which can be evaluated directly or sent to any computer using Microsoft Excel.

The Direct/Residual Shear Module provides a simple, test-specific interface to control Shear test operations and automatically record data while also displaying it in real-time tables and graphs. Technicians can be freed-up for other duties with the assurance that all test data is being collected and saved.

- Test Information is stored, and all calculations are performed automatically
- Live tests and live graphing capabilities (real-time)
- Complete test report including all calculations and graphs required for testing
- Review and export tests using Microsoft Excel

See page 72 for more information on Humboldt's HMTS software.