



Marshall and TSR Compression Machine— H-1322 Compression Machine, 220V 50Hz— H-1322.5F

The Humboldt H-1322, Marshall and TSR Compression Machine, is a state-of-the-art apparatus specifically designed for Marshall and TSR testing. These tests can be used to evaluate the relative quality of materials, as well as generate input for pavement design or pavement evaluation and analysis. The microprocessor-based system incorporates a 16-bit Analog to Digital (A to D) converter with chart recorder output and RS232 computer connection capabilities. The system automatically tests and records Marshall stability and plastic flow of Bituminous mixture on one chart with an accuracy to less than 1 percent over the total range, eliminating operator error in dial readings and manual recording of data. Meets ASTM D6927, D4123-82; AASHTO T245, T283, BS 598-107. Overall dimensions are: 36" x 18" x 38-1/2"H (914 x 457 x 978mm). Shipping wt. 250 lbs. (113.6 kg)

Features include:

- The Marshall and TSR Compression Machine has a total frame capacity of 10,000 lb (45kN).
- Stress is measured with a supplied S-Type load cell.
- The apparatus features an AC single-speed motor with an operating rate of 2 in/min or (50.8mm/sec.), and a built-in chart recorder, for monitoring load vs. rate of compression.
- The 16-bit Analog to Digital converter can be connected directly to a computer or serial printer for live data monitoring.
- The apparatus automatically detects the peak value, automatically stops testing procedure upon completion and automatically activates the chart recorder for a hard copy of the test data.
- Maximum piston travel is 3-1/2" (88mm) with limit switch to prevent gearbox jams and damages.

H-1322 Dual Range Chart Paper— H-1322CP

Chart paper with dual-range scale that allows switching between 5000 and 10,000 lbf by using switch on H-1322 chart recorder. Package of 100 sheets.

Marshall Setup using the HM-2800 Load Frame

The HM-2800 is a multi-use, multi-speed machine that provides a dedicated setting for Marshall testing in addition to its ability to provide variable speeds of operation between 0.008 and 2.000 inches/minute for doing the multitude of tests required by today's labs. Pictured above is the HM-2800 Load Frame with a typical Marshall setup. See the chart below for items to order for the setup shown.

Typical Marshall Setup using HM-2800

Part #	Qty	Description
HM-2800	1	Multi-Speed Load Frame
H-4454.100	1	Load Ring, 10,000 (45kN)
H-1344	1	Flow Meter Dial Gauge 1.000" x .0001"
H-1342	1	Breaking Head

Multi-Speed Load Frame— HM-2800

Multi-Speed Load Frame, 220 50/60Hz— HM-2800.4F

See page 62 for more information on the HM-2800 Load Frame.



H-1322



HM-2800