



**Digital, Static Cone Penetrometer— HS-4210**

The HS-4210 Digital, Static Cone Penetrometer (DSCP), with its large, digital readout, makes testing and recording readings easy. The DSCP can be used to evaluate soil consistency by determining the soil's level of compaction and/or the bearing capacity. The DSCP is especially useful in evaluating shallow foundations and pavement subgrades where fine-grained and soft soils are being used. The DSCP can also be used to aid technicians in quickly selecting sites for testing, as well as correlating with other tests, based on local conditions, such as standard or modified Proctor, CBR or Bearing Capacity. The DSCP uses a dual-rod design, which eliminates the need to correct for soil friction on the rod as the cone is pushed through the material. Penetration resistance is read directly from the cone tip and registered on the digital display. The Unit comes with a 30" starter rod and a 60° cone with a 1.5cm<sup>2</sup> area.



HS-4210

**Static Cone Penetrometer— H-4210A**

Used in fine-grained, soft soils at shallow foundation and pavement subgrades to evaluate for soil consistency, level of compaction and bearing capacity. Unmatched for accuracy, reliability and ease of use. Pressure gauge with 0-70kg/cm is scaled for direct reading of cone stress, eliminating proving ring conversions. Dual rod design eliminates soil friction factor. High strength aluminum and steel construction. Standard model includes a 60° cone with 1.5 cm. max. area, a 24" (0.6m) starter rod assembly rated at 250 lbf axial force max., and a pressure gauge. Shipping wt. 8 lb. (3.63kg)



H-4210A Top detail

H-4204 close-up

H-4210A

H-4120

H-4204

**H-4210A Accessories/Replacement Parts**

|   |            |
|---|------------|
| 60° Cone with 3cm <sup>2</sup> max area   | H-4210.3   |
| Extension rod, 24 in. (0.6m)              | H-4210E.2A |
| 60° Cone with 1.5cm <sup>2</sup> max area | H-4210.1   |
| Starter rod, 24 in. (0.6m)                | H-4210.2A  |
| Replacement O-ring                        | H-4210.9   |

**Proving Ring Penetrometer— H-4204**

Used to determine the bearing capacity of subgrades, or to measure soil compaction. Light and easy to handle in the field. A rapid means of determining the penetration resistance of soil in shallow exploration surveys. Includes: 30°, 1 sq. in. (6.45 sq cm) cone; 250 lb. (1.1kN) capacity proving ring; brake type dial indicator, holds final reading until manually released; 3/4" (19mm) dia shaft, graduated at 6", (152mm) intervals; 3/4" (19mm) dia extension rod, graduated at 6" (152mm) intervals; cast aluminum T-handle. Shipping wt. 15 lbs, (6.8kg)



H-4139

**Corps of Engineers Cone Penetrometer— H-4120**

Designed to evaluate soil trafficability and manufactured to Corps of Engineers specifications. The factory calibrated dial indicator reads directly in psi. Includes 30 degree cone with 1/2 sq. in. base area, 150 lb capacity proving ring, dial indicator calibrated direct 0-300psi in 5psi increments, extension rod 5/8", (15.8mm) dia x 19" (483mm), plus handle. Shipping wt. 15 lbs. (6.8kg)

**Proctor Penetrometer Set— H-4139**

Establishes the moisture-penetration resistance relations of fine-grained soils. Includes these interchangeable needles (area in sq. in. or sq. cm): 1 (6.45), 3/4 (4.84), 1/2 (3.22), 1/3 (2.15), 1/5 (1.29), 1/10 (.65), 1/20 (0.32) 1/30 (0.22cm<sup>2</sup>) and 1/40 (0.16cm<sup>2</sup>). Replacement needles available. Meets ASTM D1558. Shipping wt. 17 lbs. (7.7kg).

**Penetration Resistance Needles for H-4139**

|   |            |
|---|------------|
| Replacement Resistance Needle Set           | H-4143N    |
| 1 sq. in. (6.45 cm <sup>2</sup> ) needle    | H-4143.1   |
| 3/4 sq. in. (4.84 cm <sup>2</sup> ) needle  | H-4143.75  |
| 1/2 sq. in. (3.22 cm <sup>2</sup> ) needle  | H-4143.50  |
| 1/3 sq. in. (1.29 cm <sup>2</sup> ) needle  | H-4143.33  |
| 1/5 sq. in. (2.15 cm <sup>2</sup> ) needle  | H-4143.20  |
| 1/10 sq. in. (0.65 cm <sup>2</sup> ) needle | H-4143.10  |
| 1/20 sq. in. (0.32 cm <sup>2</sup> ) needle | H-4143.05  |
| 1/30 sq. in. (0.22 cm <sup>2</sup> ) needle | H-4143.033 |
| 1/40 sq. in. (0.16 cm <sup>2</sup> ) needle | H-4143.025 |