



# Materials Testing Solutions

products, specials and news

www.humboldtmfg.com | marketing@humboldtmfg.com | 1.800.544.7220

## Humboldt Turns 100 and Moves into New Location



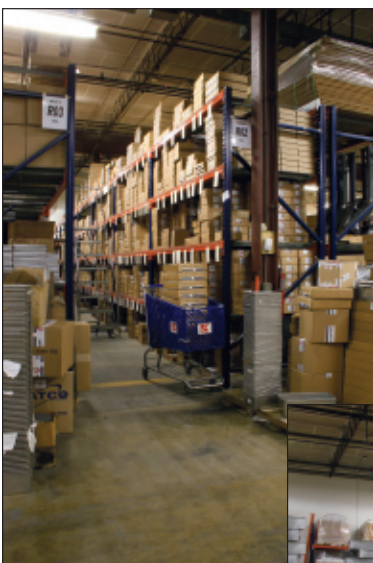
East-side shipping docks at Humboldt's new facility, looking back towards offices and main entrance.

2009 marks the 100th year of operations for Humboldt Mfg. Co. This year also marks the beginning of a new era for Humboldt with our moving into a new, larger location in Schiller Park, Illinois. This facility provides us with increased space for both warehousing and production, as well as an improved layout facilitating increased efficiencies in both shipping and manufacturing.

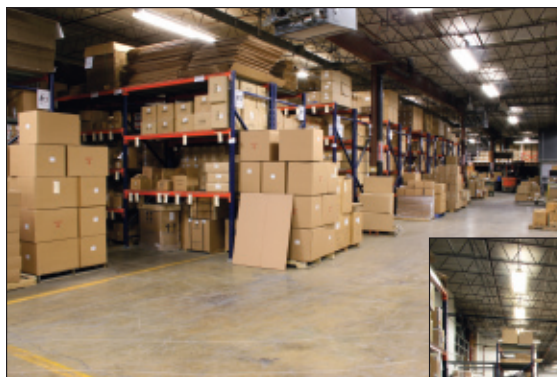
With our move to these new facilities we have also installed a new computer and phone system. While we have had some implementation problems with this new system, we believe that 2009, as well as the years to come will see us begin to reap the benefits of both of these systems.

Humboldt began operations in 1909 manufacturing asphalt, cement and oil testing apparatus and supplies in a typical 3-flat building just north of Chicago's Humboldt Park. The Company grew steadily in its early years, and, at the start of the Second World War began manufacturing a full line of labware, including burners and clamps. In 1958 the Company moved to Norridge, Illinois where it continued to build upon its product range becoming the premier U.S. provider of construction materials testing equipment.

We are excited about our 100th year and look forward to making new improvements to our products, service and organization during the year.



Warehouse shelving showing part of our sieve inventory.



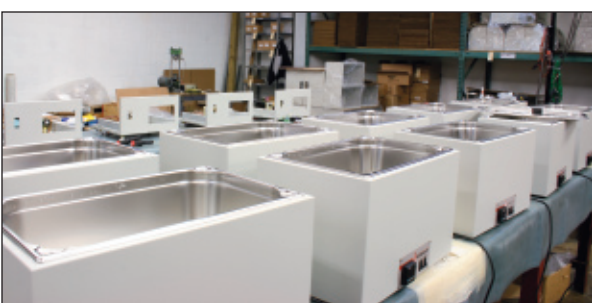
Part of the main warehouse looking towards international and truck shipment area.



Large product warehouse area.



Packing and UPS shipping area looking back into part of the main warehouse.



Preparing water baths for testing with the beginnings of HM-3000 load frames in the background.



Electronics department constructing FlexPanels and triaxial cells for orders.

# Meet Us at World of Concrete 2009— Booth N1917

## Eliminate Capping Material with New Cylinder Grinding Machine—

The NEW, manually-operated Production Cylinder-end Grinder is designed for medium production laboratories, who need a fast and precise method of preparing cylinders for compression testing. The machine's small footprint makes it perfect for most labs where space is at a premium, and, its virtually maintenance-free operation will be appreciated by the typical busy lab. The H-2966A Production Grinder is capable of preparing approximately 20 cylinders per hour for testing. It can handle 4" x 8" and 6" x 12" cylinders with equal ease and provide them plane and parallel within ASTM C617 tolerances. The grinder removes material at a rate of 1/32" (0.8mm) per pass, and is capable of quickly handling multiple passes while maintaining its preciseness. The 2966A comes complete with a simple and reliable water recirculation system.



H-2966A



H-2971B

## The New Silver Schmidt Concrete Test Hammer: Does the Work for You

Non-destructive strength testing of concrete has a whole new look thanks to the new Silver Schmidt Test Hammer. Combining the best of the original Schmidt hammer with advanced technology, makes the Silver Schmidt faster and more accurate to use, as well as offering virtually maintenance free construction.

The new Silver Schmidt automatically records each impact result and calculates the test results, providing the concrete strength in any of the many user-defined measurement modes.

The Silver Schmidt provides an easy-to-use graphical, icon interface that provides the operator complete control of the test parameters and results display. The new hammer can be attached to a computer for downloading of test information. Review of test data can also be performed with the unit itself for the last 20 measurements.

H-2968



## Curing Box For Concrete Cylinders— Perfect for Location or Lab

Lightweight, portable—74 lbs. (33.6kg)—curing box for concrete cylinders. Plastic construction is rugged, durable and rustproof. Up to 22 standard 6" x 12" (152 x 305mm) test specimens can be stored at 72 ±2°F (22.2 ±1.1°C) over an ambient range of -10 to 100°F (-23 to 37.8°C). Sturdy, 14-gauge steel bottom rack provides optimum water circulation for even curing. Bottom valve for fast drainage. Lockable lid resists tampering. Requires minimum 15 amp circuit. Includes recirculating water temperature control unit with temperature set buttons, indicating lights and digital readout for water temperature. Meets ASTM C192, C511, C31; AASHTO M201, T126, T23.



H-2912L

HM-2325A



## Data Acquisition Setups for Compressometers—

Fully automate your collection of concrete cylinder deformation and strain characteristics by using one of our compressometers and a Humboldt MiniLogger. The MiniLogger is a simple-to-use, four channel, stand-alone data-logging system, which collects data generated from LSCT transducers or digital indicators. Use model HM-2325A.3F for LSCTs and HM-2330D.3F for digital Indicators. Features include:

- Four channels with real-time data acquisition
- Backlit LCD display
- RS232 interface for computer or printer.
- Nonvolatile test data storage and instrument calibration
- Battery-backed real-time clock
- Auto conversation of instrument calibration between English or Imperial units and SI or metric units
- View logged test data via the LCD display



H-3012

## Concrete Beam Curing Covers—

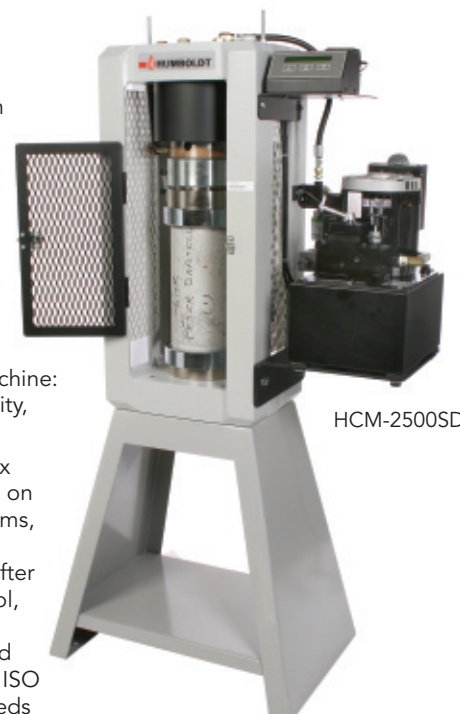
Vinyl covers with integral moistening pad to keep concrete beams moist during curing. For best results allow beam to take initial set, then saturate foam with water prior to covering beam. Aids in providing consistent and uniform curing of beams. Available in two sizes 9" x 6" x 24" for 24" and smaller beams and 9" x 6" x 36" for 30" and 36" beams.

## Perfect Compression Machine for Labs and Contractors—

- Accuracy of ±.5% of indicated load from 2,500–250,000 lbs. (11–1,112 kN)
- Choice of 3 digital load-indicating systems
- Quiet-running, continuous-duty hydraulic pump
- Supplied with platen set for 6" (150 mm) cylinders

The HCM-2500 has all the features you look for in a basic compression testing machine: accuracy, compactness, portability, versatility, and dependability.

The load frame features a wrap-around box construction with each corner fully-welded on both the inside and outside crosshead seams, providing the rugged stability needed for accurate and repeatable test results year after year. Featuring superior rate-of load control, its unique quiet-running, continuous-duty hydraulic pump and pressure-compensated loading-control valve are manufactured to ISO 9001 international quality standards. Exceeds ASTM C39, E4 and AASHTO T22 specifications.



HCM-2500SD

[www.humboldtmg.com](http://www.humboldtmg.com)

**BUY**  
**24/7**

**Moisture Meter & Thermo-Hygrometer Kit—**

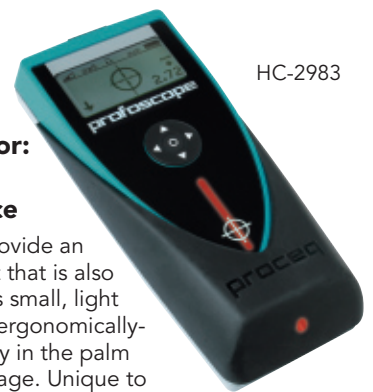
Kit includes: a HC-2991 Moisture and Humidity Meter with Software and PC Cable, Two Relative Humidity Probes, RH Probe Calibration Check Solution with Sleeve, Pack of twelve RH Sleeves, and optional instant read Infrared Surface Thermometer. Use to perform ASTM F2170-02 and ASTM F2420-05.



HC-2992

**The Profoscope Rebar Locator: Accurate, easy-to-use rebar location at an affordable price**

The Profoscope was designed to provide an accurate rebar detecting instrument that is also affordably priced. The Profoscope is small, light and has no connection cables. The ergonomically-designed instrument fits comfortably in the palm of the hand for fast and accurate usage. Unique to the Profoscope is its ability to accurately display the center point between two rebars, ideal for those looking for a place to drill.



HC-2983

**Concrete Moisture Test—**

Calcium chloride concrete moisture test, incorporating a new red dome cover for high, onsite visibility. These test modules are sold in economical 12-packs (HC-2993B) and 3-packs (HC-2993A). These kits are designed to measure the moisture vapor emission rate of concrete sub-floors using anhydrous calcium chloride. In addition, a pH test kit is included to measure the concrete's surface alkalinity. Conform to ASTM F1869-04 and F1907-04.



HC-2993B



H-4112



**Plastic, Reusable Cylinder Molds**

Lightweight, impact resistant construction. Will not crack, rust or deform. Can be reused up to 100 times. Meet ASTM specifications. 1/4" (6.2mm) wall thickness. Sold individually.

H-3043.6— 6" x 12" (152 x 305mm).  
H-3043.4— 4" x 8" (102 x 203mm).

H-3043.6



H-2999

**Laboratory Vibrator—**

**115V, 50/60Hz 7 amps 1ph— H-2999**  
**230V, 50/60Hz 3.6 amps 1ph— H-2999.5F**

Lightweight square-head laboratory vibrator is used for vibrating concrete test cylinders and molds in the laboratory or field. Unit is flexible-shaft type, powered with 3/4 HP electric motor. Shaft is 24" (610mm) long; vibrating head is 1" sq x 13" L (25 x 330mm) with a speed of 10,000 vpm. Meets ASTM C31, C138, C192.

**Chase Concrete Air Indicator Kit— H-2756**

(Isopropyl-Alcohol Method) Complete kit for measuring air content of fresh concrete includes H-2755 air indicator, instructions, cleaning brush and plastic squeeze-type bottle for alcohol in plastic storage box. Meets AASHTO T199.



H-2756

**Percometer Measures Dielectric Value, Electrical Conductivity and Temperature to Determine Material Property Values—**

The Percometer is a reliable, accurate, lightweight and easy-to-use instrument for measuring the dielectric value ( $\epsilon_r$ ), electrical conductivity (J) and temperature of materials indoors and outdoors. Dielectric value is an indication of the volumetric moisture content and the state of molecular bonding in a material. Electrical conductivity is a reflection of ionic concentration, water content and temperature. These measurements can be used to indicate—

**Moisture Damage (Structural damage)**—Elevated  $\epsilon_r$  values can indicate moisture infiltration in a wall.

**Tube Suction Test (Aggregate moisture susceptibility)**— Measures the suction properties of bound and unbound aggregates and road materials. This passive capillary test demonstrates a materials' capacity to adsorb water if available

**Asphalt Air Voids (Pavement quality control)**—Measuring  $\epsilon_r$  values for pavement can provide an indication if a pavement has been sufficiently compacted.

**Soil Moisture**—  $\epsilon_r$  is a function of the amount of free water in a material, and can be an effective tool for determining soil moisture.

**Frozen/Unfrozen & Frost Susceptibility (Soils and Road Structures)**

Freezing cycles in materials can be evaluated by monitoring  $\epsilon_r$  values since conductivity drops and  $\epsilon_r$  values decrease as materials freeze. Also, a strong correlation exists between  $\epsilon_r$  and frost susceptibility of unsaturated soils.

**Sales & Information: 1.800.544.7220**



If you're looking for an easy-to-use nuclear gauge that you can depend on day-in and day-out, the Humboldt HS-5001EZ Moisture/Density Gauge is just that— easy. Easy to operate, easy to power and easy to service. The EZ gauge features a menu-driven control panel with easy-to-use, built-in test routines and auto features, making testing a quick and accurate operation. Available in 8" (200mm) and 12" (300mm) lengths with either 1" (25mm) or 2" (50mm) increments, the EZ gauge provides a single gauge solution to density and moisture measurements.



**Radiation Safety and Certification Classes**

For information and class schedules for Radiation Safety Classes and Radiation Safety Officer Courses, click the training classes link on our website: [www.humboldtscientific.com](http://www.humboldtscientific.com) or call: **1.800.537.4183**



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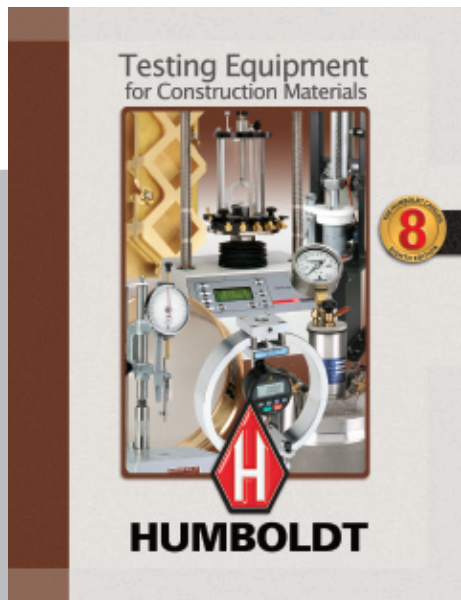


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