
Testing Equipment for Construction Materials
HUMBOLDT
Speed 1
Speed 2
Stop
EMERGENCY STOP

CEMENT

Testing Equipment For Construction Materials

HUMBOLDT

H-3852.3F

Mortar Mixer, 5L (5.3qt)

ASTM C305; AASHTO T162; EN 196
DIN 1164; BS 3892; ISO 679

Two-speed mixer designed to mix cement mortars and pastes. Mixer provides manually-controlled cement, water and sand supplies. Mixer features a 5L (5.3qt) stainless steel bowl and ASTM stirrer, and a two-speed motor, which runs at either 140 ±5 rpm or 285 ±10 rpm.

Features control panel, which provides fast, easy control in eight languages. Numerous safety features are incorporated in the mixer and includes a service program with malfunction messages for operator, including paddle/planetary speed and time monitoring. Heavy-duty construction of aluminum and cast iron provides durability and a long service life. The mixer provides a powerful motor for quiet and maintenance-free operation aided by the use of planetary gears and a toothed, belt drive. The mixing bowl is connected to the mixer by a quick-release clamping system. The distance between the mixing bowl and the stirrer can be easily and accurately be set.

Mixer design conforms to CE standards, featuring a mixing bowl cover, electronic position monitoring of the mixing bowl, emergency stop switch and restart protection.

Mortar Mixer, 5L (5.3qt)
ASTM/EN—110/230V 50/60Hz H-3852.3F

Ship wt. 165lbs. (75kg)

Mortar Mixer Components	Part #
Stainless Mixing Paddle, ASTM, EN196	H-3853.1
Stainless Bowl, ASTM, EN196	H-3853.2

H-3853.3F

Mortar Mixer, 5L (5.3qt) w/ Program Control and Auto Sand Feed

ASTM C305; AASHTO T162; EN 196, EN 413, EN 480, DIN 1164; BS 3892; ISO 679

Mixer with 5L (5.3qt) capacity provides automatic program control and auto sand feed with manually-controlled cement and water supply. Provides software with 4 standard programs installed covering the following standards: ASTM C305, EN 196 -1,3,9; EN 480 and EN 413. Two-speed mixer designed to mix cement mortars and pastes. Mixer features a 5 Liter (5.3qt) stainless steel bowl and ASTM stirrer, and a two-speed motor, which runs at either 140 ±5 rpm or 285 ±10 rpm.

Features control panel, which provides fast, easy control in eight languages. Numerous safety features are incorporated in the mixer and includes a service program with malfunction messages for operator, including paddle/planetary speed and time monitoring.

Heavy-duty construction of aluminum and cast iron provides durability and a long service life. The mixer provides a powerful motor for quiet and maintenance-free operation aided by the use of planetary gears and a toothed, belt drive. The mixing bowl is connected to the mixer by a quick-release clamping system. The distance between the mixing bowl and the stirrer can be easily and accurately be set.

Mixer design conforms to CE standards, featuring a mixing bowl cover, electronic position monitoring of the mixing bowl, emergency stop switch and restart protection.

Mortar Mixer Mortar Mixer, 5L (5.3qt) w/Program,
ASTM/EN—110/230V 50/60Hz H-3853.3F

Ship wt. 165lbs. (77kg)

H-3854.3F

Mortar Mixer, 5L (5.3qt) w/ Program Control and Auto Sand and Water Feed

ASTM C305; AASHTO T162; EN 196, EN 413, EN 480, DIN 1164; BS 3892; ISO 679

Mixer with 5L (5.3qt) capacity provides automatic program control and auto sand feed with manually-controlled cement and water supply. Different water amounts (100-600 ml) can be freely programmed into the system. Provides software with 4 standard programs installed covering the following standards: ASTM C305, EN 196 -1,3,9; EN 480 and EN 413. Two-speed mixer designed to mix cement mortars and pastes. Mixer features a 5 Liter (5.3qt) stainless steel bowl and ASTM stirrer, and a two-speed motor, which runs at either 140 ±5 rpm or 285 ±10 rpm.

Features control panel, which provides fast, easy control in eight languages. Numerous safety features are incorporated in the mixer and includes a service program with malfunction messages for operator, including paddle/planetary speed and time monitoring.

Heavy-duty construction of aluminum and cast iron provides durability and a long service life. The mixer provides a powerful motor for quiet and maintenance-free operation aided by the use of planetary gears and a toothed, belt drive. The mixing bowl is connected to the mixer by a quick-release clamping system. The distance between the mixing bowl and the stirrer can be easily and accurately be set.

Mixer design conforms to CE standards, featuring a mixing bowl cover, electronic position monitoring of the mixing bowl, emergency stop switch and restart protection. **Includes stainless steel cabinet. approx. weight of the steel furniture 85kg.**

Mortar Mixer Mortar Mixer, 5L (5.3qt) w/Program, Auto
ASTM/EN—110/230V 50/60Hz H-3854.3F

Ship wt. 170lbs. (77kg)

H-3858.3F

HC-3851

H-3841

Humboldt Laboratory Mixer, 5L. (5.3qt)
ASTM C305; AASHTO T162; EN 196
DIN 1164; BS 3892; ISO 679; NF P15-411

Humboldt's 5-Qt. Laboratory Mixer has been designed to provide material testing labs with a step up in quality from the typical lab mixer. This mixer has been designed specifically for the demands of cement and soil mixing and not as a kitchen-prep machine. This new mixer, with its clear safety cover provides a design, which allows for material, water and other additives to be easily added to the mix via a port at the top of the mixer. The clear safety cover is attached to the mixer, independent of the bowl and can be removed for cleaning. The mixer features lightweight aluminum construction and comes with a stainless steel stirrer and mixing bowl.

The H-3858 promotes extremely safe operation and complies with CE standards. It provides an emergency stop button and stops automatically when the bowl is lowered during the mixing process. Its design is optimized for easy handling including its easy-lowering bowl mechanism. The mixer provides two mixing speeds: 140 ±5 rpm and 285 ±10 rpm. Dimensions are: 9.25" x 15.5" x 22.4" (235 x 396 x 568mm).

Mixer, 5L (5.3qt) ASTM
110/230V 50/60Hz **H-3858.3F**

Shipping wt. 66lbs (30kg)

Mixer Components	Part #
Stainless Mixing Paddle, ASTM, EN196	H-3858.1
Stainless Bowl, ASTM, EN196	H-3858.2
Splash Guard Ring	H-3858.7

Mortar Mixer, 5L (5.3qt)
ASTM C305; AASHTO T162; EN 196
DIN 1164; BS 3892; ISO 679; NF P15-411

This excellent, alternative to the Hobart mixer features two-speed, manual-control with a very robust design, expressly made for the efficient mixing of cement pastes and mortar. The mixer offers two speeds: 140 rpm for revolving with 62 rpm planetary action and 285 rpm revolving with15 planetary action. This mixer features a heavy-duty design, which provides excellent stability when placed on a counter top. Provides open mixing bowl for easy visual consistency control. Simple distance control between stirrer paddle and mixing bowl maintains standard distance between bowl and stirrer.

Hoisting mechanism can also be used to lower the mixing bowl. Quick-clamping system allows mixing bowl to be attached to the mixer easily. Provided with standard stainless steel bowl and standard beater.

Mortar Mixer, 5L (5.3qt), 120V 60Hz **HC-3851**
Mortar Mixer, 5L (5.3qt), 230V 60Hz **HC-3851.2F**
Mortar Mixer, 5L (5.3qt), 230V 50Hz **HC-3851.5F**

Ship wt. 125lbs. (56kg)

Mixer, 5-Qt. (4.73L)
ASTM C305; AASHTO T162

ASTM-compliant mixer for mixing hydraulic cement pastes and mortars of plastic consistency. Mixer includes H-3844 bowl positioning adapter, a 5-qt. (4.73L) stainless steel bowl and 1 flat, stainless steel beater for mixing heavy materials. Hobart model No. N-50 operates on principle of planetary action—beater reaches every part of the batch, rotating on its axis in opposite directions as it moves around the bowl. Thoroughly blends, mixes and aerates all ingredients for consistent, predictable finished batches. Selective agitator transmission has 3 speed settings: 139, 285 and 591 RPM. Base dimensions: 10.375 x 15" (264 x 381mm). Height: 17" (432mm). Features UL-listed cord and plug. See below for accessories and replacement parts.

Mixer, 120V 60Hz **H-3841**
Mixer, 230V 60Hz **H-3841.2F**
Mixer, 230V 50Hz **H-3841.5F**

Ship wt. 55lbs. (25kg)

Mixer Components	Part #
Bowl positioning adapter	H-3844*
Bowl lid, acrylic	H-3846L
Beater— stainless steel, flat-type	H-3841.1*
Bowl— stainless steel, 5 qt. (4.73L)	H-3841.2*
Wire loop whip— stainless steel	H-3841WW
Cage (guard) for bowl, metal	H-3841.7
Wire loop whip— SS, Heavy-duty, 0.25" dia. wire	H-3841HW

* Included with H-3841 mixer.

H-3841.1

H-3841.2

H-3341

H-3342

H-3340

H-3844

H-3841WW

H-3841HW

H-3820

H-3825

H-3825BX

H-2845
H-2846
H-2847

ACCESSORIES

For Mixer Component Chart, please see previous page 235.

Humboldt Extreme-Duty Whisk

Custom, hand-made extreme-duty whisk designed for use with the H-3841 mixer. Whisk is formed from 0.25" dia. stainless steel rod for extended service. Designed to withstand the abuse of mixing heavy-aggregate concrete and asphalt mixes. Whisks are available for other mixers, see page 289 for information.

Humboldt Extreme-Duty Whisk	H-3841HW

Ship wt. 3lbs. (1.3kg)

Test Sand, ASTM 20-30

ASTM C91, C141, C185, C359, C778; AASHTO T132, T137, T185

Sand is specially graded natural silica sand to pass a No. 20 (850µ) sieve. Specific gravity is 2.65. Packed in 50 lb. (22.7kg) bags or boxes.

Test Sand, ASTM 20-30, bag	H-3820
Test Sand, ASTM 20-30, box	H-3820BX

Ship wt. 55lbs. (24kg)

Ottawa Test Sand for Cube Molds

ASTM C87, C109, C348, C359, C593, C778; AASHTO T71, T106, T185

Sand is specially graded natural silica sand graded to retain 98% on a No. 100 (150µ) sieve, 75% on a No. 50 (300µ) 30% on a No. 40 (425µ) and 2% on a No. 30 (600µ). Specific gravity is 2.65. Packed in 50 lbs. (22.7kg) bags or boxes.

Ottawa Test Sand, bag	H-3825
Ottawa Test Sand, box	H-3825BX

Ship wt. 53lbs. (24kg)

Tube Sampler with Partitions, Bulk Cement

ASTM C183; AASHTO T127

For sampling hydraulic cement in bulk shipments or bulk storage. Has two polished brass telescopic tubes with registering slots (with partitions) that open or close by rotation of the inner tube. Outer tube has sharp point to facilitate penetration. Sampler is 1.375" (35mm) dia. x approximately 63" (160cm) long.

Tube Sampler with Partitions	H-3341

Ship wt. 9.8lbs. (4.4kg)

Tube Sampler w/o Partitions, Bulk Cement

ASTM C183; AASHTO T127

For sampling hydraulic cement in bulk shipments or bulk storage. Has two polished brass telescopic tubes with registering slots (without partitions) that open or close by rotation of the inner tube. Outer tube has sharp point to facilitate penetration. Sampler is 1.375" (35mm) dia. x approximately 63" (160cm) long.

Tube Sampler without Partitions	H-3342

Ship wt. 10.9lbs. (4.49kg)

Tube Sampler, Packaged Cement

ASTM C183; AASHTO T127

For sampling hydraulic packaged cement, brass unit has hardwood handle. Unit is 1.25" (32mm) dia. x 28.75 (730mm) long.

Tube Sampler, Packaged Cement	H-3340

Ship wt. 1.7lbs. (.77kg.)

Air Entrainment Meters for Mortar

EN 1015-7, EN 459-2, EN 413-2

Air entrainment meters for testing freshly-mixed mortar with direct readings in percent. Uses hand-operated pump. These Air Meters are used for the determination of the total air content in cement paste, mortar and masonry cement. These meters have a pressure chamber, in which a defined pressure is generated. By opening the overflow valve, the pressure in the chamber is equalized within the sample container, which is filled with mortar. The pressure drop is a measurement of the air content present in the mortar. The accuracy of the pressure gauge is 1.0. Both air meters use pushbutton controls for simple test operation. Both meters use a mechanical valve to provide a reliable seal between the pressure chamber and test container. The pressure gauge is integrated in the top of the meter. Quick-release fasteners between the container and cover provide easy sealing and opening of the meter. Both meters utilize a robust hand pump for operation independent of air supply system.

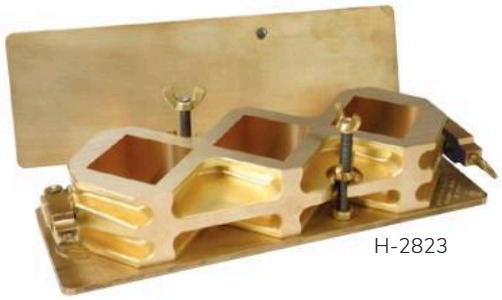
Air Meter for Mortar, 1L, EN 1015-7, 459-2	H-2845
Air Meter for Mortar, 0.75L, EN 413-2	H-2846
Air Meter for Mortar, 0.5L, EN 413-2	H-2847

Ship wt. 9.9lbs. (4.5kg)

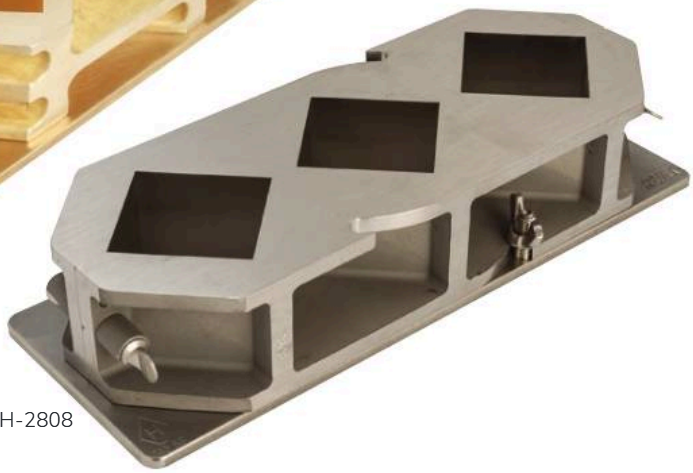
Air Meter Accessories

Description	Model
Filling Hopper (1L & 0.75)	H-2845.1
Transport Box (1L & 0.75)	H-2845.2

H-2820

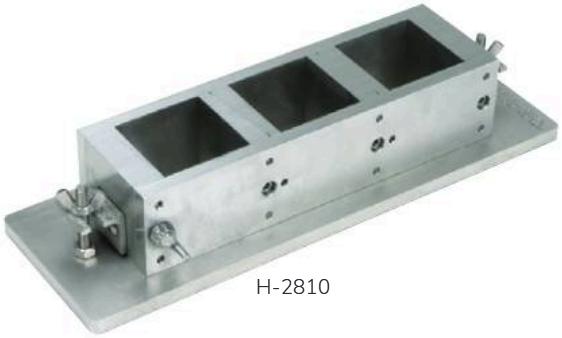


H-2823



H-2808

H-2802



H-2810

H-2821

H-2822

Cube Mold, Diagonal Bronze

ASTM C87, C91, C109, C141, C267, C307, C311, C472, C617, C618, C1073; AASHTO T71, T106.

Three-gang, cube mold with diagonal arrangement in forged bronze. Reinforcing rib prevents spreading and detachable baseplate. Available in 2" and 50mm.

2" Cube Mold, Parallel **H-2820**

50mm Cube Mold, Parallel **H-2820M**

Ship wt. 13.7lbs. (6.2kg)

Cube Mold, Diagonal Stainless Steel

ASTM C87, C91, C109, C141, C267, C307, C311, C472, C617, C618, C1073; AASHTO T71, T106.

Three-gang, 2" cube mold with diagonal arrangement in forged stainless steel. Reinforcing rib prevents spreading with detachable baseplate.

2" Cube Mold, Diagonal Stainless Steel **H-2808**

Ship wt. 12lbs. (5.4kg)

Cube Mold, Parallel Stainless Steel

ASTM C87, C91, C109, C141, C267, C307, C311, C472, C617, C618, C1073; AASHTO T71, T106.

Three-gang, cube mold with parallel arrangement in 316 stainless steel. Fitted with angles for attaching to studs threaded into detachable baseplate. Available in 2" and 50mm.

2" Cube Mold, Parallel **H-2810**

50mm Cube Mold, Parallel **H-2810M**

Ship wt. 14lbs. (6.3kg)

Cube Mold, Expansive Grout, Bronze

2" cube mold for expansive grout with diagonal arrangement, forged bronze. Reinforcing rib prevents spreading. Detachable base plate and top plate. Also available in 50mm.

Cube Mold, Expansive Grout, 2" **H-2823**

Cube Mold, Expansive Grout, 50mm **H-2823M**

Ship wt. 17.2lbs. (7.8kg)

Cover Plate for Cube Mold

Cover plate for slowing the cooling rate as compound is poured. Designed to be used with H-2820 cube molds.

Cover Plate for Cube Mold **H-2822**

Ship wt. 6.2lbs. (2.8kg)

Cube Mold, Expansive Grout, Stainless Steel

2" cube mold for expansive grout with diagonal arrangement, forged stainless steel. Reinforcing rib prevents spreading. Detachable base plate and top plate.

Cube Mold, Expansive Grout **H-2802**

Ship wt. 14lbs. (6.3kg)

Cube Mold, Econ-o-Cube

ASTM C109

The Econ-O-Cube cube mold forms three 2" test cubes in a diagonal arrangement. Mold and detachable base are held together by self-aligning thumbscrews, which ensure an even, tight fit. Molded to ASTM C109 dimensional tolerances.

Cube Mold, Econ-o-Cube **H-2821**

Ship wt. 4lbs. (2kg)


H-2809


H-2800

H-3272


H-3855

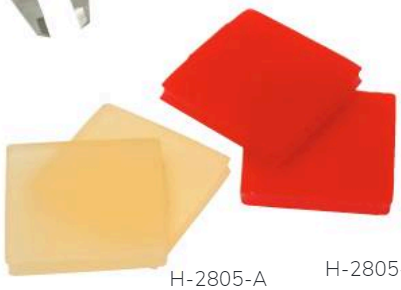

H-2860W


H-2860


H-2816.8


H-2817


H-2812


H-2805-A H-2805-R


H-2804

Cube Mold, Stamped Construction
2" cube mold with diagonal arrangement. Used with cement, gypsum, lime, mortars, etc. These molds do not meet ASTM or AASHTO specifications and must be individually measured.

Cube Mold, Stamped Construction H-2809
Ship wt. 1.7lbs. (0.7kg)

Briquette Mold
ASTM C307
Cast-bronze briquette mold for hydraulic cement mortar tensile strength tests. Bronze clamps with pins hold the two mold halves securely. Designed to prevent spreading during molding.

Briquette Mold H-2800
Ship wt. 3.5lbs. (1.5kg)

Tamper, Oak
ASTM C348
Tamper made of seasoned oak wood that has been Dipped in paraffin wax rendered Non absorptive.

Tamper, Oak H-3272
Ship wt. 0.3lbs. (0.14kg)

Tamper, Wood
ASTM C87, C109, C157, C185, C596; AASHTO T106, T137, T160
Wood tamper is 6" (152mm) long with 0.5 x 1" (13 x 25mm) cross section.

Tamper, Wood H-2860W
Ship wt. 0.3lbs. (0.14kg)

Tamper, Rubber Compound
Rubber compound tamper is 6" (152mm) long with 0.5 x 1" (13 x 25mm) cross section. Does not comply with ASTM standards.

Tamper, Rubber Compound H-2860
Ship wt. 0.3lbs. (0.14kg)

Tamping Stick
ASTM C185; AASHTO T137
Maple wood with .625" (16mm) dia. and 6" (152mm) length.

Tamping Stick H-3855
Ship wt. 0.1lbs. (0.04kg)

Rubbing Block
Ground steel block 3" dia. x 1" (76 x 25mm) for removing lose sand grains and encrustations from concrete specimen surfaces before compressive testing.

Rubbing Block H-2812
Ship wt. 0.2lbs. (0.09kg)

Digital Caliper, 0-200mm
Provides accurate outside, inside, depth and step measurements and features large, easy-to-read LCD digits, rolling thumb wheel; plus control buttons for zero, on/off and inch/mm functions.

Digital Caliper, 0-200mm H-2816.8
Ship wt. 2.2lbs. (1kg)

Dial Caliper, Stainless Steel 6" (150mm)
Easy-to-read black face dial caliper with combination inch and metric scales features 0.001"/0.1mm graduations, hardened and ground stainless steel main beam with hardened, ground and lapped measuring faces.

Dial Caliper, Stainless Steel 6" (150mm) H-2817M
Ship wt. 1.5lbs. (0.68kg)

Dial Caliper, Stainless Steel 6"
Similar to above, features a 6" measuring range with .001" graduations and .100" per revolution.

Dial Caliper, Stainless Steel 6" (150mm) H-2817
Ship wt. 1.3lbs. (0.58kg)

Certified Calipers are also available, please inquire.

2" Cube Compression Pad, Amber
Compression pad, 85 durometer, used in compression tests of 2" cubes. Used with H-2804 Retainer Caps. Sold individually.

2" Cube Compression Pads, Amber H-2805-A
Ship wt. .25lbs. (.11kg)

2" Cube Compression Pad, Red
Compression pad, 70 durometer, used in compression tests of 2" cubes. Used with H-2804 Retainer Caps. Sold individually.

2" Cube Compression Pads, Red H-2805-R
Ship wt. 0.25lbs. (0.11kg)

2" Cube Pad Retainer Caps
Stainless steel retainer caps for use with 2" cube specimens. Use with 2" compression pads to eliminate the need for capping compound. Sold in sets of 2.

2" Cube Pad Retainer Caps H-2804
Ship wt. 0.25lbs. (0.23kg)

2" Cube Compression Pads Set
Compression pads used with H-2804 Retainer Caps. Sold in set, consisting of (2) H-2805-R and (2) H-2805-A.

2" Cube Compression Pads Set H-2805
Ship wt. .5lbs. (.22kg)


H-3252


H-3251


H-3254


H-3253


H-3255


H-3256


H-3255S


H-3270


H-3260

Prism Molds		
Description	**Ship wt.**	**Model**
Application: Autoclave expansion of Portland cement; length change of mortar and concrete; potential alkali reactivity of cement/aggregate combinations; linear change of magnesium and oxychloride cements; volume change of cement paste		
1" x 1" x 10" (25 x 25 x 254mm), 1-mold, cold-rolled steel	7.3 lbs (3.3kg)	H-3252
1" x 1" x 10" (25 x 25 x 254mm), 2-mold, cold-rolled steel	9.6 lbs (4.3kg)	H-3253
1" x 1" x 5" (25 x 25 x 127mm), 2-mold, stainless steel	6 lbs (2.72kg)	H-3255S
Description	**Ship wt.**	**Model**
Application: Volume change tests of mortars		
2" x 2" x 10" (51 x 51 x 254mm), 2-mold, cold-rolled steel	20.6 lb (9.3kg)	H-3251
1" x 1" x 5" (25 x 25 x 127mm), 2-mold, cold-rolled steel	6 lb (2.7kg)	H-3255
Application: Volume change of cement past; length change of mortar and concrete		
3" x 3" x 10" (76 x 76 x 254mm), 1-mold, cold-rolled steel	24.8 lbs (11kg)	H-3254
Application: Volume change tests		
4" x 4" x 10" (102 x 102 x 254mm), 1-mold, cold-rolled steel	35.5 lbs (16.1kg)	H-3256
1.6" x 1.6" x 6.3" (40 x 40 x 160mm) 3-gang mold, cold-rolled steel **This mold, not used with gauge studs**	14.3 lbs (6.4kg)	H-3270


H-2905.1


H-3251RC
H-3257


H-3258DD

Prism Molds
ASTM C490

Designed to produce required 10" effective gauge length, prism test bars. Molds feature removable partitions, base and end plates. Effective gauge length is measured from inside end of the studs. Molds produce cement prism specimens 11.25" long. Including studs, outside to outside length of specimen is 11.625".

Prism Molds — see chart

Ship wt. see chart

Gauge Studs
ASTM C151, C157, C227, C490; AASHTO M210, T107.

Gauge studs have stainless steel contact points and are knurled and threaded for use with cement prism molds. Packaged 10 per bag.

Gauge Studs — H-3260

Ship wt. 0.15lbs. (0.06kg)

Tamping Rod
ASTM C157, C192; AASHTO T60.

Round, straight steel .375" dia. x 12" (10 x 305mm). Both ends rounded to a hemispherical tip the same diameter as the rod.

Tamping Rod — H-2905.1

Ship wt. 0.5lbs. (0.23kg)

Restraining Cage, 2" x 2" x 10"
ASTM C806

For 2" x 2" x 10" (51 x 51 x 254mm) prism molds. Features 1/4-20 continuous threaded rod and acorn nuts.

Retaining Cage, 2" x 2" x 10" — H-3251RC

Ship wt. 1.4lbs. (0.63kg)

Restraining Cage, 3" x 3" x 10"
ASTM C878

For 3" x 3" x 10" (51 x 51 x 254mm) prism molds. Features 1/4-20 continuous threaded rod and acorn nuts.

Restraining Cage, 3" x 3" x 10" — H-3257

Ship wt. 2.8lbs. (1.27kg)

Demold Device for Prism Molds
Handy device for removing prism samples from molds.

Demolding Device for Prism Molds — H-3258DD

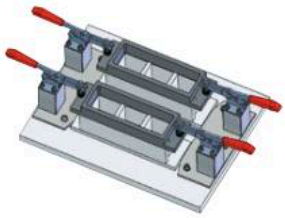
Ship wt. 4lbs. (1.8kg)

Go-No Go Gauge
For gauge stud and molds.

Dimensions: 1"x 1" x 10" molds.

Go-No Go Gauge — H-3258

Ship wt. 2lbs. (0.9kg)



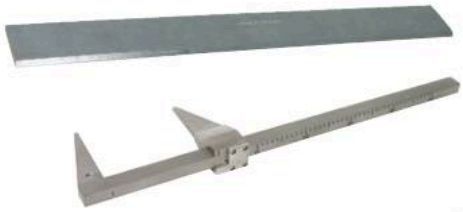
CE

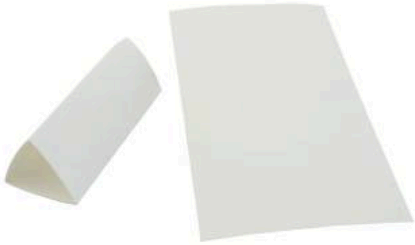
HUMBOLDT


psi
kPa
MARSH


C30362


HUMBOLDT





HUMBOLDT

CE

CE

HUMBOLDT

H-3493A

H-3491

H-3320

H-3490A H-3492A

H-3162.5F

H-3161

H-3601

Organic Impurities Test Set
ASTM C40; AASHTO T21

Determines presence of injurious organic compounds in sands used in cement mortar or concrete. Test serves as warning that further tests of sands are necessary before they can be approved for use. Air shipments must meet Dangerous Goods requirements because of Sodium Hydroxide Beads. Order H-3493X without Sodium Hydroxide Beads to avoid Dangerous Goods requirements.

Organic Impurities Test Set H-3493A
Test Set, w/o Sodium Hydroxide H-3493AX
Ship wt. 6.8lbs. (3kg)

Graduated Bottle
12 oz. (.35L) graduated bottle for organics impurities test.

Graduated Bottle H-3490A
Ship wt. 0.8lbs. (0.3kg)

Organic Color Wheel
ASTM C40; AASHTO T21

Color comparison wheel for use with organic impurities test. Color wheel has five different color filters to compare to test solution.

Organic Color Wheel H-3492A
Ship wt. 0.6lbs. (.27kg)

Sodium Hydroxide Beads
1lb (454g) Container of Sodium Hydroxide Beads. Air shipments must meet Dangerous Goods requirements.

Sodium Hydroxide Beads H-3491
Ship wt. 1.5lbs. (.68kg)

Reaction Container
ASTM C289

For determining potential alkali reactivity of aggregates (chemical method) when used with high alkali cements. Stainless steel unit is 2" dia. x 2.25" high (51mm dia. x 57mm) fitted with air-tight cover. 50-75ML capacity.

Reaction Container H-3320
Ship wt. 1.3 lbs. (0.56kg)

Cement Calorimeter, Digital
ASTM C186

Features precision digital thermometer for determining heat of hydration of cements by measuring difference between heat of solution of dry cement and heat of solution of a separate sample partially hydrated for 7 to 28 days. Constant-speed stirrer maintains uniform temperature throughout liquid and supplies sufficient agitation to keep solid reactant suspended in the acid mixture. Includes insulated wood case, insulated 1G (3.8L) can; 1 pt. (0.47L) vacuum jar with stopper; 2-channel, Precision Digital Thermometer with a resolution of 0.001°C; plastic funnel; stirring paddle and chuck; geared synchronous motor.

Cement Calorimeter, Digital, 120V 60Hz H-3161
Cement Calorimeter, Digital, 230V 50/60Hz H-3161.4F
Ship wt. 35lbs. (15.8kg)

Calorimeter
EN 196-9

Used to measure the heat of hydration of cement by the semi-automatic Langavant method. Test calorimeter includes factory calibration certificate. Temperature recorder provides (4) input channels (1x Reference and max. 3x test Calorimeter) for recording and transmission of temperature values. Analysis software provides reporting and editing function for calculating the heat of hydration. Unit includes: test calorimeter; reference calorimeter; mortar-sample container, temperature recording device and analysis software. Power for unit is supplied by USB from a PC or laptop. Does not include required PC.

Calorimeter H-3162.5F
Ship wt. 37lbs. (17kg)

Bleed Stability of Cementitous Grout Kit
ASTM C1741

Humboldt's H-3601 Bleed Stability Grout Kit is used to evaluate the bleed stability of a freshly-mixed grout under static pressure. It can be used in the field as a quality control test or in the laboratory to qualify grout materials. When using this test method, contract documents should reference the number of required tests, as well as the test pressure and acceptance criteria desired for the testing procedure.

The H-3601 Kit Includes:

- Filtration Funnel, 47mm
  (includes viton o-rings and stainless steel 45 µm (No. 325) screen)
- A/E Glass Fiber Filter, 47mm
- Graduated Glass Cylinder, 10ml
- Base and Support Rod
- Clamp, Large Swivel Jaw, Coated
- Clamp Holder (up to 3/4"/19mm)

A pressure supply with gauge, pressure regulator, valve and metal drip wick (paper clip) are also needed, but are not provided.

Bleed Stability of Cementious Grout Kit H-3601
Ship wt. 8lbs. (3.6kg)












H-3810

NOTES

.3F part numbers are 120/220V 50/60Hz

H-3812

H-3814

H-3813B

H-3811

H-3056.3F

H-3056.1

H-3056.4 H-3056.2

H-3817.20

H-3817

H-3816.1M

H-3056.11

Blaine Air Permeability Apparatus

ASTM C204; AASHTO T153

The Blaine Air Permeability Apparatus determines the fineness of Portland cement in terms of specific surface area expressed as the total surface area in square centimeters per gram of mortar or cement. The Blaine works by drawing a definite quantity of air through of bed of cement exhibiting a definitive porosity value. The number and size of the pores in a prepared bed of definite porosity is a function of the size of the particles and determines the rate of airflow through the bed. This procedure is outlined in ASTM C204, Method A and AASHTO T153. The Humboldt Blaine Air Permeability Apparatus consists of: calibrated U-tube manometer, ground glass joint, stainless steel test cell and plunger, rubber aspirator bulb and perforated disc. Includes an 8 oz. (226.8g) bottle of red manometer fluid, filter paper, wood block for holding test cell during filling and a funnel. Mounted on finished wood panel with rubber-footed base. To perform this test, NIST Portland Cement #114R is required by the ASTM standard for calibration. See Accessories H-3817 and H-3817.20.

Blaine Air Permeability Apparatus **H-3810**

Ship wt. 7lbs. (3.1kg)

H-3810 Accessories & Replacement Parts

Description	Model
Rubber bulb	H-3811
Cell and plunger	H-3812
Cell and plunger, Calibrated	H-3812CAL
Perforated brass disc	H-3813B
Perforated stainless steel disc	H-3813S
Manometer fluid, 8oz (240ml)	H-3814
Manometer u-tube, calibrated	H-3815
Filter paper discs, medium retentive, 1.27cm, pkg 1000	H-3816.1M

Portland Cement Fineness Standard, SRM 114R

This Standard Reference Material (SRM) is used in calibrating fineness testing equipment according to ASTM Standard Methods. The SRM unit consists of a glass vial with plastic caps containing powdered cement (each vial is contained in a sealed foil bag). Each vial contains approximately 5g of cement.

SRM 114R 1 vial **H-3817**

SRM 114R, package of 20 **H-3817.20**

Ship wt. 0.5lbs. (0.2kg)

Blaine Apparatus, Semi-Automatic

ASTM C204; AASHTO T153, EN 196; BS 4550

Determines fineness of cement in terms of specific surface expressed as total surface area square centimeters per gram. To obtain the most accurate results, the test should be performed in a temperature-controlled environment. The Semi-automatic Blaine Apparatus provides more accuracy and precision than provided by the manual Blaine Apparatus. The device uses an automatic pump and timer to evaluate the time precisely. Calibration of this unit is done by using various reference sands. To obtain the most accurate results, the test should be performed in a temperature controlled environment. Unit includes: the unit with an electric pump and timer; measuring cell, filter papers (12.8mm, 1000pk.; fill oil (50ml); plug; thermometer; brush and funnel.

Blaine Apparatus, Semi-Automatic **H-3056.3F**

Ship wt. 15lbs. (6.8kg)

H-3056.3F Accessories & Replacement Parts

Description	Model
Calibration Sand, Coarse, 125g	H-3056.2
Calibration Sand, Fine, 125g	H-3056.4
Fill Oil, 150ml	H-3056.5
Light Grease	H-3056.10
U-shaped Tube	H-3056.6
Filter Papers, 12.8mm (1000)	H-3056.1
Measuring Cell, 1.8cm³	H-3056.11
Perforated Disc	H-3056.8
Tamper	H-3056.13

H-3058.3F

H-3059.3F

H-3056.5

H-3056.5

H-3058.5

H-3058.1

Electronic Blaine Apparatus, Dyckerhoff

The Electronic Blaine Apparatus, Dyckerhoff system is a semi-automatic device with pump and time registration for the rapid determination of specimen characteristics. This device is a semi-automatic cement air permeability tester used for the determination of the specific surface or Blaine value. Once the test material is set inside the chambers, the test procedure is able to measure the time for the user. Measuring cell dia. is 41 mm (1.6"). Volume of measuring cell is 73 cm3. Unit includes apparatus, measuring cell, filter papers ø41mm 500pk, fill oil 150ml, tamper and dust filter ø13mm.

Electronic Blaine Apparatus, Dyckerhoff H-3058.3F

Ship wt. 47lbs. (21.3kg)

PC-Controlled Blaine Apparatus, Dyckerhoff

The PC-controlled, electronic Blaine Apparatus, Dyckerhoff system provides an automatic test procedure and evaluation, complete with software, for one cell. Once the test material is set inside the chamber, the test procedure is able to measure the values for the user. This device provides quick test preparation, which does not require the operator to determine the weighed quantity, as precise as he would for the standard procedure. After test preparation, the device can perform the test automatically and the software records all information without need of supervision. Apparatus and software are able to measure the final result for the user. Measuring cell dia. is 41 mm (1.6"). Volume of measuring cell is approximately ca. 73cm^3. Comes complete with apparatus, measuring cell, filter papers ø41mm 500pk, fill oil 150ml, tamper and dust filter ø13mm, software.

Does not include required PC.

PC-Controlled Apparatus, Dyckerhoff H-3059.3F

Ship wt. 47lbs. (21.3kg)

H-3058, H-3059 Accessories & Replacement

Description	Model
Reference Sand, Coarse, 600g	H-3058.7
Reference Sand, Fine, 600g	H-3058.8
Fill Oil, 150ml	H-3056.5
U-Shaped Tube	H-3056.6
Filter Papers, 41mm (500)	H-3058.1
Foam Plugs, Dust Filters (10)	H-3058.5
Precision Digital Gauge	H-3059.6
O-Ring for Measuring Cell	H-3058.2
Perforated Disk, ø40 x 1.5mm	H-3058.4

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Vicat Consistency Apparatus
ASTM C91, C141, C187, C191, C308, C451, C472; AASHTO T129, T131, T186

Reversible stainless steel plunger with 10mm dia. on one end and threaded, H-3070 1mm dia. stainless steel needle on the other. Weight of plunger assembly with adjustable indicator is 300g total. This includes the 1mm stainless needle. Graduated 0-50mm scale. Includes frame with bakelite platform, graduated 0-50mm scale, reversible plunger assembly with H-3070 1mm diameter stainless steel needle, H-3080 conical mold and H-3049 glass plate.

Vicat Consistency Apparatus H-3050

Ship wt. 5lbs. (2.2kg)

Vicat Apparatus, Modified, 400g
ASTM C191, AASHTO T131, EN196/3

Modified vicat apparatus with 10mm dia. plunger and H-3061 100 gram weight. Weight of plunger assembly with adjustable indicator is 400g total. Includes graduated 0-50mm scale, frame with bakelite platform, plunger assembly, H-3080 conical mold and H-3049 glass plate.

Vicat Apparatus, Modified, 400g H-3060

Ship wt. 4.6lbs. (2kg)

Vicat Consistency Apparatus, Modified, 50g
ASTM C110

Modified consistency vicat apparatus with 19mm dia. aluminum plunger on .25" rod. Weight of plunger assembly with adjustable indicator is 50g total. Includes graduated 0-50mm scale, frame with bakelite platform, plunger assembly, H-3080 conical mold and H-3049 glass plate.

Vicat Consistency Apparatus, Modified, 50g H-3090

Ship wt. 5lbs. (2.7kg)

Vicat Apparatus, Set Time & Consistency
ASTM C807

Designed to switch between 17.5mm dia. plunger for consistency determinations and a 2mm dia. needle for time of set determinations. Plunger assembly with adjustable indicator weighs 400g with 17.5mm needle attached and 300g with 2mm needle. Includes graduated 0-50mm scale, frame with bakelite platform, plunger assembly with adjustable indicator and H-3086 brass ring mold (76mm ID x 40mm).

Vicat Apparatus, Set Time & Consistency H-3085

Ship wt. 4.7lbs. (2.1kg)

Vicat Consistency Apparatus, Modified, 30g
ASTM C110

Modified consistency vicat apparatus with 12.5mm dia. aluminum plunger on .25" rod. Weight of plunger assembly with adjustable indicator is 30g total. Includes graduated 0-50mm scale, frame with bakelite platform, plunger assembly, H-3080 conical mold and H-3049 glass plate.

Vicat Consistency Apparatus, Modified, 30g H-3120

Ship wt. 10lbs. (4.5kg)

Modified Vicat Cone Penetrometer, 100g
American Dental Association

Features a 35g magnesium cone with a 65g brass weight for a total plunger weight of 100g. Includes frame with bakelite platform, graduated 0-50mm scale, magnesium cone plunger assembly with adjustable indicator, 65g weight and H-3080 conical mold.

Modified Vicat Cone Penetrometer, 100g H-3134

Ship wt. 6.8lbs. (3kg)

Modified Vicat Cone Penetrometer, 35g
ASTM C472

Used to evaluate unsanded plaster. Features a magnesium cone and plunger assembly with a total weight of 35g. Includes frame with bakelite platform, graduated 0-50mm scale, magnesium cone plunger assembly with adjustable indicator and H-3080 conical mold.

Modified Vicat Cone Penetrometer, 35g H-3135

Ship wt. 6.8lbs. (3kg)

Modified Vicat Cone Penetrometer, 50g
ASTM C472

Used to evaluate unsanded plaster. Features a magnesium cone and plunger assembly, which includes a 15g weight for a total plunger weight of 50g. Includes frame with bakelite platform, graduated 0-50mm scale, magnesium cone plunger assembly with weight and adjustable indicator and H-3080 conical mold.

Modified Vicat Cone Penetrometer, 50g H-3137

Ship wt. 4lbs. (1.8kg)

Modified Vicat Cone Penetrometer, 200g
ASTM C780, C185

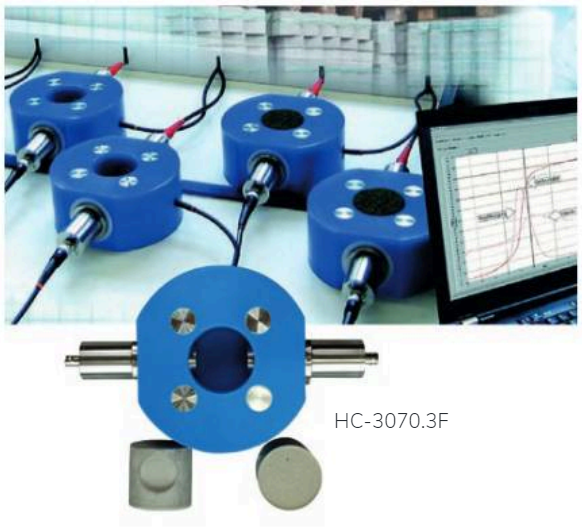
Used to evaluate unsanded plaster. Features an aluminum cone, 1.625" x 3.625" (41.3 x 92.08mm) and blunted to a hemisphere a distance of .125" (3.2mm) for an overall length of 3.5" (88.9mm) and plunger assembly with adjustable indicator. Total plunger weight is 200g. Includes frame with bakelite platform, aluminum cone plunger assembly with adjustable indicator and H-3840 400ml brass measure cup as specified for ASTM C185.

Modified Vicat Cone Penetrometer, 200g H-3133

Ship wt. 7lbs. (3.1kg)

HUMBOLDT

HC-3060A.4F


HC-3070.3F

Multiple Bond Strength Pull-off Tester, MHP400
EN 12004-2, EN 12002, EN 1324, DIN 1048-2, DIN 13279-2, EN 13892-8, ISO 4624 (more)

The multiple Bond Strength Pull-off Tester is used for testing bond strength of adhesives, mortar, coatings paints, etc. It provides computer-controlled test execution and evaluation.

Tester is optimized for 400 x 400mm plates to glue on samples, for example 50 x 50mm (test stamps must be ordered separately) Double-operative test cylinder in servo slide quality (extra low-friction), with piston stroke 100 mm and a rotation prevention

Massive, torsion-resistant machine frame for optimal determination of malleability until sample destruction (requires position measurement system). Heavy-duty, linear slides for easy insertion of test plates. Lifting table with two-handed control to position test plate on the counter holder, which can be adjusted for testing different plate heights. Positioning of traction body is via low-friction linear slides. Machine frame bolts to control cabinet. (Optional: prepared for connection with a control cabinet of a standard cement/mortar testing machine)

Control cabinet

Control cabinet with main switch, under-voltage release and emergency stop switch, as well as a Schuko socket on the front panel. Connection plug CEE plug 16 A (3~ 400 V, 50 Hz). Universal, digital measuring and control electronics is provided. The control electronics enable a fully-automatic test execution with given loading speeds for force-controlled tests (position and strain-controlled tests optional) With sensitive and adjustable break detection, the failure of the sample is detected early.

Hydraulic system

The powerful hydraulic unit with 20L oil tank included with all necessary safety, control and directional valves according to DIN 4413. It generates a maximum system pressure of 350 bar and a volume flow of 1.2 L / min. A fine 3µm pressure filter in the pressure line filters the hydraulic oil for protecting the system components. Includes filter pollution, oil level and temperature switch (80°C)

The hydraulic unit is placed inside of the control cabinet and is thereby particularly low noise <66 dB (A). A high-quality, servo valve for pressure or volume flow control enables the most precise force and stroke control (closed-loop control).

Includes Test and Motion Software preinstalled and configured on All-in-one PC.

Specifications	
Capacity	4500 lbs. (20kN)
Force display range	0 - 20kN, class 1
Stroke	3.93" (100mm)
Platen dimension	15.78" x 15.78" (400 x 400mm)
Sample size	1.96" x 1.96" Ø50 (1.96") (50 x 50mm)
Power	3ph. 230V 50/60Hz
Dimensions	(1200 x 800 x 1600mm) 47.24" x 31.49" x 62.99"

Machine requires configuration quote for specific application to determine price.

Multiple Bond Strength Pull-off Tester HC-3060A.4F

Ship wt. 1443lbs. (650kg)

HC-3060A.4F Accessories, Spare Parts

Description	Model
Stainless steel pulling plate 50mm dia.	HC-3060A.1
SS Square pulling plate 50 x 50mm	HC-3060A.2
Draw bolt for pulling plate	HC-3060A.3

Ultrasonic Measuring System

This 8-channel, ultrasonic measuring system is specifically designed to measure the setting times of materials, such as cement, mortar, gypsum and concrete. The system is comprised of eight (8) measuring units with ultrasonic probes and temperature sensors, which are connected to an 8-channel hub. This hub is connected, via a USB cable, to a PC computer running the control software, which allows control and evaluation of each measuring unit.

The system provides a high-precision (0.05 µs resolution) monitoring of the complete setting process from mixing to 28-day consistency in one test. The software provides an intuitive user-interface with direct-reading results from different modelings. The system provides a very-high reproducibility of the measurement results. It is able to detect deviations in the results early in the testing stage, which can speed up the testing process and provide an optimal process for maintaining quality control of production and a substantial reduction in development times and costs.

Features:

- Measuring Period: 15 minutes - 31 days
- Measuring Interval: 10 seconds - 60 minutes
- Ultrasonic velocity in m/s or runtime in µs
- Derivation (acceleration) and curvature
- Temperature inside the specimen
- Various zoom and scaling features also during the tests
- Reference measurements: online comparison of running measurements
- Envelope curves: definition of acceptable deviations from reference measurements
- Detection of initial set and final set
- Evaluation, Excel-export and printing during the running measurements
- Automatic logging of all measurements
- Log file browser with sort function (e.g. date product, filename, user)
- Calculation of dynamic modulus of elasticity

Includes UltraTestLab© Control Software. Requires PC computer, not included.

Ultrasonic Measuring System HC-3070.3F

Ship wt. 16lbs. (7.2kg)


HC-3042.4F


HC-3043.4F


HC-3046.4F.3


HC-4792


HC-4791

Humidity Curing and Storage Chambers
ASTM C109; EN 196-1

These humidity cabinets have been designed specifically for the curing and storage of mortar prisms and cubes in 3-gang molds. They feature durable stainless steel construction with durable specimen shelves that stand up to the loading and unloading of molds.

These chambers maintain a curing temperature 20 - 27°C (68 - 81°F) at an accuracy of ±1°. A humidity reading of > 95% can be maintained. These parameters are maintained through the use of an electronic, adjustable controller for both temperature and humidity.

Humidity Curing and Storage Chambers
ASTM C109; EN 196-1

These upright humidity cabinets are available with 6, 8 or 12 shelves.

Specification	Value
Capacity	
6-Shelf Model	24 EN 196 molds, 60 ASTM C109 2" cube molds
8-Shelf Model	32 EN 196 molds, 80 ASTM C109 2" cube molds
12-Shelf Model	48 EN 196 molds, 120 ASTM C109 2" cube molds
Dimensions	
All Models	55" x 31.4" x 761400" (1400 x 800 x 1930mm)
Power	230V 50/60Hz - 1200W

Humidity Curing Chamber, 6-shelf **HC-3040.4F**
Ship wt. 772lbs. (350kg)

Humidity Curing Chamber, 8-shelf **HC-3041.4F**
Ship wt. 794lbs. (360kg)

Humidity Curing Chamber, 12-shelf **HC-3042.4F**
Ship wt. 860lbs. (390kg)

Workbench-Style Humidity Curing Chambers
ASTM C109; EN 196-1

These humidity cabinets are designed as a work-bench to provide a work surface for a lab. They are available with 3, 6 or 9 shelves.

Specification	Value
Capacity	
3-Shelf Model	12 EN 196 molds, 30 ASTM C109 2" cube molds
6-Shelf Model	24 EN 196 molds, 60 ASTM C109 2" cube molds
9-Shelf Model	36 EN 196 molds, 90 ASTM C109 2" cube molds
Dimensions	
3-Shelf Model	63" x 31.4" x 35.4" (1600 x 800 x 900mm)
6-Shelf Model	89" x 31.4" x 35.4" (2255 x 800 x 900mm
9-Shelf Model	104" x 31.4" x 35.4" (2650 x 800 x 900mm
Power	230V 50/60Hz - 1200W

Workbench Curing Chamber, 3-shelf **HC-3043.4F**
Ship wt. 529lbs. (240kg)

Workbench Curing Chamber, 6-shelf **HC-3044.4F**
Ship wt. 661lbs. (300kg)

Workbench Curing Chamber, 9-shelf **HC-3045.4F**
Ship wt. 882lbs. (400kg)

Data Box, Shrinkage Channel
The Databox has a modular structure allowing 1 to 4 shrinkage channels to be connected. The power supply (USB) is via PC connection.

- Measurement sequence control with test plan
- Timer function for automatic measurement
- Measurements independently of each other running in parallel on different channels
- Automatic storage
- Data output in an Excel-compatible chart
- Software (Windows) includes 1 basic license for 1 port. For each additional channel an additional license and a connection cable must be purchased.

A standard PC with monitor, is required, but not supplied

Data Box, Shrinkage Channel **HC-4792**
Ship wt. 2.2lbs. (1kg)

Shrinkage Channel
The Shrinkage Channel is used to test grout and floating screed for shrinkage and expansion. Channel is made from stainless steel and the front has stabilizing claws. Measuring sample length is 1000mm. Channel width is 100mm at the top and 90mm at the bottom. Depth is 50mm. Includes digital gauge with data output. Measuring range is 12mm with an accuracy of 0.01mm.

Shrinkage Channel **HC-4791**
Ship wt. 12.1lbs. (5.5kg)

Water bath for Standing Mortar Prisms
EN 196-1

Consisting of: ·Stainless steel frame with 2 plastic tanks

- Wet storage capacity for 230 specimens
- Plastic grating to fix the specimens
- Thermostat heating system
- Without cooling device
- Dimensions: (wxdxh) = 46.8" x 28.1" x 49.8" (1190 x 715 x 1265mm)
- 400V 60Hz, 3ph with 16 A CEE plug

Water bath for Mortar Prisms **HC-3046.4F.3**
Ship wt. 253lbs. (115kg)

H-4790A


HC-2842


HC-2843A


HC-2843


H-4791

HC-2845A


H-2818


H-2818HD

H-2818MS

Mud Balance
ASTM D4380

The mud balance provides a simple, practical method for the accurate determination of fluid density. The item's durable aluminum construction makes it ideal for field use. It's high-impact plastic case protects the balance during transport while providing a secure base for the balance during use. Scale reads in pounds per gallon (6-24 lb/gal); specific gravity (0.72-2.88 gms/cm3); pounds per cubic foot (45-180 lb.cu ft), and pounds per square inch per 1,000 feet of depth (310-1250 lb/sq in/100ft of depth). The H-4790A mud balance meets all the requirements of the API standard procedures for testing water base drilling fluids, oil base drilling fluids and oil well cements.

Mud Balance **H-4790A**

Ship wt. 5lbs. (2.2kg)

Tru-Wate Density Balance
ASTM D4380

The TRU-WATE Mud Balance is an instrument for measuring the absolute density of a fluid sample. With the TRU-WATE Balance, the density of a fluid sample, such as cement slurry, can be measured in a fixed volume sample under pressure. By pressurizing the sample cup the entrained air or gas can be decreased to a negligible volume, thus providing a slurry density measurement more closely in agreement with the true density which will be realized under down-hole conditions. This density balance is constructed of premium metals for durability, accuracy and ease of use. A high impact plastic case protects the balance during transport and provides a secure base in its working position.

TRU-WATE Density Balance **H-4791**

Ship wt. 5lbs. (2.2kg)

Marsh Funnel Viscometer
ASTM D6910

The marsh funnel viscometer is a rugged, easy to operate instrument that is used for making rapid, on the spot measurements of drilling mud viscosity. Marsh funnel readings are only general measurements, but the frequent reporting of the marsh funnel viscosity will alert the mud engineer to sudden changes in the mud viscosity that could require corrective action. The marsh funnel Viscosity is the ratio of the speed of the mud as it passes through the outlet tube (the shear rate) to the amount of force— the weight of the mud itself, which is causing the mud to flow (the shear stress). marsh funnel viscosity is reported as the number of seconds required for one quart of mud to flow out of a full marsh funnel.

Marsh Funnel Viscometer **HC-2842**

Ship wt. 3lbs. (1.3kg)

1 Liter Measuring Cup for Marsh Funnel
1 liter, plastic measuring cup used for collecting sample from marsh funnel.

1 Liter Measuring Cup **HC-2843A**

Ship wt. 1lbs. (0.45kg)

1 Liter Measuring Cup for Marsh Funnel
1 liter, plastic measuring cup used for collecting sample from marsh funnel.

1 Liter Measuring Cup **HC-2843**

Ship wt. 1lbs. (0.45kg)

Sand Content Test Set
ASTM D4380

The sand content kit is a simple, accurate and inexpensive sieve analysis apparatus for determining the sand content of drilling muds. The sand content kit consists of a special 200-mesh sieve 2.5" in diameter, fastened inside a collar upon which a small funnel is fitted on either end. This is used with a 10 ml glass measuring tube, graduated to read from 0 to 20% the percentage sand by volume. The collar and funnel are made of polyethylene and the screen is made of brass. A 500ml wash bottle and carrying case are included.

Sand Content Test Set **HC-2845A**

Ship wt. 3lbs. (1.3kg)

Mat Depth Gauge, Fireproofing
Gauge for measuring the depth of fireproofing. Plastic body with steel probe. Range: 0-6" (0-150mm).

Mat Depth Gauge, Fireproofing **H-2818**

Ship wt. 0.3lbs. (0.13kg)

Mat Depth Gauge, Fireproofing
Gauge for measuring the depth of fireproofing. Plastic body with steel probe. Range: 0-3" (0-76mm).

Mat Depth Gauge, Fireproofing **H-2818HD**

Ship wt. 0.3lbs. (0.13kg)

Mat Depth Gauge, Fireproofing
Gauge for measuring the depth of fireproofing. Plastic body with steel probe. Range: 0-3" (0-76mm).

Mat Depth Gauge, Fireproofing **H-2818MS**

Ship wt. 0.3lbs. (0.13kg)