



# AMERICAN CUBE MOLD, INC.



**Testing Equipment Catalog** 





# **Molds Designed To Fit Your Every Need**

#### **POLY-CUBE MOLD**

Our original polyethylene plastic three gang 2" cube mold, designed and produced in 1985, has since been proven to be reliable, durable, and easy to strip and reassemble. Most of all, this economical mold produces specimens that test equally with traditional brass molds. This mold made out of polyethylene has become a favorite among many satisfied customers.



ACM 1-K Poly Cube Mold Kit.....

Kit contains: Three gang mold, Top, Compactor tamper

ACM-RR Ready Release, Silicone Mold Release 18 oz. - price per can ......



#### ALL BRASS CUBE MOLD

Meets the Standards of ASTM C 109

Machined out of brass, this three gang 2" x 2" cube mold makes 3 compression test cubes at once. This mold casts cubes in a diagonal arrangement with a detachable brass base plate. Wing nut clamps lock the mold to the base while stainless thumb screws secure halves tightly together. Large screened off upper surface area makes this mold a preferred choice. Optional accessories include an all brass

fitted top, or a cover plate designed to pour molten sulfur capping compound down through taper holes for testing compressive strength.

ACM-7 BRASS CUBE MOLD WITH BASE

ACM-75 STAINLESS STEEL CUBE MOLD WITH BASE.....

**BRASS CUBE MOLD ACCESSORIES** 

ACM-7C Brass cover.....

ACM-7SSC Stainless steel cover .....

ACM-7CS Cover plate for casting capping compound cubes ......

ACM-7PC 1/2" thick plastic cover plate.....

ACM-25 Individual tamping rod.....

#### CUSTOM MOLDS

#### For your custom needs!

ACM, Inc. manufactures easy to clean high density polyethylene beam and cube molds which can be custom fabricated to your specifications.

Some popular sizes are as follows:

ACM-CM4 4" cube mold (two gang) .....

ACM-CM3 3" x 4" x 16" beam mold.....



TURN TO PAGE 7 FOR MORE MOLDS AND SUPPLIES

#### WELCOME TO AMERICAN CUBE MOLD, INC.

American Cube Mold was established in 1985. We created the first poly cube mold. Since then we have developed and manufactured the Cube Maker™, plastic fiber reinforced Volumetair™, heavy duty AR-B™ Type B pressure meter, Pro Cali-Can™ and the Type A Entrainment Meter. AMERICAN CUBE MOLD, INC. Here at ACM we provide quality equipment at competitive prices, backed by technical experience.





2

1515 WEST 130TH STREET ■ BUILDING C ■ HINCKLEY, OHIO 44233 TEL. 330.558.0044 TOLL FREE 1.888.311.CUBE FAX 330.558.0055 AMERICANCUBEMOLD.COM



#### CUBE MAKER™

#### Features:

- Durable brass mold frame
- Removable polypropylene water tight disposable liners
- No cleaning of molds required, just insert a new liner
- "Unbonded" capping system required when using this method: capping accessories included in every kit
- Most economical mold system available
- Reproducible, accurate results



ACM 2-K

#### ACM-2K Cube Maker Kit

Kit contains: Metal three gang mold, 27 liners, a tamping rod, and a testing fixture with compression pads.....

Metal cube mold only.....

#### ACM-22

Plastic disposable liners 198/box .....

#### ACM-23

Stainless steel retainer caps 2/set.....

#### ACM-24

Compressive pads 4/set .....

**FEATURED ITEM** AMERICAN CUBE MOLD





### **Air Entrainment Testing**

#### Trade-ins Welcome!

Conforms to **ASTM C231 &** AASHTO T-152

ACM-6 (Complete Kit) **CALL FOR PRICE** 

ACM-6A

(Air Meter Only)

#### **AIR-METER (TYPE B)**

The AR-B AIR-METER is one of the most precise air measuring devices available for concrete. With heat treated cast aluminum construction and cast in handles on base, the AR-B is heavy duty, yet lightweight, and easy to handle.

Our unit utilizes the best clamping system available, with large stainless steel clamp levers and a holding capacity of 2500 lbs. each. This clamping system provides easy, dependable operation.

Employing the use of a superior high volume Ultra PumpTM, this system makes operation rapid and easy. This includes a larger, more accurate pressure gauge, bourdon tube, and an easy reading color dial face coded for entrapped and entrained air.

Our unit is furnished complete with a carrying case, instructions, and equipment needed to perform calibration and tests.



#### **Molded Case for Type B Pressure Meter**



ACM-6 38P OUTSIDE VIEW OF MOLDED CASE

- Precisely molded polyethylene case with inner molded reinforced walls to hold the meter and accessories in place.
- Bowl and meter cover stored apart to eliminate bowl from bonding with cover gasket.
- Case designed to fit all pressure meters except Type A (Protex) Meters.
- Replaceable plastic case clamps.
- Light weight, long life, rust-free!

ACM-6 38P Type B Pressure Meter Molded Case ......

#### **Gauge Protectors**





#### **Plastic Strike-Off Plates**

12" x 12"

14" x 14"



#### **Type B Pressure Meter Complete Kit**

- Type B Pressure Meter
- Molded plastic case
- Instructions
- Calibration equipment Calibration vessel Inside calibration vessel tube Outside calibration vessel tube
- Syringe 3 oz.
- Strike off bar
- 24" Tamping Rod
- 16 oz. Rubber Mallet

**ACM-6 CASE SHOWN WITH EQUIPMENT** 

ACM-6 Type B Pressure Meter Complete Kit ......



### **Air Entrainment Testing**



# Chace **Indicator**

**41100** Complete Kit

#### **AASHTOT199**

Our Chace Air Indicator Kit is recommended for fast estimating of air content of fresh concrete at the plant or jobsite. A sample is placed in the brass measuring cup on the back of the stopper. The stopper is placed in the glass tube, and the tube is filled with isopropyl alcohol. Percent air is determined by the number of lines the alcohol drops in the stem of the vial after shaking. Instructions and percentage air chart are included in kit.

| ACIVI-ATTUU | Complete Kit       |
|-------------|--------------------|
| ACM-A1101   | Air Indicator Only |
| ACM-A102    | Tube Only          |



ACM-40P

#### Pro Cali-Can

This brass reusable calibration vessel can be used with any 1/4 cubic foot concrete air entrainment pressure meter.

> This precisely machined calibration vessel of 354 mL is exactly 5% air by volume when placed in any 1/4 cubic foot pressure

meter bucket (base). You can make quick and easy checks by placing this vessel upright at the bottom of your pressure meter bucket. The best way is to place Pro Cali-Can in an already water-filled meter bucket. Place the pressure meter cover on the bucket, latch, top off meter with water, and continue to operate your pressure meter as you would normally do taking a test.

Use two Pro Cali-Cans if you would like to check at 10%.

ACM-40P Pro Cali-Can .....

#### **VOLUMETAIR**<sup>TM</sup>

Easily measures entrained air in ANY type of concrete

- Ultra lightweight: Weighs one third of brass unit Weighs one half of "lightweight" aluminum unit
- Accurate: Meets ASTM C-173
- State of the art design: No threads to strip, easy to use, expansion plug top, all stainless steel, "V" clamp securely holds unit top and bottom together, leak-proof "O" ring design, can be rolled on clamp smoothly and easily
- Low cost: half the cost of other models
- Easy to clean: PVC and fiberglass reinforced plastic construction makes water clean-up easy; can be dipped in muriatic acid for periodic cleaning

#### Specifications

| Net weight of meter | 5.5 lbs.    |
|---------------------|-------------|
| Height              | 24.25"      |
| Diameter at middle  | 7.25"       |
| Volume of base      | 2200 mL     |
|                     | 134 cu. in. |
| Sight Tube          | 0-9%        |

#### THE VOLUMETAIR™ KIT

The Volumetair™ Kit contains: Meter, Funnel, Syringe, Tamper, Calibrated cup, Mallet, Plastic case, Strike off bar

ACM-4K

VOLUMETAIR

Volumetair Kit .....



#### TYPE A PRESSURE METER

- Conforms to the ASTM-C231 Type A
- Light weight aluminum design
- New interchangeable parts with Protex - Conchem meters (No longer manufactured)

Type A Pressure Meter Only



#### Type A Pressure Complete Kit

ACM-5 Complete Kit contains: Meter, Calibration Vessel, Rod, Scoop, Strike Off Bar, Mallet, and Instructions

ACM-5 Kit Type A Pressure Full Meter Kit .....

CALL TODAY - QUANTITY DISCOUNTS ARE AVAILABLE!



One Stop For All Your Slump

**Testing Needs** 

#### **SLUMP KIT**

- High density polyethylene
- Long lasting
- Lightweight
- Easy to use
- Strong, adjustable hold-down clamps
- Rod clamps to hold slump rod which doubles as a carrying handle

ACM-3K Slump Kit contains: Slump base, cone, rod, and scoop



| Δ | r | NA | 1-3 | K |
|---|---|----|-----|---|
|   |   |    |     |   |

| ACM-3K  | Slump Kit                  |
|---------|----------------------------|
| ACM-31  | Slump Base                 |
| ACM-32  | Spun Steel Cone - each     |
| ACM-32P | All Plastic Cone           |
| ACM-31P | All Plastic Slump Kit      |
| ACM-33  | Rod with Cushioned Handle  |
| ACM-33A | without handle             |
| ACM-34  | Cast Aluminum Scoop - each |
| ACM-39  | Grout Rod                  |
|         |                            |

#### ACM-6-63

16 oz. Rubber Mallet.....





ACM-36



#### Slump Cone Funnel

ACM-32F.....

# Round Bottom Scoops



 Made of die cast highly polished aluminum

ACM-34S 24 oz. .....

ACM-34M \*38.8 oz. .....

ACM-34L 57.5 oz. .....

\*Customer preferred



AMERICAN CUBE MOLD FEATURED ITEM

#### **MINI SLUMP CONE**



- Spun steel and chrome plated
- 6" high
  - 2" diameter top
  - 4" diameter bottom

The mini slump cone is specially run as a novelty item. It can be used as an award by mounting it on a plaque in addition to special research projects.

ACM-32M without handles .....

#### ACM-32M

#### **PLASTIC RING**

Plastic ring for mini mix slump cone

ACM-32M RING .....

FEATURED ITEM
AMERICAN CUBE MOLD





### **Curing Supplies**

#### **Curing Tank**

6x2-Ft., LxW, 142-Gal. Capacity



Special pipe-reinforced top provides extra strong, crush-proof rim, and sturdy, rolled seam with enclosed sealant prevents leaks. Side panels are 22-gauge, zinc-coated galvanized steel with both diagonal and horizontal corrugations which provide additional strength. Bottom is 20-gauge, zinc-coated galvanized steel. All tanks have drain plug. Curing Tanks are oversized and must be shipped via motor freight only.

#### ACM-HM-621

Curing Tank .....

#### **Field Curing Chest**



The Collapsible, readyto-user Model ACM-HM-112 Field Storage Chest holds nine 6x12" concrete test cylinders. Easily portable, the unit eliminates time

and expense of repeated custom making of wooden curing boxes for each job site. The 24x24x14" (610x610x356mm), WxDxH zipper-sealed polymer and vinyl chest has 1/2" (12.7mm) of insulating foam. The lightweight chest folds easily for transportation, storage, and reuse. The rigid floor has a handle slot to facilitate removal for use as a slump test plate if desired. Valuable strength samples are protected from harsh weather conditions. Designed to hold optional HM-116 Cylinder Transport Rack (listed separately) for initial curing and transport. Shipping Data: 15 lb(6.8kg); Cu.Ft.: 2.0.

#### ACM-HM-112

Additional Models and Sizes Available!

Field Curing Chest .....

#### **Curing Tank Circulating Pump**

■ 1/160 HP

■ 115 VAC



**ACM-TP-PUMP** Curing Tank Pump.....

#### **Curing Tank** Heater

- 110 VAC
- 1000 watts
- Adjustable thermostat
- Incolloy-shielded heating element
- Stainless steel construction
- Thermostatically controlled
- 3 pronged grounded plug

#### ACM-TH-100

Curing Tank Heater.....



AMERICAN CUBE MOLD **FEATURED ITEM** 

#### **Moisture Room Control System**



The Heart of Every System is the Control Panel. Our control panel automatically blends hot and cold water to the temperature desired for your curing environment.

 $73.4 \pm 3^{\circ}F$  (23 ± 1.7°C)

See page 36 for ACM's moisture room control panel and chiller. Call us we'll layout your curing room free of charge.

#### **ACM-MCP**

Assembled Control Panel .....

ACM-SP

Spray heads -1.5 gal/hr.....

**FEATURED ITEM** AMERICAN CUBE MOLD



### **Hot Stuff... Furnaces And Ovens**

#### **MUFFLE FURNACE**

- 2000°F max.
- Stainless steel construction
- 81/2" x 10" x 61/2"
- 115 VAC

ACM-MF-100 Muffle Furnace .....



#### **BENCH OVENS**

- Fan forced air circulation
- Incoloy sheathed elements
- Automatic thermo control
- Pilot light heat indicator
- Mineral wool insulation
- All steel lined interior
- Fully gasketed doors
- Adjustable damper control
- Piano type door hinges
- High heat switch
- All models 115 VAC

| ORDER#   | TEMP.  | I.D.             | O.D.        |       |
|----------|--------|------------------|-------------|-------|
| ACM-5009 | .437°F | .26" x 26" x 20" | 33" x 32" x | x 24" |
| ACM-5010 | .437°F | .26" x 26" x 30" | 33" x 32" x | x 34" |













# More Mold Supplies

continued from page 2

#### **Beam Mold**

High quality 6" x 6" x 20" heavy gauge 1/8" steel beam mold for concrete flexural strength tests.



ACM-4B

Beam Mold .....

ACM-4B

call for quantity pricing!

#### Econ-O-Beam™ Mold

6" x 6" mold for forming concrete test beams

#### Features:

- Reusable
- Inexpensive
- Will not rust
- Lightweight
- Easy to maintain
- Molded from an engineered copolymer plastic
- Meets ASTM C31-98, C78-94, C192- 98, C293-94

#### ACM-4BE

Econ-O-Beam™ Mold .....



Cylinder Mold
Stripping
Tool

ACM-CMS-01.....

#### Cylinder Molds

6" x 12"

4" x 8"

3" x 6"

call for pricing!



# **Capping Frames and Systems**

# CAPPING FRAMES

- Built to last
- Bottom plate disassembles for easy machining

ACM-CP006 Capping Frame.....



#### CAPPING COMPOUND

HYTECH™ High Strength Capping Compound is in flake form with compressive strengths in 2 hours of 8,000 psi average using 2" cube method. This compound is blended in a molten state providing a guaranteed consistency with minimum shrinkage,

higher density which yields more caps per pot and less odor.

Compliance C617 & C287

ACM-CAP Capping Compound - 50lb. bag.....

#### **One-Piece Ladle**

Deluxe heavyweight 18/8 stainless steel 8oz. ladle

ACM-7748 Ladle....



Reusable

Odorless

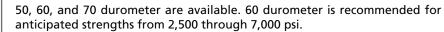
Cleaner

#### UNBONDED CAPPING SYSTEM KAP-IT™



AccurateAccepted

SET INCLUDES 2 STEEL RINGS AND 6 PADS



Note: Compression machines must have 141/4" plus clearance between platens to use unbonded capping system.

Unbonded Capping System - 12 or more.....

call for larger quantity pricing

#### **Cap and Pad System for Compression Testing**

| MODEL     | DESCRIPTION  |
|-----------|--|
| ACM-CS600 | 6" Complete set  |
| ACM-CS400 | 4" Complete set  |
| ACM-CS300 | 3" Complete set  |
| GSB Set   | Grout Sample Cap and Pads (pads only also sold separately) |
| ACM-23K   | 2" Square complete set                                     |
| ACM-NP601 | 6" Neoprene pads   |
| ACM-NP401 | 4" Neoprene pads   |
| ACM-NP301 | 3" Neoprene pads   |
| ACM-24    | 2" Square (4 pads)   |



# **Service and Parts Selection Guide**

#### Want your old worn out pressure meter to be like new?

Let us help. We know how to make it right. We can calibrate and refurbish your meter to the like-new condition seen in the photo. Why wait? Send your meter to us now! Your cost for **refurbishing** and **calibrating ANY** type or brand of meter includes parts and shipping. Call for pricing.

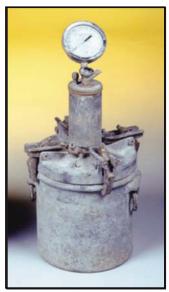
#### **Parts Guide**

|        | Callac                                |       |
|--------|---------------------------------------|-------|
| PART # | DESCRIPTION                           | GUIDE |
| 01     | Pressure Chamber                      | AWF   |
| 02     | Pressure Chamber Cap                  | AWF   |
| 03     | Pressure Chamber Elbow                | AWF   |
| 04     | Pressure Chamber Gasket               | AWF   |
| 05     | Pressure Chamber Bleeder Stem         | AWF   |
| 06     | Air Bleeder Cap with Gasket           | AWF   |
| 07     | Gauge                                 | AWF   |
| 11     | Needle Valve Stem                     | AWF   |
| 12     | Needle Valve Nut                      | AW    |
| 13     | Needle Valve Lever                    | AWF   |
| 14     | Needle Valve Spacer                   | AWF   |
| 15     | Needle Valve O Ring                   | AWF   |
| 16     | Needle Valve Spring                   | AWF   |
| 17     | Valve Spring Retainer Nut             | AWF   |
| 18A    | Valve Seat O Ring                     | AW    |
| 18     | Valve Seat Assembly (complete)        | AWF   |
| 19     | Cover                                 | Α     |
| 20     | Cover O Ring                          | AWF   |
| 21     | Cover Petcock                         | AWF   |
| 22W    | Clamp with Stud (Stainless)           | W     |
| 23W    | Clamp Nut                             | W     |
| 24W    | Clamp Trunion                         | W     |
| 25W    | Clamp Spring                          | W     |
| 26W    | Clamp Toggle                          | W     |
| 27W    | Clamp Toggle Set Screw                | W     |
| 28W    | Clamp Toggle Lock Nut                 | W     |
| 22     | Clamp Complete (specify model)        | AF    |
| 23     | Clamp Tab & Stud                      | Α     |
| 24F    | Forney Tab Only                       | F     |
| 25F    | Forney Stud Only                      | F     |
| 29     | Base with Molded Handles              | AW    |
| 31     | Calibrated Vessel                     | AWF   |
| 32     | Calibration Outside Tube              | AWF   |
| 33     | Calibration Inside Tube               | AWF   |
| 34     | Strike Off Bar                        | AWF   |
| 35     | Tamping Rod                           | AWF   |
| 36     | Syringe                               | AWF   |
| 37     | Gauge Safety Glass (specify diameter) | AWF   |
| 38P    | Molded Plastic Carrying Case          | AWF   |
| 57     | Gasket Kit without #20                | AWF   |
| 60     | Ultra Pump                            | AWF   |
| 61     | Check Valve with Gasket               | Α     |
| 62     | Pump O Ring Kit (specify model)       | AWF   |
| 63     | 16 oz. Rubber Mallet                  | AWF   |
| 60A    | Ultra Pump Adapter to White/ELE       | ELE   |
|        |                                       |       |



8

A...ACM #AR-B Meter ELE...Soiltest F...Forney Brand W...WATTS-Concrete Specialties







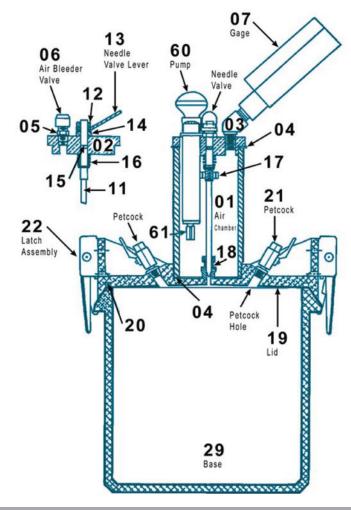
**AFTER** 

When purchasing a new AR-B meter, we accept trade-ins on old pressure meter equipment.

Call us for details!

#### **AIR-METER (TYPE B)**

MFG. MODEL #AR-B





# **Service and Parts Selection Guide**

#### **Brass / Roll-A-Meter / Forney**



| PART # | DESCRIPTION                    |
|--------|--------------------------------|
| RM-03  | Brass Cap                      |
| RM-04  | Plastic Gauge Tube             |
| RM-05  | Tube Clamp Ring                |
| RM-06  | Top Tube Gasket                |
| RM-07  | Bottom Tube Gasket             |
| RM-09  | Chamber Gasket                 |
| RM-10  | Adjusting Nut                  |
| RM-14  | Plastic Baffle Funnel Assembly |
| RM-15  | Toggle Pin and Nut             |
| RM-16  | Toggle Lever (stainless)       |
| RM-17  | Spring Retainer                |
| RM-18  | Jay Bolt                       |
| RM-19  | Jay Bolt Spring                |
| RM-20  | Measuring Cup                  |
| RM-27  | Gasket Kit                     |
| RM-28  | Clamp Assembly (ea.)           |
| RM-28K | Clamp Assembly Kit (3)         |

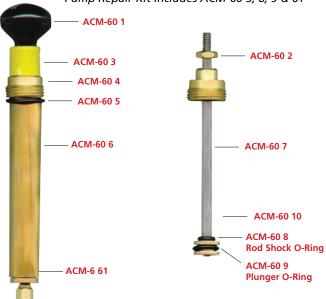
#### **Volumetair Parts**

| PART # | DESCRIPTION                     |
|--------|---------------------------------|
| 01     | Top (expansion plug)            |
| 02     | Clear Calibrated Tube Assembly  |
| 03     | Calibrated Decal, only          |
| 04     | Meter Top Housing               |
| 05     | Meter Bottom Housing (base)     |
| 07     | Stainless Steel Clamp Assembly  |
| 09     | 5/8" Tamping Rod, 12" long      |
| 10     | Funnel                          |
| 11     | 22 ml Measuring Cup             |
| 12     | Strike Off Bar                  |
| 63     | 16 oz. Rubber Mallet            |
| 36     | 3 oz. Heavy Duty Rubber Syringe |
| 15     | Meter O Ring Gasket             |
| ACM-4K | CP Plastic Volumetair Box       |

# JOLANGT AND TO STATE OF THE ST

#### **Ultra Pump Parts BEST SELLER!**

| PART #    | DESCRIPTION                                  |
|-----------|--|
| ACM-6 60  | Ultra Pump Complete                          |
| ACM-60 1  | Black Knob                                   |
| ACM-60 2  | Brass Nut 1/4-20                             |
| ACM-60 3  | Vinyl Shield                                 |
| ACM-60 4  | Top Housing                                  |
| ACM-60 5  | Housing O Ring                               |
| ACM-60 6  | Pump Tube                                    |
| ACM-60 7  | Rod (stainless)                              |
| ACM-60 8  | Rod Shock Ring                               |
| ACM-60 9  | Plunger O Ring                               |
| ACM-60 10 | Plunger Spool                                |
| ACM-6 61  | Check Valve with Gasket                      |
| ACM-60 PK | Pump Repair Kit                              |
|           | Pump Repair Kit includes ACM-60 5, 8, 9 & 61 |



#### **Protex Type A Meter Parts**

| PART #    | DESCRIPTION                                |
|-----------|--|
| 96502 AN  | NOSHOK 0-10 X.1 psi                        |
| 96502 A   | Air Pressure Gauge (economy)               |
| 96504 B   | Air Pump Complete (Ultra Pump adapted)     |
| 96505 B-1 | Protex (Schrader) Check Valve (old style)  |
| 96505 B   | Check Valve (new style)                    |
| 96506 C   | Pump Cup (rubber)                          |
| 96507 D   | Poly-tite 3/8" x 1/8" NPT Fitting          |
| 96509 E   | 3/8" Plastic Tube                          |
| 96510 F   | 1/4" Fill Pipe                             |
| 96511 H   | Scoop                                      |
| 96514 I   | Funnel                                     |
| 96515 J   | Connecting Rod                             |
| 96516 K   | Connecting Rod Nut                         |
| 96517 L   | Calibrated Plastic Tube with Decal         |
| 96518 L-1 | Decal                                      |
| 96519 M   | Tube Gasket (top or bottom) ea.            |
| 96520 HN  | Clamp Bolt                                 |
| 96521 O   | Knob                                       |
| 96522 P   | Top Plate (die cast aluminum)              |
| 96523 Q   | Molded Lid Gasket                          |
| 96525 R   | Fill Valve 1/4" NPT                        |
| 96526 S   | Drain Valve, 1/8" NPT                      |
| 96526 T   | Air Vent Valve                             |
| 96526 U   | Air Inlet Valve                            |
| 96527 V   | Pot (now available)                        |
| 96529 W   | Lid (now available)                        |
| 96531 X   | Brass Standardization Vessel (1/4 cu. ft.) |
| 96533 Y   | Tamping Rod                                |
| 96534 Z   | Straight Edge                              |



# **Ensure Proper Grout Sampling**

#### **ECONOMY PRICED!**

#### **Flow Cone Set**

#### **ASTM C 939 Procedure**

This unbreakable polyethylene cone is economy priced, easy to use, and cleans up with ease.

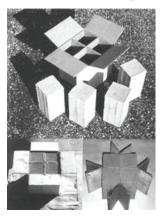
The ACM-FC-1K Flow Cone Set is for field and laboratory measurements of flowability of fluid hydraulic grouts used in preplaced aggregate concrete. The flow cone method is for use with grouts having 35 sec. or less efflux time. Cone with special 3/4" inch orifice is also available.

Includes: Polyethylene cone, stainless steel discharge tube, steel ring stand, point gauge fluid level indicator, and instructions.

| 3, 1      |                                |
|-----------|--------------------------------|
| ACM-FC-1K | Complete flow cone set         |
|           | (Specify 1/2" or 3/4" orifice) |
| ACM-FC-01 | Flow cone only                 |
| ACM-FC-R  | Large steel ring stand         |
| ACM-PG-1  | Point gauge level indicator    |
|           |                                |

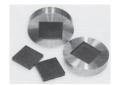


#### **Grout Sample Box**



- Proven by tests to yield comparable compressive strength values to samples cast by traditional method regardless of CMU moisture content
- Consistent, identical prism geometry is created with every set of samples
- Engineered slotted corrugation retains moisture while closely simulating CMU absorption rate
- Performs as mold and transport / shipping container in one
- Saves money, time, labor and space
- Assembles easily, ships and stores flat
- Yields an additional specimen as a reserve
- ★ See page 7 for compression ring set ★

**ACM-GSB** Grout Sample Box - per case



Grout Sample Unbonded
Capping System For Compression
Testing of Grout Specimens

#### **Grout Demonstration Box**

Custom fabricated out of high density polyethylene and clear acrylic plate

ΔCM-37

Effective plate area 6" xx 29.5" Meets ASTM C1339-96

ACM-37 .....

**ACM-379** 

10

Similar to above, but a much smaller version. Effective plate area 3" x 7 1/2"

ACM-37S .....





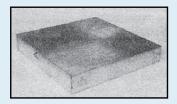
#### **Pans**

### CALL FOR A COMPLETE LIST AND PRICING!

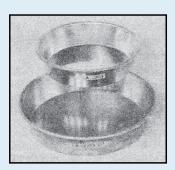




Beakers and Measurers



**Material Pans** 



**Round Aluminum Pans** 



**Stainless Bowls** 



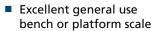
Water Bottles





### **Measuring Tools** Scales, Measures, Etc.

#### **FG Series Bench and Platform Scales**



- Easy to set up and operate with stable, accurate, large display
- Compact and lightweight
- AC or battery operation
- Rugged construction for heavy duty use
- Stainless steel weighing pan for easy wash down and moisture protected load cell

| G-30K   | 60lb. x 0.02 lb   |
|---------|-------------------|
| FG-60K  | 150 lb. x 0.05 lb |
| FG-150K | 300 lb. x 0.10 lb |

#### Optional:

ACM-FG-Case Plastic Case .....

ACM-FG-Scale Case Platform Insert .....

All ACM scales can be refurbished, recalibrated, and repaired!

#### **Graduated Cylinders** and Beakers



Cylinder.....

#### **Ohaus Triple Beam** Scale - 1600 Dial-O-Gram



ACM-TB-2610..... gram x .1g Optional: ACM-CC Metal Carrying Case .....

**5 YEAR FACTORY WARRANTY** 

#### The Windsor HP **Probe System**



For in-place testing of normal and high performance concrete

- New electronic measuring system enhances accuracy and efficiency
- Measurement to 17,000 psi (110 MPa) with new probes
- Memory for data storage and uploading to PC
- Safe: no accidental discharge and no recoil
- Fast and economical use
- Determines the developing strength of concrete; improves safety, ensures quality and reduces costs
- Monitors the strength for rehabilitation as concrete ages
- Conforms to ASTM C-803 and other official tests

ACM-HP Probe System ..... ACM-HP Probes Only.....

#### **James Windsor Pin System**

A unique intrument for measuring the strength of new or existing materials in situ utilizing the es-



tablished principle of resistance to penetration.

- Portable and completely self contained
- Safe to use non explosive
- Economical Steel pin can be reused
- Non destructive
- Removable chuck facilitates testing of mortar strength in masonry.
- Conforms to ASTM-C803

#### Benefits:

- Test new concrete products and structures for early strength. Field test cylinders do not reflect in place concrete strength due to lower internal heat hydration - especially during early stages.
- Evaluate the in situ strength in existing structures. e.g. after suspected fire damage.
- Test strength of block, brick, and mortar joints within an existing structure, e.g. load bearing walls.
- Test polymer concrete and patching compound
- Quality control of precast elements such as block brick slabs and pipe.



Max. Cap.: 165 lbs (75kg) Readability: 0.05 lb (0.02kg) **Suggested Calibration Weight:** 

This Compact Field Scale is a portable and affordable solution for weighing concrete, soil and asphalt samples in remote locations. With capacities ranging from 30 to 75kg (66 to 165lb), these units enable fast, accurate weight determinations in an easily transportable package. This model meet ASTM C 29, C 138 and AASHTO T19, T121 concrete specifications with the most commonly used 0.25 cu. ft. (7.08 L) unit weight containers.

Large stainless steel platform adds stability when weighing large containers and is easy to keep clean. Base is sturdy steel. Remote mountable indicator has gross, net, zero and stable functions displayed in 1" (25.4mm) high LCD characters. Weighing units are selectable between kilograms and pounds and all models feature full capacity tare range. AC adapter is included or units can be operated with 6 AA batteries. Base dimensions: 12.25x12x2" (310x300x50mm)WxDxH. Indicator: 11x3x1" (270x80x30mm)WxDxH. Gross weight is 10.6 lb (4.8kg). Scale includes sturdy plastic carrying case with fitted foam interior. Shipping weight: 20lb (6.8kg);

ACM-CP-75 Compact Field Scales .....

Carrying Case also available .....













### **Carrying Storage Unit**











- Will hold eight (8) 4 x 8 Test Cylinders
- Manufactured from Durable Lightweight High Strength Copolymer Plastic
- Molded Grip Handles For Ease of Carrying
- Protects Specimens from Damage And Includes Cushion Bottom Inserts
- Stackable Units Save Space in Curing Tanks and Moist Rooms
- Yields an additional specimen as a reserve

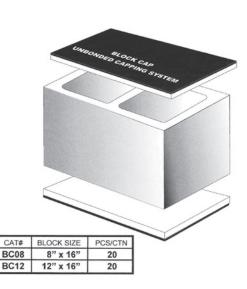
### **Block Cap**

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- Convenient and Uncomplicated. No Mixing, Cutting or Measuring.
- Clean and Economical, Saving Time and Labor

Accurate and Consistent. Based on Comparison tests this unit indicates excellent results versus capping with hydrocal gypsum performed according to astm C140. The block cap compression pad is a fiberous composite laminated to a tough plastic sheeting. The composite flows into the irregularities of the cmu, thus distributing the test load uniformly - with no damage to the cell stems.

The plastic sheeting provides rigidity and provides protection to machine platens.





### **Assorted Concrete Supplies**

#### Canvas Wrap for Concrete Test Specimens

- Improves safety
- Minimizes fragment scattering
- Reusable
- Reduces mess
- Aids in rapid cleanup
- Velcro tabs for quick and easy installation and removal

ACM-CW4 Polywrap 4" .....

ACM-CW6 Polywrap 6" .....

# Concrete Test Hammer

- Concrete rebound test hammer
- Determines an estimated strength value of hardened concrete
- U.S. made
- Comes with, hammer, charts and instructions

ACM-N-34A Concrete Hammer.....

WE ALSO REPAIR

AND

REFURBISH ALL TEST HAMMERS!

# **Lifting Handle**

- Transport 6" concrete test specimens with one hand
- Remove 6" specimens from curing tank
- Reduce back stress
- Safe

ACM-LH Lifting Handle.....

# **Slant Shear Dummy Sections**



- Slant sheer test: ASTMC 882
- Plastic dummy sections used in the test method which covers the determination of the bond strength of epoxy-resin-base bonding systems for use with portland cement concrete

Slant Shear Dummy 2 per set......

#### Soils & Mortar Pocket Penetrometers



- Spring operated device
- Soils strength readings in tons per sq. ft. (4.5 tons max.)

ACM-CL-700A Soils penetrometer .....

ACM-CL-701 1" Adapter foot ......

ACM-CT-421A Mortar penetrometer.....

(Used in mortar set times)

# Steel Yield Bucket

This precision machined bucket complies with all specifications for aggregate and concrete.



- Convenient handle
- Weighs 24 lbs.
- 1/2 cubic ft.

ACM-YB-150 Steel Yield Bucket.....

#### **Test Cylinder Transport Rack**



- Anchoring holes allow transport rack to be secured to truck bed
- Fits inside Deslauriers' "Econ-O-Cure" curing bag for winter transport
- Center opening for heater storage
- Easy opening allows for placement of cushioning material (ie: used compression pads)
- Keeps test specimens secure and eliminates loose cylinders in truck bed
- Multiple units can fit in truck measures23.5" sq. x 9" high
- Holds (8) 6" x 12" specimens

ACM-TR-4 4" Test Cylinder.....

ACM-TR-6 6" Test Cylinder.....

#### **Melting Pots**

20-Qt., 115V/60Hz



Melting pots are useful for preparing capping compounds, wax, tars, asphalt, and other materials in the lab. Each has precision temperature control for 38-160°C (100-320°F) range that holds to set point. A high limit control turns pots off at 182°C (360°F). The cast aluminum inner liner is contacted from top to bottom by a unique helically wound element to give even heat distribution. Durable polished stainless steel outer case assures long, dependable service.

ACM-HM-205 Melting Pot .....



# **Take Your Concrete Work to New Levels With Quality Products**

# Combination Portable Beam Tester

ACM-HM-1712 Portable Beam Tester is equipped to perform third-point and center-point flexural tests on standard 6x6" (152x152mm) beams. Results compare favorably with more



expensive machines conforming to ASTM and AASHTO standards. Conversion from center-point to third-point can be made in seconds. The hydraulic hand pump and 6" (152mm) diameter gauge comprise one assembly; the hydraulic cylinder and load frame comprise the second. A 6-ft. (1.8m) hydraulic hose has quick disconnect.

Gauge has 12,000 lbf (53kN) range accurate to 1%, suitable for most flexure testing.

Piston travel is 3" (76mm). Lower bearing points are 18" (457.2mm) center-to-center and pivot as test beam deflects. Self-aligning upper bearing assemblies are provided for both single-point and double-point loading. Double-point assembly is 6" (152.4mm) center-to-center. Load frame measures 24x8x26" (610x203x660m). Shipping Data: 77 lb (35kg); Cu. Ft.: 8.0.

ACM-HM-1712 Combination Portable Beam Tester.....

#### **T-90 Trident Moisture Meter**

#### **Features:**

- Fast and easy to use: simply insert the prongs into the sand or aggregate.
- Accurate.
- Completely portable.
- Easy to read display.
- Instantaneous reading.

# 

#### **Technical Features:**

This device represents a break-through in modern moisture measurement technology. By utilizing the latest microwave and microprocessor technology, the trident can determine the moisture content of sand, gravel, crushed stone and other fine and coarse aggregate. Simply insert the prongs of the probe into the material to be measured and instantaneously the percentage of moisture content is shown on the easy to read display.

The unit comes calibrated for both sand and aggregate. It can also be programmed with up to ten different materials by the user. For highest accuracy, the unit should be programmed for the material being tested. Simple to use Win95/WinNT software is provided for calibrating the unit to the various materials.

Finally, it can store over 150 readings. Storage is time and date for complete with the time and date for future reference. Data can be recalled via RS-232 interface to a personal computer.



#### A CN I HN 570

# **Mortar Penetration Apparatus**

Model ACM-HM-570 Acme Penetrometer and Model ACM-HM-571 Mortar Penetration Apparatus are used to determine setting times of concrete mixes by measuring the penetration resistance. Suitable for lab and field-testing, both are also ideal for testing prepared mortars and grouts.

A mortar sample, sieved from fresh mix, is placed in a container and

stored at a specified temperature. It is tested at regular intervals with standard penetration needles. Resistance is plotted to determine initial (500 psi) and final (4000 psi) setting times.

The Acme Penetrometer uses a load cell to measure loads. The load is read on a 200 lb (890 N) capacity gauge graduated in 1 lb divisions.



ACM-HM-571

Penetrometer has dimensions of 10"x13"x31" WxDxH and 9.5"x7" platform. Hand-held ACM-HM-571 Mortar Penetration is applied using a downward force to penetrate 1 inch (25mm) into a sample. Pressure reads on a scale on the handle stem via a sliding ring indicator. Unit comes with convenient carrying case.

Both units include six standard stainless steel penetration needles with 1, 1/2, 1/4, 1/10, 1/20, 1/40 in.<sup>2</sup> (645, 323, 161, 65, 32, and 16mm<sup>2</sup>) bearing areas.

ACM-HM-570 ACM-HM-571 Acme Penetrometer......

Mortar Penetration Apparatus ......

#### **Standard Vicat Apparatus**



The ACM-HM-300 Standard Vicat, used for most purposes, has a 300g reversible stainless steel rod with 10mm diam. plunger on one end and 1mm diam. double-threaded needle at the other. An adjustable indicator on the rod may be set to read a 0-50mm x 1mm scale on the frame when used either end down. A 40mm high conical plastic specimen mold with 70mm ID base and 60mm ID top is included.

All Vicats come with frame, graduated scale, and indicator. Plunger, needles, and molds to meet needs of each Vicat are included as noted in the model table. Shipping Data: 8 lb (3.6 kg); Cu. Ft.: 0.6.

ACM-HM-300 Standard Vicat Apparatus .....

#### **Modified Vicat Apparatus**

The ACM-HM-305 modified Vicat has special higher frame with longer measurement scale and an aluminum cone for ASTM C 780.

All Vicats come with frame, graduated scale, and indicator. Plunger, needles, and molds to meet needs of each Vicat are included as noted in the model table. Shipping Data: 8 lb (3.6 kg); Cu. Ft.: 0.6.

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ACM-HM-305 Modified Vicat Apparatus .....

TEL 330.558.0044 ■ TOLL FREE 1.888.311.CUBE ■ FAX 330.558.0055 ■ AMERICANCUBEMOLD.COM



# **Products and Supplies to Make Your Job Easier**

#### **Fire Proofing Depth Gauge**



#### **New Masonry and Paver Saws - CC300M Masonry Saw**





Available with optional wet kit that converts the CC300M into a wet cutting saw. (P/N 6043058)

| CC300M Speci       | fications     |
|--------------------|---------------|
| Power Supply       | 115V/60Hz     |
| Power              | 2 HP          |
| Amp Draw           | 15A           |
| RPM                | 3600          |
| Blade Capacity     | 14"           |
| Max. Depth of Cut  | 5"            |
| Max. Length of Cut | 16"           |
| Material Size      | 8" x 8" x 16" |
| Weight             | 80 lbs.       |
| Saw Height         | 24"           |
| Saw Length         | 28"           |
| Saw Width          | 23"           |

#### **Faster Cutting Turbo Blades**

- Wave-style core to enhance cutting speed
- Continuous rim turbo segment for a smooth cut
- For use on electric circular saws & right angle grinder



#### **Shock Wave Blue**

General purpose, fast cutting - Good Long Life



#### **Shock Wave White**

■ General purpose, fast cutting - **Better Longer Life** 















### Nuc Lok for Transportation Safety

Nuc Lok (for all manufacturers)

Wire lock for nuclear boxes being transported

### Self Concolidating Concrete (SCC) Testing SCC J-Ring Set

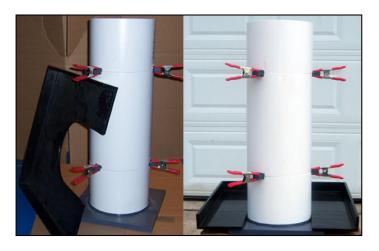
Meets ASTM specification C 1621 and C 1621M-06 Standard Test Method for Passing Ability of Self-Consolidating Concrete by J-Ring.

The J-Ring Test Set contains everything you need to determine the ability of SCC mixtures to flow around rebar and other reinforcing structure in concrete forms. The test can be used in the laboratory for comparing the passing ability of different mixtures or in the field for QC testing.

The set features a heavy-duty steel J-Ring and a large, rigid plastic base plate with centering ring decal on which to perform the test, a slump cone and straightedge.

J-Ring, Base Plate and slump cone conform to ASTM C 1611 and C 1612/C 1621M-06.





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#### **SCC Tower Set**

The Segregation Test Set contains everything needed to determine the potential segregation of coarse aggregate in SCC mixtures tested in a static condition. The unit consists of three PVC plastic pipe sections, clamps and collector plate.

Concrete is poured into the column and allowed to set for 15 minutes. The collector plate is then held at the level of the upper horizontal seam and the top portion is slid onto the collector plate. The material in the plate is then washed and the remaining aggregates are weighed. This process is repeated for the other sections. The weights of the aggregates in the top, middle and bottom thirds are compared. Weights which are significantly different indicate that there is substantial segregation in the concrete.

Digital scale, straightedge and screen tray may be purchased separately.



# **Accurate Readings...**

#### **Digital Temperature**



- On / off power button
- Data hold button
- Automatic shut off
- -40° 300°F x 0.1°
- 8" stem
- Sampling; Approx 1 min.

DT-300 Digital Thermometer.....

# **Pocket Digital Thermometer**



- On / off power button
- Data hold button
- Automatic shut off
- -40° 300°F x 0.1°
- Accuracy \_ 2°F
- Sampling; 1.5 sec.
- Switchable to C°

PDT-300 Pocket Digital Thermometer .......

#### Pocket Concrete Thermometer



- Glass spirit filled red on yellow background for easy reading
- Dual Range 0°- 125°F (-30°- 50°C), 1 degree division

PG 125 Pocket Concrete Thermometer ......

# **Digital Thermometer**

- On/off power button
- Digital Thermometer
- On/off power button
- Data hold button
- Automatic shut off
- -40° to 300°F x 0.1°
- 5" stem
- Sampling; Approx. 1 min.

ACM-TT/300

Digital Thermometer .....

#### ACM-GF-550

PROFESSIONAL INSTANT READING THERMOMETER



- Glass water-tight dial cover
- Stainless steel construction
- 8" stem
- 5 degree divisions
- 50° 550°F

ACM-GF-550.....



#### MIN / MAX Thermometers

- -35 120°F (-35 - 50°C)
- Press button reset

#### ACM-PBM-

# Pocket Dial Thermometers



- Recalibration nut
- Plastic water-tight dial cover
- Stainless steel construction
- +1 division accuracy
- NSF listed
- One year limited warranty

#### ACM-PD-120

| 0°-120°F                | ea. | or | doz. |
|-------------------------|-----|----|------|
| ACM-PD-125<br>25°-125°F | ea. | or | doz. |
| ACM-PD-160              | -   | •  |      |
| -40°-160°F              | ea. | or | doz. |
| ACM-PD-220              |     |    |      |
| 0°-220°F x 2            | ea. | or | doz. |
| ACM-PD-550              |     |    |      |

50°-550°Fx5° ..... ea. or doz.

#### Surface Thermometers



#### **SURFACE THERMOMETER**

0°-300°F

ACM-310F

Surface Thermometer .....

#### Dual Magnet Mount







ACM-312F (0°-250°F) .....

#### Traceable™ Long-Stem Thermometer

- Accurate thermometer at a great price!
- Temperature range: -58 to +302°F (-50 to 150°C)
- Display resolution:
   0.1°F (from -20 to 200°F)
   1° resolution outside this range
- NIST traceable certificate provided (each with an individual serial number)

#### ACM-TST302

Traceable Thermometer.....

# Vane **Anemo-thermometer**

The ACM-DFM8904 vane anemometer is an economical and easy way to measure wind/ air speed.

- Large digital read-out
- 9V alkaline battery
- Plastic carrying case
- Automatic shut-off
- °F / C switchable (14-122°F)
- Five different measuring modes

- ft./min. 80-5900 x 1 FPM - m/sec. 0.4-30.0 x 0.01m/s - km/h 1.4-108 x 0.1 Km/h - miles/h 0.9-68 x 0.1 miles/h - knots 0.4-78.7 x 0.1 Knots

#### ACM-DFM8906

Vane Anemometer.....















# **6032**Long Stem Thermometer

- Deep immersion or long reaches!
- Big Digits
- Max/Min
- °C/°F Switch
- Water Resistant
- Range: 14 to 392°F (-10 to 200°C)
- Accuracy: ± 1°C (±1.8°F)
- 8" x 1/8" Dia. Pointed Probe

To Order: 6032 Long Stem





| Range                     | -58°F to 392°F / -50°C to 200°C   |
|---------------------------|---|
| Accuracy                  | ±1.8°F / 1.0°C over full range  |
| Resolution                | 0.1°  |
| Display Reading<br>Update | 1 second  |
| Response                  | Approximately 15 to 20 seconds in liquid  |
| Auto Off                  | After approximately 10 minutes  |
| Battery                   | 1.5 volt, type LR44 or equivelant x 1 peice (included)  |
| Battery Life              | About 5,000 hours continuous operation  |
| Water Resistance          | IP66/67   |
| Probe Size                | 0.197 (dia) x 4.9 (L) inches (0.137 inch diameter at tip<br>5 (dia) x 125 (L) mm (3.5 mm diameter at tip) |
| Operating Range           | 32 to 122°F / 0 to 50°C   |

- Upper Range to 392°F (200°C)
- Rubberized front panel to seal out moisture
- IP66/67 Waterproof Rating
- Heavy Duty SST Probe
- Large and Clear Display
- Automatic Shutoff
- Penetration Probe Tip

To Order: RT610B





- Very Affordable
- Big Digits
- Fits Chef Pockets
- °C/°F Switch
- Anti-Roll, Oval Shape
- Range: -58 to 302°F (-50 to 150°C)
- Accuracy: ± 1°C (±2°F) between -20 to 120°C otherwise ± 2 °C (± 4°F)
- 5" x 1/8" Dia. Pointed Probe

To Order: 6032 Long Stem

#### **Psychrometer / Thermo-Hygrometer**

- Min. / max. function
- Data hold button
- -4° 120°F x 0.1°
- Accuracy + 1°
- 60 second response time
- On / off power button
- Automatic shut off
- 0 100% RH °F / C switchable
- Dew point and wet bulb readings





ACM-SAM 990DW Psychrometer.....



#### Zircon METALLISCANNER™ 6.0

Zircon's MetalliScanner is a sturdy and accurate electronic tool that has been designed to provide years of dependable and reliable use.

- Locates rebar, copper pipe, and other metallic objects
- Features two operational modes

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- copper pipe and rebar up to 6 inches
- Includes an ergonomic hand grip and controls

ACM-MT-6 - Zircon METALLISCANNER 6.0 .....



# See Concrete In a Whole New Light....



#### **TN418L1**

- Temperature Range: -76° to 932° F (-60° to 500° C)
- Distance to Spot Size Ratio of 12:1
- Bright, built-in laser provides easy aiming
- Accuracy +/- 2% of reading with 1/10th degree resolution
- Emissivity preset at 0.95
- Also measures Maximum temperature during scan
- Amber back-light LCD display, select °C or °F, Auto Off
- Uses 2 AAA batteries and provides 130 hours of use
- A tremendous savings on traditional 9 volt models

Weight and Dimensions: 9 oz. 7 1/2" x 6" x 1 1/2"



#### **TN418LD**

- Temperature Range: -76° to 1157° F (-60° to 625° C)
- Distance to Spot Size Ratio of 16:1
- Bright, built-in laser provides easy aiming
- Accuracy +/- 2% of reading with 1/10th degree resolution

- Emissivity preset at 0.95
- Also measures Max-Min-Dif-Avg temperature during scan
- K-Type thermocouple port accepts any Mini-K-Probe
- Amber back-light LCD display, select °C or °F, Auto Off
- Uses 2 AAA batteries and provides 130 hours of use
- A tremendous savings on traditional 9 volt models

Weight and Dimensions:

9 oz. 7 1/2" x 6" x 1.8"



#### IRT424-2L

- Temperature Range: -76° to 1600° F (-60° to 860° C)
- Distance to Spot Size Ratio of 30:1
- Bright, built-in DUAL laser provides easy aiming AND target area identification
- Accuracy +/- 2% of reading with 1/10th degree resolution
- Adjustable emissivity from 0.10 to 0.95 in 0.01 steps
- Measures Max-Min-Dif and Avg temperatures
- Amber back-light LCD display, select °C or °F, Auto Off
- Uses 2 x AAA batteries (incl) to provide 180 hours of use
- High intensity flashlight

#### **PLUS**

Programmable HI and LOW audible temperature alarms

.....

Hard ABS padded plastic carry case included

Weight and Dimensions:

11.3 oz. (with batteries) 6" x 6" x 2.8"

Cases and probes are available for all IR guns featured on this page.



# TW2 Pocket Infrared Thermometer

- 6:1 optics for a smaller target spot
- Includes laser sighting
- Includes detachable neck lanyard

#### SHOP AROUND BUT READ THE SPECS CLOSELY!

This is the absolute best value in a palm sized IR thermometer. Professional 6:1 optics give you a 1" measurement spot at 6" distance. Many pocket units today offer only 1:1 which means you have to be nearly touching the surface for an accurate reading. Comfortably fits your palm with the trigger button on the side. Simple mode button steps through Max, Min, C/F, and adjustable emissivity. If you want a pocket unit, don't settle for less!

#### **Specifications:**

- Measuring Range: -67°F to 482°F -55°C to 250° CIR
- Accuracy:
   ±2% of reading or ±2 C, whichever is greater
- Resolution: 0.1°F to 199.9°, 1° beyond
- Units: Switchable C or F
- Emissivity: default 0.95 adjustable 0.05 to 1 in 0.01 increments
- Distance/Target Ratio:
   6:1 (1" target diameter at 6" distance)
   Battery: 2x CR2032, included

#### ACM-TW2

Pocket Infrared Thermometer.....





# Product Comparison

# Aqua-Check & Speedy Moisture Testers





#### Aqua-Check & Speedy Moisture Testers ASTM D 4944; AASHTO T 217

American Cube Mold is pleased to introduce the new Aqua-Check gaspressure moisture tester in addition to the popular "Speedy" tester we have offered for many years. This popular test method is widely accepted for rapid, accurate, and reliable moisture tests on sand, aggregate, ores, coal, soils, ceramics, abrasives, and other materials. Units are portable, easy to use and do not require a power supply. The American Cube Mold branded Aqua-Check features

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significant savings for our customers and increased margin for our dealers.

Aqua-Check is similar in functionality and design to the Speedy units and meets the same ASTM and AASHTO requirements. The rugged, dis-cast aluminum units are made in the USA, and are supplied as a complete testing kit. The integral dial pressure gauge ready direct percent moisture content from 0% - 20% in one to three minutes. Aluminum boy is 14x5.5in (356x140mm), LxDia. and finished in tough, wear-resistent coating. Aqua-Check kits include electronic digital balance, two 1.25in (32mm) Dia. steel balls for pulverizing samples, reagent

measuring scoop, a 1lb (0.45kg) can of reagent, brush, and instruction in a heavy-duty, waterproof plastic case.

American Cube Mold's price structure for the Aqua-Check is designed to insure our customers save money and our dealers make money. Our list price for the complete kit is significantly lower and the dealer discount is considerable greater. Accessories, components, and many replacement parts are interchangeable between Aqua-Check and Speedy models, and offer similar savings. The 0% - 20% Aqua-Check Replacement Pressure Gauge is compatible with Speedy brand Moisture Testers, MA-26, MA-21A and MA-25.

#### AQUA-CHECK & SPEEDY MOISTURE TESTER COMPARISON

| Description                        | Model               |
|------------------------------------|---------------------|
| Aqua-Check, Complete Kit           | MA-26               |
| Speedy Tester, Complete Kit        | MA-25               |
| Aqua-Check Pressure Gauge          | MAA-45              |
| Speedy Pressure Gauge              | RPMA-SPEEDY-S22     |
| Aqua-Check Heavy-Duty Plastic Case | MAA-46              |
| Speedy Heavy-Duty Plastic Case     | RPMA-SPEEDY-PL CASE |





#### Large Gilson Shaker



Gilson Testing Screen, complete with dustpan and 5 TSA-100 Coarse Series trays (specify sizes).

Call for pricing on extra coarse, intermediate, and fine series screen trays and wire cloth replacements!

#### ACM-TS-1

Hydraulic Clamping Model 115V/60 Hz

#### ACM-TS-2

Hand Clamping Model 115V/60 Hz

#### 5 FREE COARSE SCREENS WITH SHAKER!

.....







# **Specific Gravity Bench**

ASTM: C 20, C 127, C 642, C 830, D 1188, D 2041 & D 2726

AASHTO: T85, T166, T209 & T275

The ACM-SG-20 Specific Gravity Bench is designed for convenient weigh-below use when determining specific gravity of aggregates, hardened concrete, bituminous mixtures, refractory brick, and similar materials where weightings must be made with samples suspended in water. Bench top is a 31x25" (787x635mm) platform with three 2" (51mm) diameter holes for suspension



of samples and thermometer. Lower tank shelf has two locations to fit tanks of 18" or 24" (457 or 610mm) internal depth. Bench is sturdy, painted-steel and requires assembly. A 4-outlet, 15-ampere, electrical strip (UL Listed, CSA Certified) is attached for single switch on/off of 115V/60Hz accessories. Outlet strip is not supplied for 230V/50Hz.

Overall height is 46" (1168mm).

Use any scale or balance of suitable capacity with weigh-below capability.

Shipping Data:

Specific Gravity Bench, complete with 2 position tank shelf, without tank, 115V/60Hz – 75 lb, 11.0 Cu. Ft.

#### ACM-SG-20

Specific Gravity Bench.....







Liquid limit is the water content at which soil changes from liquid to plastic state. It is arbitrarily defined as that point where two halves of a soil cake flows together when jarred in a specified manner using a special machine.

We offer both a motorized and a handcrank operated machine. All models consist of a brass cup suspended from a carriage designed to control its drop exactly 1 cm onto a hard rubber base. Height of drop is adjusted by a nut at the rear of the cup carriage using the gauge at one end of the Casagrande grooving tool included. The cup is attached to the carriage by a pin to allow easy removal for cleaning and inspection. All parts except handle are machined from solid brass, and rubber feet isolate base from work surface.

Motorized Model SA-60 with counter has highest accuracy since special geared motor assures proper operating speed of  $2 \pm 0.1$  revolutions per sec. An on-off switch is provided.

Motorized Model SA-60 measures 12x7.5x6"H (305x191x152mm).

Hand Model SA-61 is 6.5x6x5"H (165x152x127mm).

#### ACM-SA-61

Hand Operated
Liquid Limit Machine ......

# Mechanical Stirring Apparatus

115V, 50/60Hz, AC or DC

ACM-SA-10

Mechanical Stirring Apparatus

# Motorized Liquid Limit Machine

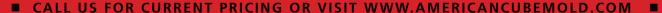
with Counter, 115V/60Hz

ACM-SA-60

Motorized Liquid
Limit Machine .....









# **Soil and Aggregrate Supplies**

AMERICAN CUBE MOLD

#### ASTM Soils Hydrometer 151H



Range 0.995 to 1.038 S.G. by .001 Divisions

Sedimentation methods based on laws of Stokes and Oden are used widely to characterize particle size distribution in the 1-100µm range. Time of sedimenta-tion relates to particle di-ameter, and determination of distri-

bution of percent by weight vs. equivalent diameter is possible by measurement of weight settled vs. time.

ACM-SA-1 is graduated to read in specific gravity at 68° F (20°C). The 280mm long hydrometers and the general methods are also useful for kaolins and clays (ASTM C 775) and for determination of particle size distributions of many other materials where absolute density has little variation among sample particles.

The method calls for hydrometer readings for up to a 24-hr period. A 1000ml sedimentation cylinder, or hydrometer jar, is required for each sample. For consistent results, temperature may be maintained in a constant temperature bath during this period. Cylinders are 18" (457mm) H x 2.5" (64mm) diameter. Samples are dispersed in sodium hexametaphosphate solution prior to sedimentation using a special stirring apparatus with special mixing paddle and dispersion cup.

Call for
Other
Specific
Gravity
Equipment



U.S.A. STANDARD
TESTING SIEVES

Our sieves are one of the finest manufactured and meet all specs. The frames are made of brass and are drawn from one piece without a seam. Extended bottoms (skirts) are also seamless and they are matched to fit all frames,

pans, or separator pans of the same diameter - for convenient stacking. The cloth is hand soldered onto the frame, the frame skirt, then spun over the cloth, and the circle of contact between cloth and the frame is smoothly filled with solder so no material is lost between cloth and frame. Nameplate shows sieve number, microns, and nominal openings (in both millimeters and inches).

Our sieves conform to the following specifications:

\*ASTM-E11 \* AASHTO-M92 NBS

\*AN SZ23.1 \* FS RRS-366B \* CRD-C102

Affordable 8" sieve tester will hold 8 full-height sieves or 16 half-height sieves with lid and pan. Comes complete with a 15 minute timer and a 115 VAC 1/3 H.P. motor.

Note - On brass sieves #100 - #400:

Customers may upgrade to stainless steel for the same price as the brass.

| <u>Sieves</u>           | 8" Brass              | <u>Frame</u>       | <u>12" E</u>         | Brass Frame |
|-------------------------|-----------------------|--------------------|----------------------|-------------|
| Sieve Number<br>or Size | Mesh:<br>Brass/Bronze | Stainless<br>Steel | Mesh:<br>Brass/Bronz |             |
| #6 to 4 inches          |                       |                    |                      |             |
| #80 to #7               |                       |                    |                      |             |
| #100                    |                       |                    |                      |             |
| #120                    |                       |                    |                      |             |
| #170                    |                       |                    |                      |             |
| #200                    |                       |                    |                      |             |
| #230                    |                       |                    |                      |             |
| #270                    |                       |                    |                      |             |
| #325                    |                       |                    |                      |             |
| #400                    | N/A                   |                    |                      |             |
| PAN                     |                       |                    | 1" or 2"             |             |
| LID                     |                       |                    |                      |             |
| Backup Reinforcer       | ment #20 Mesh         |                    |                      |             |



# When Precise Control is the Only Acceptable Standard

# TRIAXIAL/UNCONFINED LOAD FRAMES

This load frame is designed to perform Triaxial and Unconfined testing using carious accessories. A wide selection of strain rates and accessories are available to make this a truly versatile devise. Modifications to meet you lab's specific applications are available upon request.

#### Construction

The frames are designed around a heavy-duty main frame and precision loading screw. Built to withstand harsh lab environments,

the cabinet is constructed with 14 gauge steel and painted with a durable enamel finish. The 1" diameter vertical rods have coarse threads for quick change in crossarm heights. The nuts and vertical rods are plated for corrosion resistance. A 6" platen and protective boot for the loading screw is standard on all frames.

#### **Electronics**

All controls are located on the front panel for easy accessibility. Strain rates are selected by the low and high speed selector switch and the digital selector thumbs wheels located on the front panel. A calibration chart is provided for strain rate selection.

A push-button jog switch, located at the top of the control panel, is used to move the platen up at high speed. A three-position switch (up, down and off) is used to control the platen direction. The switch has a built-in hesitation to prevent damage to the motor when reversing direction.

The maximum platen travel is 76 mm (3") and there are limit switches to prevent over travel. Indicator lights are used to show when upper and lower limits are attained.

Digital readouts, load cells and linear displacement transducers can be added to tie-in with data acquisition systems.

The readouts come standard with analog output for driving strip chart recorders or for feeding directly into data acquisition systems.

#### **Specifications:**

| Height             | 1,194mm (47")         |
|--------------------|-----------------------|
| Width              | 305 mm(12")           |
| Depth              | 610 mm (24")          |
| Cabinet Height     | 229mm (9")            |
| Vertical Clearance | 800 mm (31.5")        |
| Horizontal         | 168mm (6.6")          |
| Platen             | 152mm x 178mm (6"x7") |
| Net Weight         | 165 kg (75 lbs.)      |
| Platen Travel      | 76 mm (3")            |
| Voltage            | 11 v. 60 Hz           |
| Capacity           | 4,000 lbs.            |
| •                  |                       |

# TRIAXIAL/PERMEABILITY CONTROL PANEL

The Model 3230 Logic Panel combines precise control, logical layout and quality components for use in triaxial, consolidation and flexwall permeability testing of soils. It is designed to function either by itself as a master panel or as an add on to existing panels.

One panel can be set up and used as the master panel and fitted with the optional digital readout for setting pressures. Additional panels can then utilize the readout from the master panel. The cabinet is built to survive laboratory environments and is

constructed of aluminum with a hard coat paint and durable screen lettering.

All controls are laid out in a logical order. The upper half of the panel contains controls for air pressures while the lower half contains the water controls. Precision regulators set and control pressures. Whitey ball valves are used for positive shut-off. Two 50 cc burettes, graduated by .1 cc., for flow measurement and two 4 cc pipets, graduated to .008 cc., are also included. These are located inside two storage chambers which have an additional 400 cc capacity each.

Cell water interface utilizes a 20 cc burette. The operator is able to fill and drain the panel and cell conveniently from the front panel. A bias control feature allows the user to set the effective cell pressure and also increase both the cell and sample back pressure using only one regulator. This is useful when saturating the specimen and causes no change in effective stress. It also minimizes air consumption during saturation as only two of the three regulators are utilized at this time.

Easy access air, water, vacuum and drain connectors are located on the rear of the panel.

All connections and tubing for the cell are

conveniently on the front of the panel.

#### ACM-MODEL 3230M

#### Specifications:

| Width                  | 21"                              |
|------------------------|----------------------------------|
| Height                 | 371/4"                           |
| Depth                  | 61/4"                            |
| Pressure               | 150 psi max                      |
| Net Weight             | 45 lbs.                          |
| Shipping Weight        | 65 lbs.                          |
| Cell Water Storage     | 20cc capacity                    |
| Measurement Burets (2  | 50cc capacity, 0.1cc resolution  |
| Measurement Pipets (2) | 4cc capacity, 0.008cc resolution |
|                        |                                  |

#### ACM-Model 3230M

Triaxial/Permeability Control Panel.....





# Product Information

#### **Pro-Loader Load Frames**

PRO-LOADER LOAD FRAMES ASTM D 1633, D 1883, D 2166, D 2850, D 3668, D 4767, D5581, D6927; AASHTO T134, T 193, T 208, T 245, T283, T 297

American Cube Mold's Pro-Loader multiuse load frames feature many component options, allowing design of a versatile system to meet your application needs. These frames can often perform all load tests required in a laboratory with only a quick change of component sets. All frames have 3/4hp DC motors and controllers to precisely regulate strain rates to ± 1% of set point. The sturdy 14-gauge painted steel cabinets are built for demanding laboratory environments. Cross-head heights are quickly and accurately changed using adjusting nuts. The coarse-threaded vertical rods are plated for corrosion resistance and flexible boot protects the precision loading screw from dust and dirt. Units operate on 115V/60Hz power supplies. Add "F" suffix to model numbers for units operating on 230V/50Hz.

Component sets are required and purchased separately. Standard component sets include an appropriately rated load ring and dial indicator, and digital component sets include a load cell and linear displacement transducer. Digital component sets can be connected to a user-supplied computer for transfer of data in ASCII file format. Load Frame Component sets and individual accessories are listed separately.

HM-396, HM-397 Pro-Loader and HM-398 Pro-Loader II 10,000lbf (44.5kN) capacity load frames are designed for multiple applications in efficient, cost -conscious soil testing laboratories. All can be used for CBR, unconfined compression and triaxial testing on soil or soil-cement samples. The Pro-Loader AA has extended capabilities for Marshall testing of hot-mix asphalt specimens.

Loading rates are easily selected from the push-button control panel with digital display. Travel limit switches with indicating lights protect the unit from damage due to platen travel outside of its 3in (76mm) range. A 60-3/4in (171.5mm) diameter lower platen is included. Cross head height is quickly and accurately changed using the self-centering adjusting nuts. The vertical rods are 1.25in (31.8mm) diameter.

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HM-397 shown with HM-430

HM-398 shown with HM-430D & HM-418

The HM-396 Pro Loader strain rate ranges from 0.001in-0.1in (0.0254-2.54mm) per minute. A high-speed platen advance rapidly positions the platen for efficient testing. The HM-397 has a wider range, from 0.0001in-.3in (0.00254-7.623mm) per minute, and is a better choice for more extensive soils applications, including some triaxial testing. The mircro-stepping drive controller allows

more precise control of loading rates. The HM-398 Pro-Loader II has a higher strain rate to accommodate Marshall and Lottman testing of hot-mix asphalt specimens, while still allowing many soils tests to be performed. The range is 0.02in-2.0in (0.508-50.8mm) per minute. This unit does not use a high speed platen advance Est Ship Wt.:240lb (109kgh).

|                             |                    | PRO-LO                     | ADER LOAD FRA                  | MES   |                            |
|-----------------------------|--------------------|----------------------------|--------------------------------|---|----------------------------|
| Frame                       | Model <sup>1</sup> | Frame Capacity<br>Ibf (kN) | Strain Rate<br>in/min (mm/min) | Frame Opening<br>Overall Dimensions<br>WxDxH, in (mm) | Dimensions<br>WxH, in (mm) |
| Pro-Loader                  | HM-396             | 10,000 (44.5)              | 0.001 - 0.1<br>(0.0254 - 2.54) | 18x29x54.5<br>(457x737x1,384)                         | 11.9x37.3<br>(302x947)     |
| Load Frames                 | HM-397             | 10,000 (44.5)              | 0.0001-0.3<br>(0.00254-7.62)   | 18x29x54.5<br>(457x737x1,384)                         | 11.9x37.3<br>(302x947)     |
| Pro-Loader II<br>Load Frame | HM-398             | 10,000 (44.5)              | 0.02-2.0<br>(0.508-50.8)       | 18x29x54.5<br>(457x737x1,384)                         | 11.9x37.3<br>(302x947)     |

Add "F" suffix to model number for units operating on 230V/50Hz power supply



#### **Aggregate Washers and Crack Monitors**

#### **TABLE TOP AGGREGATE WASHER**



Aggregate washers are used to remove clay and other particles by gently agitating the specimen in a revolving drum until all particles are washed and separated and the overflow water runs clear.

The smaller version aggregate washer is unique in that the drum can be removed for weighing the sample. The smaller size also allows placement on a counter top next to a sink drain. Because of its compact size and light weight, the washer can be moved easily if space is a concern.

A new accessory, a vacuum lid allows the user to turn the washer into a pycnometer. The washer and vacuum lid combination is much quicker than the vibrating table used in most labs and it can also handle larger samples if needed.

- Removable Stainless Steel Drum
- Permanent water connect with regulator valve
- Stainless Steel gooseneck water tube with swivel connection
  - Fixed tilt position
- Tubing and Saddle Valve to hookup to existing water line
   6 ft. Power Cord with GFCI plug

#### What is a GFCI plug?

GFCI stands for Ground Fault Circuit Interrupter. GFCI's protect you from electric shock by interrupting the circuit in less than a 40th of a second if it detects any difference in electricity between that coming in on the "hot" line and going out on the "neutral" line.

#### Specifications:

| Dimensions                                | Ship Weight 40 lbs.                        |
|---|--|
| S.S. Drum 9.0" Diam. X 103/4" Deep        | Electrical 115Vac, 50/60 Hz, Single Phase  |
| Net Weight 25 lbs.                        | 220Vac, 50/60 Hz, Single Phase             |
| ACM-9050Aggregate Washer, 115Vac, 50/60Hz | ACM-9051 Aggregate Washer, 220Vac, 50/60Hz |

#### VACUUM LID



Turn your aggregate washer into a vacuum pycnometer with the addition of the lid. The Table top Aggregate washer can be used for determining the specific gravity of bituminous paving mixtures. It is made from clear acrylic and fitted with a rotating vacuum seal, port for connection to a vacuum source and locking tabs.

The Vacuum Lid was designed to fit on the drum of the Table Top Aggregate Washer. Its guiet operation and unique action of the rotating drum allows the samples to tumble under water during the vacuum process and remove air trapped in the sample.

ACM-90506 Stainless Steel Drum ..... ACM-9055 Vacuum Lid ......

#### **CRACK MONITORS**



#### Multi-Direction Crack Monitor Gauge

The displacement crack gauge monitors displacements in 3 directions. It monitors displacement and horizontal movement where there is a step across a crack due to displacement or an out of plane movement.



**Corner Crack Monitor Gauge** 

The corner crack gauge, with its hinged design is used to monitor cracks in both internal and external corners. Corner gauges are sold in pairs.



Simple and accurate device for monitoring & charting movement of cracks and joints in concrete and masonry structures. Movement is indicated by crosshairs on a grid and is recorded by periodically copying the crosshair positions onto an accompanying chart.

#### Crack Monitor Gauge with Measurement Tabs

Similar to the standard gauge (H-2936), but allows you to measure the width of the crack using a vernier or digital caliper-enhancing accuracy. where there is a step across a crack due to displacement or an out of plane movement.



caliper not included

# -

#### Los Angeles Abrasion Machine

230V/60Hz/1-Phase



The Los Angeles abrasion test is widely used as an indicator of relative quality of aggregates such as crushed stone, slag, and

gravel. Test measures degradation of standard gradings of aggregates when subjected to abrasion, attrition, impact, and grinding in a rotating steel drum containing an abrasive charge of steel balls of specific size and weight.

Up to 12 balls are used, depending on size gradation of test sample. This new design integrates sound and mechanical safety features, with total control from outside a sound enclosure. An electrical interlock allows the machine to operate only when the double hinged lid is closed. Drum is positioned for loading and unloading using a jog button while watching for a colored indicator through a viewing window in the enclosure. Sound is absorbed by the heavy painted steel enclosure with sound attenuating foam and membrane lining.

An abrasive charge is included, consisting of 12 hardened steel balls of 1-27/32" (46.8mm) diameter totaling 5000 ±25g. Heavy-duty catch pan with handle measures 24x26x2.5" (610x660x63mm) and is 18.5 lb (8.4kg) net weight. The ACM-HM-70A measures 38x40x46.5" (965x1016x1181m). Shipping Data: 1080 lb (491kg); Cu. Ft.: 58.

#### ACM-HM-70A

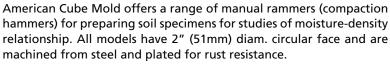
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Los Angeles Abrasion Machine



# **Compactors**

#### MANUAL SOIL COMPACTORS



Models ACM-HM-550 and ACM-HM-551 rammers meet ASTM and AASHTO standards and are equipped with a loosely fitting guide sleeve to control drop height without restricting free fall. Sleeves have four vent holes at each end for free air flow during drop.



#### MECHANICAL SOIL COMPACTORS

#### 115V/60Hz

**4CM-HM-551** 

Model ACM-HM-530 compactor automatically counts the number of hammer blows and shuts off when a preset number is reached. The sample mold indexes to a new position with each count to assure uniform compacting with the assurance of mechanical reproducibility.

The ACM-HM-530 Mechanical Compactor may be used with the 4" (102mm) ID molds with 5.5 lb (2.5 kg) weight and 12" (305mm) drop. In addition the HM-530 compactor will also accommodate the 6" (152mm) ID molds using the standard 5.5 lb. (2.5 kg) weight and 12" (305mm) drop or the modified 10 lb. (4.5kg) weight and 18" (457mm)

drop. The standard 2" (51mm) hammer is replaced by one of the same 3.14 in² area but with pie-shaped face to cover entire sample surface with 6" molds. The hammer lift compensates for sample drop during compaction and results in low overall machine height to permit bench top use. The free-fall hammer has weight concentrated at the foot and adjustment from 5.5 to 10 lb. is by addition of a surcharge weight.

Model HM-530 includes 2" round 5.5 lb hammer, a pie-faced hammer for 6" molds, a surcharge weight, 4" and 6" standard compaction molds, and digital automatic counter with start/stop switching. Overall dimensions: 12.5x29.5x56" (318x749x1422mm), WxDxH.

Special Model HM-531 for California Method 216 is supplied with 2" round 10 lb hammer only. Order special 16" H x 2-7/8" ID Model HMA-119 Calif. 216 mold separately. Required piston and rod are included as parts of the machine.



#### **Soil Compaction Molds**

Our compaction molds fit the ACM-HM-530 Mechanical Soil Compactor, and also may be used with manual soil compactors.

Split type molds separate longitudinally for easy

sample removal. All molds are 4.584"H (116.4mm) with detachable extension collar and base plate, and are plated for rust resistance.

Shipping Data: 14-18 lb (6.4-7.7kg) each; Cu. Ft.: 0.3-0.6 each.

| ACM-HMA-110 Soil Compaction Mold 4-inch Std, 1/30 Cu. Ft |  |
|--|--|
| ACM-HMA-111  |  |
| ACM-HMA-116  |  |

ACM-HMA-117 .....



# Soils and Aggregate Products

# **DETERMINING YOUR DENSITY...**

#### **Density Drive Samplers**

The density drive sampler is designed to determine in place density of soil. The sampler and tubes are used to obtain relatively undisturbed soils. Made of stainless steel, this sampler consists of a rod, handle and hammer with and internal spring shock.

#### **Specifications:**

Drive head: 3" or 4" diameter

Hammer Assembly:

Plated steel with internal shock spring

Tube dimensions: 3" x 2.75"

4" x 5"

Weight: 3" = 22lbs

4'' = 23lbs

Drive Tubes: 3" 0.01 cu ft capacity

4" 0.033 cu ft capacity

|           | the state of the s |
|-----------|--|
| ACM-DS-3  | 3" Density Drive Sampler   |
| ACM-DS-4  | 4" Density Drive Sampler   |
| ACM-DS-3T | 3" Density Tube  |

ACM-DS-4T 4" Density Tube .....



#### **Density Plate**

12x12" (305x305mm)

The sand cone density test is an inexpensive method of determining in-place density of soils having maximum particle sizes up to 2"

(51mm) using test hole volumes of approximately 0.1ft3 (2.8 liters).

Basic Model ACM-HM-100 apparatus consists of 1-gal. (3.8 liter) threaded plastic jar with detachable brass double cone fitting. Fitting is threaded on one end, flanged to 6-1/2" (165mm) on the other, with a brass cylindrical valve of 1/2" (12.7mm) diam. orifice between ends. Valve has stops to prevent rotating past completely open or closed positions.

Model ACM-HM-104 Density Plate is 12x12" (305x305mm) aluminum alloy with 1/2" (12.7mm) high edge walls to contain soil sample that is dug using 6-1/2" (165mm) center hole of plate as a guide. After test hole is prepared, flange of cone fits plate opening for filling hole with special Density Sand.

Density Sand is clean, dry, uniform, uncemented, durable, and free flowing. Few particles pass No. 200 (75µm) or are retained on No. 10 (2.00mm) sieves. Bulk density varies less than 1%. Packing bag is heavy and reinforced.

ACM-HM-104 6 lb, 0.1 Cu. Ft. .....

#### **Sand Cone Density Apparatus**

**ACM-HM-100** Sand Cone Density Apparatus



# Gilson Universal Porta-Splitter®

For 2" (51mm) to Sand Sizes

Patented combination of adjustable chutes and gate release hoppers assures top accuracy for mixing and reducing gross samples to

representative smaller test quantities. Universal Splitters are convenient, space saving, and cost-effective. A single model serves the purpose of two or more conventional splitters. Since the hoppers have a gate release, only the included sample collecting pans are necessary for proper use; but extras are available. This model has a simple; inexpensive Adapter Kit to convert standard 45° chutes to 60 when necessary for flow ability or to meet specifications (recommended for coal and coke). This model has heavy-gauge painted steel, which has been forced air-dried.

The Universal chute section is comprised of a set of aluminum bars of precise width that pivot about a rod through their lower ends. Top of bar ends are flipped to alternate sides to form desired width chutes, as determined by number and width of bars grouped on each side. Groupings that result in an equal number of chutes to either side may be used (See table of options for each model). Once set, bars are held tightly together via wing nuts on threaded ends of the pivot rod.

Superior durability sets this compact splitter apart from conventional portable models. Lightweight with ample hopper capacity, the ACM-SP-2 has wide appeal for floor or bench use. A 60° Kit is available.

Dimensions: 22 x 14-1/2 x 20 1/2

Hopper / Pans Capacity: 0.55 ft(cubed), 15.6 liters

Chute Slope: 45 degrees Chute Bar Width, In: 1/2 Number of Chute Bars: 36

ACM-SP-2 Gilson Universal Porta-Splitter® ......



# **Pycnometer Bottle** with Thermometer

25ml Capacity

The ACM-SG-25 is used for determining specific gravity of pigment samples. Conical-shaped body has side tube with vented cap and a capacity of 10ml. Thermometer has range of 14-37°C in 0.2°C increments.

ACM-SG-25

Pycnometer Bottle with Thermometer.....

#### **Vacuum Pycnometer**

The ACM-SG-16 meets both ASTMD 2041 and AASHTO209. Aluminum volumetric canister is 7.5" diam. x 6" D (191x152mm) and tests a max. 2000g (4.4 lb) sample, sufficient for mixes with up to 3/4" (19.1mm) aggregates. A transparent vacuum lid and



a second tapered aluminum lid with capillary bore are included, to allow canister to be used as volumeter for determining specific gravity of compacted bituminous mixtures.

ACM-SG-16 Vacuum Pycnometer, 2000g .....

# STANDARD BANNER LINE EXTRACTOR

1500g Expl. Proof, 115V



An inner bowl, inner cover, and nut are included with this model. Outer cover latches securely in place and has handles for easy removal after test. All contact parts are corrosion resistant lightweight cast aluminum.

Standard models have a dial operated speed control that must be gradually increased manually to bring units up to operating speed in the 0-3600 rpm range during the test. The control is mounted directly to the centrifuge base on these models. A brake stops rotation in seconds when the unit is switched off.

Digital Automatic Models run unattended according to a preset time (1-10 min.) and preset maximum speed is reached via an electronic acceleration control. The unit stops and brakes automatically when time expires, and controls reset to repeat for the next test at a touch of the start button. Actual speed is displayed while running.

The separate control box is designed for wall mounting or other remote position, attached by flexible conduit to the centrifuge. This 1500g unit measures approximately 17x17x18" (432x432x457mm) and has 4 mounting holes in its base. Ten filter rings are included; order extras in packs of 100. When using terpene-based biodegradable solvents, order special filter rings. Shipping Data: 65 to 85 lb (30-39kg); Cu. Ft.: 5.5 to 7, depending on model.

#### ACM-HM-3

Standard Banner Line Extractor .....



### 



# **Universal Penetrometer Manual**

Model ACM-HM-320 is ruggedly constructed for accurate, sensitive measurements. The aluminum base has a machined, grooved table with leveling screws and rubber inserts to protect tips of needles and cones. Two stainless steel rods act as support guides for a cast aluminum head with coarse/ fine adjustments and a calibrated friction-free plunger mechanism. Indicator dial has instant zero reset. Any needle or cone with standard 1/8" (3mm) diameter stem may be mounted to the 47.5g plunger assembly. A standard 2.5g ASTM D 5 needle (HMA-180) and two additional loading

weights (50g, 100g) are included. Order needles or cones for other tests separately as needed. Overall dimensions are 10.5x13x22" (267x330x559), WxDxH.

ACM-HM-320 Universal Penetrometer Manual.....

# **Universal Penetrometer Automatic**

115V/60Hz

The Automatic Model ACM-HM-322 is the same as the ACM-HM-320, but has a button release mechanism with digital timer to automatically stop the plunger when the preset time from 0.1 to 9.9 sec. expires.

ACM-HM-322 Universal Penetrometer Automatic.....





AMERICAN CUBE MOLD FEATURED ITEM

#### **Sample Ejector**

The Karol-Warner sample ejector utilizes a 6000 lb capacity hydraulic jack for extruding samples from asphalt, soil compaction molds and shelby tubes. There are three asphalt and two soil models available as well as various options. Careful attention has been given to the alignment of the drive piston, loading platform and extruder rings. Unique features of this ejector are: the three upright rods



which evenly distribute the load; the spring return of the piston; and the load platform that prevents the mold body from dropping over the jack when the sample has been ejected.

Soil

| ACM-8400 | 4.0" / 6.0" Combination Ejector |
|----------|---------------------------------|
| ACM-8410 | 4.0" Ejector                    |
|          | 4" to 2" Adaptor & Piston       |
| ACM-8412 | 4" to 2.5" Adaptor & Piston     |
|          | 4" to 3" Adaptor & Piston       |





# MOTORIZED EXTRACTOR



ACM-HM-1

The ACM-HM-1 Motorized Extractor has accurate and dependable electronic solid-state speed control and operates on 50/60Hz current. Speed of rotation adjusts upward and downward using tachometer over full 0-3600 rpm range, and the electric brake stops rotation within 10 seconds. Solvent may be added during operation.

The ACM-HM-1 measures 13x13x20" (330x330x430mm), LxWxH.

ACM-HM-1 Motorized Extractor .....

# FILTERLESS CENTRIFUGE

#### 115V/60Hz, 1 Phase

The American-made Continuous Flow Filterless Centrifuge is effective for recovery of mineral filler fines from bitumen-laden



nonflammable solvents from asphalt mix extraction tests. Analysis is simplified and eliminating a filter approves accuracy. Solvent suspension is fed through a top funnel into a special aluminum beaker (included) rotating at 11,000 rpm. Under high centrifugal force, the liquid moves up the beaker wall and out through the overflow tubing while solids remain for easy removal. Continuous feeding of suspension is possible until the solidsretaining capacity of the beaker is reached.

Rotating spindle and electric motor of the centrifuge are enclosed in a sturdy cast aluminum case. Overall dimensions are 20x15x33" (508x380x 840mm), WxDxH. Shipping Data: 150lb (68kg).

#### ACM-HM-750R

Filterless Centrifuge .....

#### Manual Marshall Compaction Set with Handle Guide

The Marshall System is widely used for design and control of bituminous paving mixtures. The resistance to plastic flow of compacted cylindrical specimens is measured in terms of maximum load before fracture occurs. Standard 4" (102mm) diameter specimens are suitable for up to 1" (25.4mm) maximum aggregate size.



Four-inch specimens ACM-MS-12 may be compacted with a 10 lb (4.54kg) hammer having 3-7/8" (98mm) circular face and 18" (457mm) free fall.

The ACM-MS-12 has a special guide to hold the handle of the hammer perpendicular to the base of the mold assembly during compaction. Overall dimensions of manual sets are 12x12x64" (305x305x1626mm). Manual compaction sets include Hammer Assembly, Compaction Mold assembly, and Mold Holder.



ACM-MS-1

Automatic Mechanical compactors have a surcharge weight applied to the hammer foot during compaction. The weight is automatically lifted and released the exact number of hammer blows preset on the digital counter. Multiple automatic units permit duplicate compacting of check specimens under exact temperature conditions. They are also useful for mix design labs or labs with many test to run. Compaction Mold Assemblies, mold holders, hammers, counters, pedestals, and belt guards are provided with all mechanical compactors. Mechanical units are approximately 20x66"LxH (508x1676mm) overall, and approx. width is 12" (305mm), 17" (432mm), and 20" (508mm) for single, double and triple units.

#### **Compactor and Mold**

4" Single Specimen, 115V/60Hz

The ACM-MS-1 Single 4" Mechanical Compactor is an economy version with fixed mold and flat hammer face. Double and Triple 4" and the 6" Single Mechanical Compactors all have indexing and bevel-faced hammers. Molds index with each hammer drop, and the slight bevel of the hammer face gives consistent kneading action during compaction.

| ACM-MS-1 | Compactor and Mold |
|----------|--------------------|
|----------|--------------------|

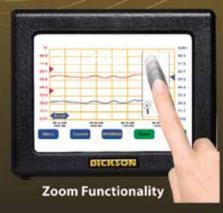
ACM-MS-12 Compaction Set with Handle Guide ......



MIN/MAX and Current Readings
View



**Jumbo Current Readings View** 



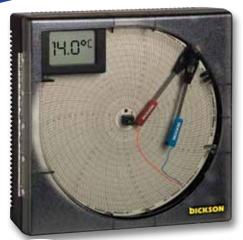
30

# Touchscreen Data Logger



The most technologically advanced instrument!

- Customizable graph
- Zoom feature for detailed views
- Scroll to view data history



#### **Features**

Includes an audio/visual alarm, a large digital display, and two screw terminal connectors on the back of the instrument for easy connection of the input transmitter

**Universal Chart Recorder** 

#### ET855

| RANGES     |  |  |   |  |  |  |
|------------|--|--|---|--|--|--|
| Input: 0-2 | Input: 0-20mA, 4-20mA, 0-5Vdc, 1-5Vdc                            |  |   |  |  |  |
| Output:    | 0.0 to +100.0<br>0.0 to +14.0<br>0.0 to +200.0<br>-10.0 to +10.0 | 0.0 to +1000<br>0.0 to +150.0<br>0.0 to +300.0<br>-150.0 to +250.0 | • |  |  |  |

| CHARTS All boxes contain 6 | 0 charts       |                   |                 |
|----------------------------|----------------|-------------------|-----------------|
| Chart Range                | 7-Day<br>Chart | 24 -Hour<br>Chart | 31-Day<br>Chart |
| 0 to +100                  | C412           | C410              | C409            |
| 0 to +1000                 | C440           | C441              |                 |
| 0 to +200                  | C436           | C456              |                 |
| 0 to +14                   | C453           | C457              |                 |
| 0 to +150                  | C435           | C425              |                 |
| 0 to +300                  | C431           | C422              |                 |
| -10 to +10                 | C405           | C495              |                 |
| -150 to +250               | C452           | C442              |                 |

6 Pack - ACM Red Pens - P222

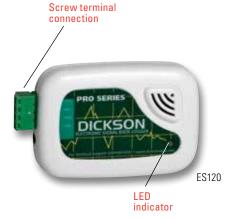
6 Pack - ACM 3-Red and 3-Blue Pens - P246

#### **Universal & On/Off Loggers**

|                                   |        | I.     | 1      |
|-----------------------------------|--------|--------|--------|
|                                   | ES120  | ES120A | EV100  |
| FEATURES                          |        |        |        |
| LED Indicator                     | •      | •      | •      |
| Data Storage (Number of readings) | 32,000 | 32,000 | 65,512 |
| Delayed Start                     | •      | •      | •      |
| RANGES                            |        |        |        |
| 0 to 5V                           | •      |        |        |
| 0 to 15V                          |        | •      |        |
| 0 to 20mA                         | •      |        |        |
| 120-240 VAC                       |        |        | •      |
| SOFTWARE                          |        |        |        |
| A015                              | •      | •      | •      |
| '                                 |        | '      | '      |
|                                   |        | ·      | t .    |

Dicksonware™ software, purchased separately, is required for setup and downloading data.

ET855





# **Enhanced data clarity** with 8" chart

#### **Features**

- Rugged low-maintenance design features
- Single AA battery power
- Corrosion-resistant case
- 7-day or 24-hour operation
- Keyhole slot for wall mount
- Case is splash proof with an IP rating of 66



|                 | PW864        | PW865        | PW875         |  |
|-----------------|--------------|--------------|---------------|--|
| Recording Time  | 7-Day        | 24-Hour      | 24-Hour       |  |
| CHARTS*         | C436         | C456         | C441          |  |
| Pressure Ranges | 0 to 200 PSI | 0 to 200 PSI | 0 to 1000 PSI |  |

<sup>\*</sup>All boxes of charts contain 60 charts

# 4" Outdoor Pressure Chart Recorder

#### **Features**

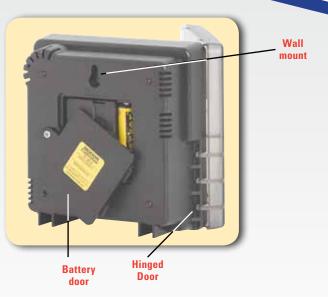
- NEMA 4X water resistant enclosure
- Operates up to one full year on a single AA battery
- 1/4" NPT connection



| PW450 | PW451   | PW454         | PW455               | PW456                       | PW457                             | PW459                                     |
|-------|---------|---------------|---------------------|-----------------------------|-----------------------------------|---|
| 7-Day | 24-Hour | 7-Day         | 24-Hour             | 7-Day                       | 24-Hour                           | 24-Hour                                   |
|       |         |               |                     |                             |                                   |   |
| •     | •       |               |                     |                             |                                   |   |
|       |         | •             | •                   |                             |                                   |   |
|       |         |               |                     | •                           | •                                 |   |
|       |         |               |                     |                             |                                   | •   |
| C012  | C010    | C040          | C026                | C036                        | C022                              | C028                                      |
|       | 7-Day   | 7-Day 24-Hour | 7-Day 24-Hour 7-Day | 7-Day 24-Hour 7-Day 24-Hour | 7-Day 24-Hour 7-Day 24-Hour 7-Day | 7-Day 24-Hour 7-Day 24-Hour 7-Day 24-Hour |

<sup>\*</sup>All boxes of charts contain 60 charts





#### Simple temperature reading

- Easy-to-use and portable for refrigerators, freezers, or any location.
- Accurate and designed with simplicity in mind
- 4" readable chart
- 2-3 year battery life
- Cord-free and portable
- Digital display
- Optional 24-hour or 7-day recording
- NEW F/C Switchable

|        | Display | Ranges        | 24-Hour<br>Chart | 7-Day<br>Chart |
|--------|---------|---------------|------------------|----------------|
| SL4350 |         | -22 to +122°F | C205             | C206           |
| 3L4330 | •       | -30 to +50°C  | C180             | C181           |
| SL4100 |         | 0 to +100°F   | C010             | C012           |
| 3L4100 | _       | -18 to +37°C  | C209             | C210           |
| SL490  |         | +45 to +90°F  | C205             | C206           |
| 3L430  |         | +7 to +32°C   | C180             | C181           |
| SK4350 |         | -22 to +122°F | C205             | C206           |
| 314330 |         | -30 to +50°C  | C180             | C181           |
| SK4100 |         | 76 to 122°F   | C010             | C012           |
| 3N4100 |         | 25 to 50°C    | C209             | C210           |

12-Pack
Bargain
Coin-sized
Temperature
& Humidity
Data Loggers

**NOW WITH USB** 

When Price and Portability Matter Most- Buy loggers by the dozen for mapping larger warehouses, recording temperature and humidity during shipping, HVAC/R audits, and more.

The Compact Data Logger Choice--

- Lower per unit price
- Easy-to-use
- Unfailing Accuracy













# **Compression Machines**

# Portable 250,000-lb capacity machine tests six forms on site with a simple accessory change

The compact, single-unit design of this machine offers a structurally integral load from comprising four structural steel side members welded to solid-steel top and bottom crossheads. It can test concrete cylinders, beams, cubes, masonry, brick, and block in the field with a simple accessory change.

Additional features and benefits include:

- Weighs under 800lb
- 2500 to 25,000 lb testing range
- Compression platen is chrome-plated for wear and rust resistance



- Guide for easy centering of specimens is scribed into the platen surface
- Safety features include guards, safety valves, and side-mounted controls
- Models available with manual pump
- Single and dual gauge models available
- Available with Digital Force Monitors DFM/I and DFM/IV with graphics

















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CORE DRILL MACHINES & BITS

Multi-Purpose, Heavy-Duty, Rust Resistant Construction, Complete, Ready-To-Use Systems





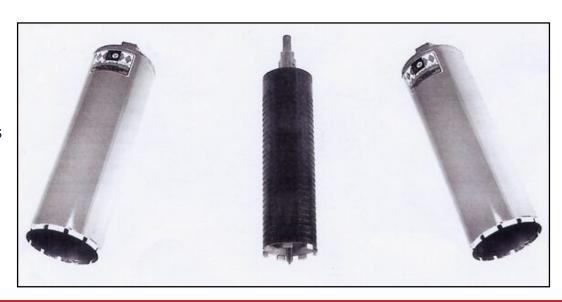


K-201-HR

K-102 (with accessories)

#### **WET AND DRY**

- High Quality
- Long Lasting
- Diamond Core Drill Bits
- Professional
- Superior
- Asphalt
- Specialist and Utility Brands



















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#### PC - ONE PASS CHILLERS

#### WELDED HERMETIC MODELS

A completely packaged liquid chiller designed for applications where the liquid to be cooled passes through the chiller only once before either being added as an ingredient to a product or fouled by the product it is cooling. It is most important that a single pass chiller be able to chill liquids at high and low flow rates without significant pressure drop or danger of freeze up and yet have close, accurate temperature control. Filtrine PC chillers are specifically designed for one pass cooling. A high transfer immersion coil evaporator supplies maximum capacity at any flow rate with no pressure drop. Storage tank design permits close temperature control without short cycling.





# **Scales and Balances**



















Health ometer















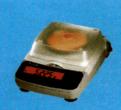


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#### **REMEMBER - THERE'S ALWAYS MORE AT ACM!**

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- STRENGTH AND TEMPERATURE
- MIXERS
- WINDSOR PROBES

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- PROFILOGRAPH
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- Payment 30 days firm, U.S. dollars
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