

Slump Test Set

ASTM*
C 143, C 192

AASHTO*
T 23, T 119, T 126

BS 1881 #102

* See Standards Buyer's Guide at
www.DGSI.info/3000.

DGSI Slump Test Set may be used at the pour site or laboratory to measure the ease of placing and consolidating freshly mixed concrete.

The Set comprises a spun metal slump cone, graduated tamping rod and a cast aluminum base with handle.



C-350

C-350	Slump Test Set	18.0 lb
Includes:	C-335 Slump Cone C-351 Aluminum Base with handle and tamping rod	
Related Items		
C-354	Slump Cone Funnel	
G-15910	Armored Concrete Thermometer	
G- 96	Grading Trowel 4 in 10. cm	
G- 9003	Stiff Wire Brush	
G-510	Rubber Hammer	
G- 9 0	Scoop large round bottom	
G-30010	Material Pan 4 4 3 in 6 61 8 cm	

Slump Base with Graduated Tamping Rod

The cast Aluminum Base C-351 provides a sturdy working surface to perform the slump test. Benched clamps slide over the foot wings on the slump cone to hold it securely while filling and rodding. The octagon shaped base is 15 in (38 cm) across.

The Tamping Rod, C-352, may be used to connect the Aluminum Base to the Slump Cone during transport. It is slipped through holes in the handle and flange of the base to provide stability.

The Tamping Rods are dimensionally accurate rods used to tamp fresh concrete into slump cones and cylinder molds to eliminate voids and excess air. Made from machined steel, they have a rust resistant zinc plating and are 5/8 in (1.6 cm) diameter by 24 in (62 cm) long. The Puddling Rod is made of stainless steel and is the shortest.

C-351	Aluminum Base with graduated rod
C-352	Graduated Tamping Rod, 5/8 x 24 in
C-353	Tamping rod, 5/8 x 24 in
C-357	Puddling Rod, 3/8 x 12 in

Slump Testing Components

C-335 Steel Slump Cone

ASTM* C 31, C 143, C 172, C 192, C 232
AASHTO T 23, T 119, T 126, T 141, T 158

* See Standards Buyer's Guide at
www.DGSI.info/3000.

The DGSI Slump Cone is spun from heavy gauge steel and is seamless to provide a stronger, more durable product that is easy to clean. All parts are plated for rust resistance. The cone has an 8 in (20.3 cm) open base and a 4 in (10.2 cm) top. Overall height is 12 in (31 cm).



C-335

C-356 Plastic Slump Cone

ASTM* C 31, C 143, C 172, C 192, C 232
AASHTO T 23, T 119, T 126, T 141, T 158

This inexpensive, rugged Plastic Slump Cone is dimensionally identical to our standard metal cone. It will not rust or dent and can be cleaned in an acid bath if necessary. It is used with the Aluminum Base C-351.



C-356

C-354 Slump Cone Funnel

The Slump Cone Funnel is used to fill the slump cone with fresh concrete. It is made from seamless, spun aluminum for durability, corrosion resistance and easy cleaning. The upper end has a diameter of 8 1/2 in (21.6 cm).



C-354

Slump Testing Components		
C-335	Slump Cone	5.0 lb
C-351	Aluminum base w/ handle and tamping rod	13.0 lb
C-356	Plastic Slump Cone	3.0 lb
C-354	Slump Cone Funnel	2.0 lb

Fresh Concrete Testing Set



C-360

DGSI offers a complete set of the most often requested equipment for job-site testing of slump, air content and unit weight of fresh concrete.

C-360	Fresh Concrete Testing Set	135 lb
Includes		
C-209	Plastic Cylinder Molds. 6 in x 12 in, 20 per carton	
C-20910	Lipped Cylinder Lids for C-209 (20 ea.)	
S-35710	Straight Edge	
C-335	Slump Cone	
C-351	Aluminum Base w/ handle and tamping rod	
G-510	Rubber Mallet	
G-29202	Large, round bottom scoop	
C-435A	Press-Ur-Meter	
GW-135	Platform Scale, 131 lb x 0.01 lb	
C-615	Yield bucket, 1/2 ft ³ capacity	
G-161	Pocket Thermometer, 25 ° - 125 °F	

K-Slump Tester

ASTM* C 1362

* See Standards Buyer's Guide at www.DGSI.info/3000.

The K-Slump Tester rapidly indicates the water content, workability and standard slump of fresh concrete.

The device has a pointed end for easy insertion into fresh concrete and a disc that controls the depth of penetration. When inserted, wet concrete enters the shaft through side openings and raises a floating plunger to give an estimate of concrete slump. The level of concrete retained in the probe after it has been withdrawn provides an index of water content and the degree of compaction. It should only be used when at least 6 in (15 cm) of concrete surrounds the tester. Operating instructions and a correlation chart are included. 12 x 2.5 x 2.5 in.

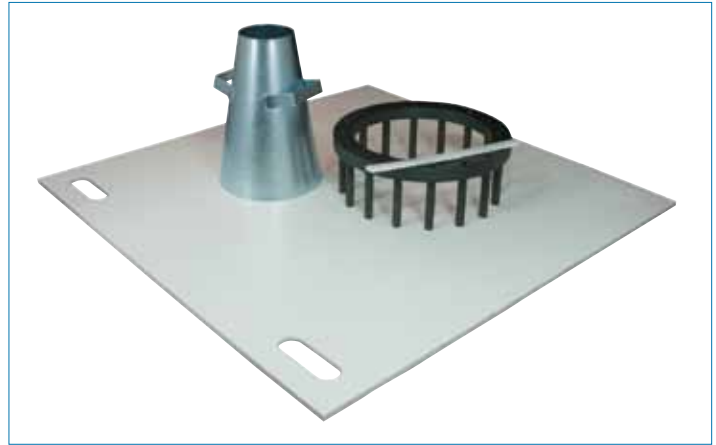


C-340

C-340	K-Slump Tester	2.0 lb
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J-Ring Test Set

ASTM C 1621/C 1621M-06



C-337

The DGSI J-Ring Test Set is used to determine the passing ability of self-consolidating concrete (SCC) by the J-Ring Method. Limited to concrete with nominal maximum size of aggregate of 1 in (25 mm). The Set includes the steel J-Ring, footless slump cone and plastic 36 x 36 inch base plate.

C-337	J-Ring Test Set
Set includes:	
	C-33701 — J-Ring
	C-33702 — Base Plate
	C-33703 — Mold
Accessories:	
C-44134	Strike-off Bar
C-19610	Measuring Tape, steel, 6 ft with 0.01" increments

VeBe Consistometer

ASTM C 1170 ASTM C 1176

Model C-370 conforms to ASTM C1170 for determining the consistency and density of roller-compacted concrete.

The unit is comprised of a vibrating table, swing arm with guide sleeve for the 50-lb surcharge weight, and a 9.5 in ID x 7.75 in H test mold.

Model C-371 conforms to ASTM C1176 for determining the consistency and density of roller-compacted concrete.

The C-371 is comprised of a vibrating table, a swing arm with guide sleeve for the 20-lb surcharge weight, and a 6 in ID x 12 in H test mold.



C-370

C-370	VeBe Consistometer, 9.5 in ID x 7.75 in H test mold	350 lb
C-371	VeBe Consistometer, 6 in ID x 12 in H test mold	350 lb

Volumetric Air Meter (Plastic)

ASTM C 173

Meter made from PVC and FRP. Very similar in design to model C-440. It weighs only 5.5 lb (2.5 kg). It features non threaded construction for easy use. A stainless steel "V" clamp holds the two halves together.

"O" ring seals prevent leakage. Expansion plug top. This Meter meets ASTM C 173-94 except for not being "constructed out of machined metal".

The base volume is 134 in³ (2.2 dm³) and the sight tube reads from 0-9%. Supplied as a kit, it includes the meter, syringe, tamping rod, strike off bar, funnel, mallet, calibrated cup and a hard sided plastic carrying case.



C-445

C-445	Air Volume Meter (Volumetair™) w/ acc. in case	18.0 lb
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Pressure Type "B" Meter

ASTM* C 231 AASHTO* T 152

* See Standards Buyer's Guide at www.DGSI.info/3000.

The Type "B" Meter measures the air content of fresh concrete based on the pressure-to-volume relationship of Boyles Law. Pressure is applied to the sample to compress the entrained air in the pores. The Type "B" Meter uses the change in known volume of air to determine the air content of the mix. The readings are not affected by changes in barometric pressure. This method is faster to use than the volumetric method. The meter is made from a corrosion resistant aluminum alloy with a heavy duty pump and built-in gauge (0-20%). The base has a volume of 1/4 ft³ (7 dm³) and can also be used for unit weight measurements. Instructions for use includes a chart for using the meter to determine the specific gravity of aggregates.

Kit includes the meter, syringe, tamping rod, calibration vessel, strike-off bar and plastic carrying case.



C-435A

C-435A	Type "B" Air Meter	35 lb
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Volumetric Air Meter (Metal)

ASTM C 173 AASHTO T 196

A Volumetric Air Meter measures air entrainment in fresh concrete by the "Volumetric Method." Air is removed from a known volume of concrete by agitation in an excess of water. It may be used with any type of aggregate including light weight and porous material. The test is not affected by atmospheric pressure and the specific gravity of the material need not be known. A direct reading sight gauge is built-in to the instrument. The base has a volume of 130 in³ (2.13 dm³) and the sight tube reads 0-10%. These Meters can be used as a pycnometer to determine the specific gravity of cement, sand or gravel as well as the percent of free-water in damp sand and gravel.

C-440 is machined bronze. The base and upper chamber of model C-440A is constructed of machined aluminum. Either model is supplied in a transport case with straight edge, measuring cup, tamping rod, syringe, baffle-bottom funnel and instructions.



C-440A

Volumetric Air Meter		
C-440	Roll-A-Meter™ (bronze), in wood case	35 lb
C-440A	Roll-A-Meter™ (aluminum), in plastic case	11 lb

Calibration Vessel

These Calibration Vessels may be used with any 1/4 ft³ (7 dm³) Concrete Air Entrainment Pressure Meter. Their volume is precisely 354 ml which is exactly 5% air by volume when placed in any 1/4 ft³ pressure meter bucket. Use two to check at 10%. It is best used if placed in a meter bucket pre-filled with water.



C-44201P



C-44201

C-44201	Calibration Vessel, brass, 1/4 ft ³ , 5%	2 lb
C-44201P	Calibration Vessel, plastic, 1/4 ft ³ , 5%	1 lb

Air Indicator Kit

AASHTO T 199

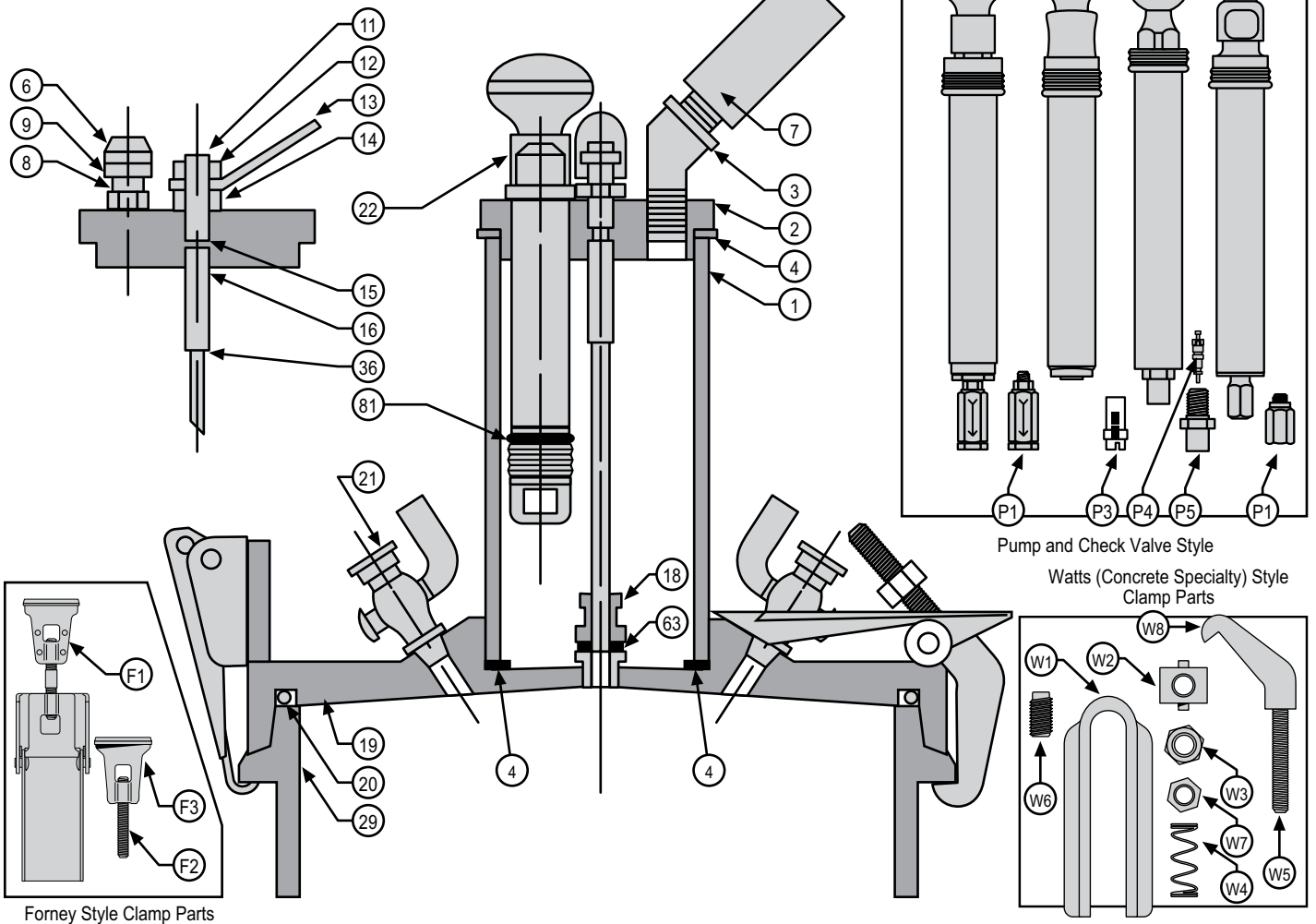
The test takes about 3 minutes to perform and is ideal for field use at either a pour site or batch plant. It may also be used to determine whether more thorough testing may be needed. The open end of the vial has a reinforced lip and extra graduation marks are included on the stem. The kit includes a 6 1/4 x 1 1/8-in (159 x 28 mm) air indicator vial with stopper/cup, squeeze bottle for alcohol, brush and instructions in a plastic case.



C-450

C-450	Air Indicator Kit	4.0 lb
C-45020HW	Air Indicator Tube (Replacement)	

Parts for Type "B" Air Pressure Meter



Drawing #	Part No.	Description	Qty Req'd
1	C-43501	Pressure Chamber	1
2	C-43502	Pressure Chamber Cap	1
3	C-43503	Pressure Chamber Elbow	1
4	C-43504	Pressure Chamber Gasket	2
6	C-43506	Air Bleeder Cap	1
7	C-43507	Gauge Complete	1
Not Shown	C-43508	Gauge Lens, 4-1/4 in OD, Acrylic	1
Not Shown	C-43509	Gauge Lens, 3-5/8 in OD, Glass	1
Not Shown	C-43510	Gauge Lens, 3-13/16 in OD, Glass	1
8	C-43505	Air Bleeder Stem	1
9	C-43569	Air Bleeder Cap Gasket	1
11	C-43511	Needle Valve Stem	1
12, 36	C-43512	Needle Valve Nut/Spring Retainer	1
	C-435A12	Needle Valve Snap Ring Spring Retainer	1
13	C-43513	Needle Valve Lever	1
14	C-43514	Needle Valve Spacer	1
15	C-43515	Needle Valve O-ring	1
16	C-43516	Needle Valve Spring	1
18	C-43518	Needle Valve Seat Assembly	1
19	C-43519	Cover	1
20	C-43520	Cover O-ring	1
21	C-43521	Cover Petcock	2
22	C-470	Universal Pump Assembly, Complete	1
29	C-43529	Base	1
63	C-43517	Needle Valve Seat O-ring	1

Drawing #	Part No.	Description	Qty Req'd
81	C-43561	Pump Piston O-ring	1
Not Shown	C-44131	Calibrating Vessel	1
Not Shown	C-44132	Calibrating Tube (Curved)	1
Not Shown	C-44133	Calibrating Tube (Straight)	1
Not Shown	C-44134	Strike-Off Bar	1
Not Shown	C-44135	Tamping Rod	1
Not Shown	C-44136	Syringe	1
Not Shown	C-435A22-46	Pan-Head Screw #10 x .5	3/latch
F1	C-435A22	Latch Assembly, Complete, 3 Hole	4
F1	C-435A22B	Latch Assembly, Complete, 2 Hole	4
F2	C-435A22-43	Latch Tab Stud	1
F3	C-435A22-44	Latch Tab	1
P1	C-43566A	Pump Check Valve	1
Not Shown	C-46020	Check Valve O-ring for P3	1
P3	C-46050	Pump Check Valve (Nylon/Plastic)	1
P4	C-43566	Pump Check Core Only	1
P5	C-43565	Pump Check Kit with Core	1
W1	C-43526	Clamp Toggle	1/clamp
W2	C-43524	Clamp Trunion	1/clamp
W3	C-43523	Clamp Stud Nut	1/clamp
W4	C-43525	Clamp Spring	1/clamp
W5	C-43542	Clamp Stud	1/clamp
W6	C-43527	Clamp Set Screw	1/clamp
W7	C-43528	Clamp Lock Nut	1/clamp
W8	C-43522	Clamp	1/clamp

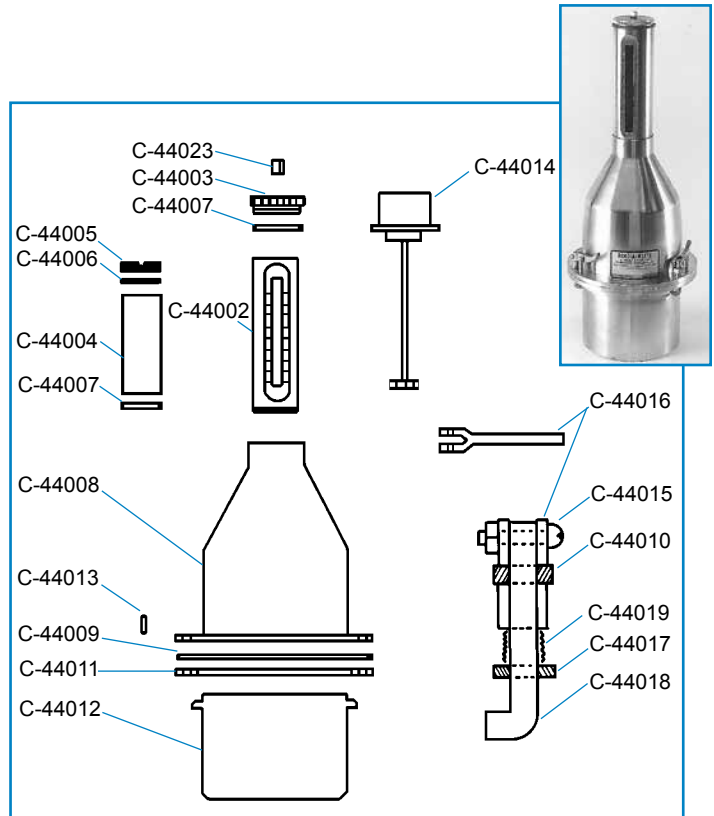
Plastic Air Meter Parts

C-445 Plastic Air Meter Replacement Parts

- C-44501 Top (Expansion Plug)
- C-44502 Calibrated Tube (Neck) Assembly
- C-44503 Calibrated Decal Only
- C-44504 Meter Top Housing
- C-44505 Meter Bottom Housing (Base)
- C-44506 Meter Instruction Decal
- C-44507 Clamp Assembly
- C-44509 Tamping Rod, 5/8 in x 12 in long
- C-44510 Funnel
- C-44511 Measuring Cup
- C-44512 Strike-Off Bar
- C-44515 Meter Top Housing O-Ring Gasket

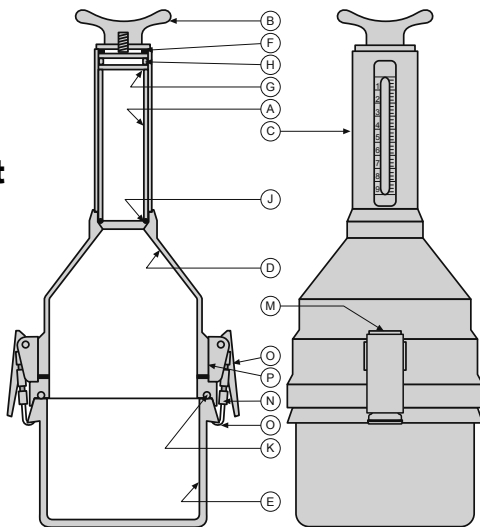


Roll-A-Meter™ and Replacement Parts



Roll-A-Meter, Model C-440 Components

Aluminum Volumetric Air Meter Replacement Parts



C-440A Aluminum Volumetric Air Meter Replacement Parts

Item	Part Nbr.	Description	Qty Req
A	C-44004	Plastic Sight Tube	1
B	C-440A02	Cap (New Expansion Style)	1
C	C-440A03	Graduated Tube	1
D	C-440A04	Upper-Chamber Body	1
E	C-440A0	Base	1
	C-440A0	Gas et New Cap	1
G	C-4400	Gas et Top Sight Tube	1
	C-4400	Sight Tube Clamp Ring	1
	C-4400	Gas et Lower Sight Tube	1
	C-440A1	Clamp Ring Upper-Chamber Body	1
	C-44014	Battle Funnel Assembly	1
M	C-43 A22	Latch Assembly	2
N	C-43 A22-43	Latch Tab Stud	1
	C-43 A22-4	Latch Tab	1
P	C-43 A22-4	Phillips Head Screw 10 x 1 2	3 latch

C-440 Roll-A-Meter (Whitecap [Watts]) Replacement Parts

C-44002	Graduated Tube	C-44012	Brass Base
C-44003	Brass Cap	C-44013	Guide Pin
C-44004	Gauge Tube	C-44014	Battle Funnel Ass'y.
C-44005	Glass Clamp Ring	C-44015	Toggle Pin
C-44006	Top Glass Gasket	C-44016	Toggle Lever
C-44007	Bottom Glass Gasket	C-44017	Spring Retainer
C-44008	Upper Chamber	C-44018	Jay Bolt
C-44009	Chamber Gasket	C-44019	Jay Bolt Spring
C-44010	Adjusting Nut	C-44028	Clamp Ass'y. Cpte.
C-44011	Brass Gasket Ring	C-44023	Brass Plug for Cap

Not Shown

C-44000	Gasket Kit	C-44135	Tamping Rod
C-44020	Brass Cup Measure	C-44136	Syringe
C-44134	Strike-Off Bar	C-44026	Carrying Case
C-44022	Spanner Wrench		

Capping Pad System

ASTM C 1231 AASHTO T 22



Capping Pads and Steel Receivers of various sizes and shapes.

The Capping Pad System is an alternative to the traditional casting-type capping method. These high-strength, abrasive-resistant neoprene discs and steel receivers are placed on each end of the concrete test cylinder. The Capping Pad System is easy to use, allows immediate testing and the components are reusable (100 breaks approx.). Available in three grades of hardness (soft, medium and hard).

Capping Pad System			
Capping Pads			
Size (nominal) and shape	Soft (50 durometer)	Medium (60 durometer)	Hard (70 durometer)
6 in (round)			
1 pair	C-293	C-294	C-295
12 pairs/carton	C-29312	C-29412	C-29512
4 in (round)	C-28704	C-28705	C-28706
3 in (round)	C-28701	C-28702	C-28703
3 in (square)	C-28710	C-28711	C-28712
2 in (round)	C-28707	C-28708	C-28709
2 in (square)	—	—	C-23704*
Steel Receivers			
C-288	6-in Steel Receivers, round, set of two		
C-28804	4-in Steel Receivers, round, set of two		
C-28803	3-in Steel Receivers, round, set of two		
C-28805	3-in Steel Receivers, square, set of two		
C-28802	2-in Steel Receivers, round, set of two		
C-23703	2-in Steel Receivers, square, set of two		
Related Item			
C-260	Planeness Gauge		

*70 and 80 durometer, set of 4. C-23704 square capping pads are available in two (2) strengths. Red pads can withstand strengths up to 4000 psi and amber pads are capable of withstanding strengths in excess of 4000 psi.

Note: Soft (50 durometer) pads have been found appropriate for cylinder strengths more than 1500 psi (10.3 MPa) and up to approximately 6000 psi (41.4 MPa). Medium (60 durometer) pads have been found appropriate for cylinder strengths between 2500 to 7000 psi (17.2 to 48.0 MPa). Hard (70 durometer) is not recommended for strengths less than 4000 psi (28 MPa). Capping pads may not be effective for very high strength concrete, i.e. in excess of 9000 psi (63 MPa).

Vertical Cylinder Capping Fixture

ASTM* C 617 * See Standards Buyer's Guide at www.DGSI.info/3000.

These fixtures are used to simplify the process of capping concrete test cylinders. Made from heavy gauge steel, they provide a stable base for the capping process. The upright supports are widely spaced to minimize injury and allow accurate alignment of the cylinder on the capping fixture. The fixture can easily be disassembled for base plate resurfacing, if needed, to extend the life of the device.

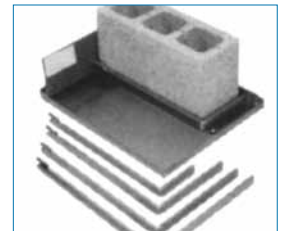


C-275

Vertical Cylinder Capping Fixtures		
C-275	Vertical Cylinder Capping Fixture, 6 x 12 in (15.2 x 30.5 cm)	27 lb
C-27510	Vertical Cylinder Capping Fixture, 4 x 8 in (10.2 x 20.3 cm)	27 lb
C-27520	Vertical Cylinder Capping Fixture, 3 x 6 in (7.6 x 15.2 cm)	27 lb
C-27530	Vertical Cylinder Capping Fixture, 2 x 4 in (5.1 x 10.2 cm)	

Block Capping Fixture

Block capping fixture caps 6-in (15 cm), 8-in (20 cm) and 12-in (30 cm) masonry blocks in preparation for compression testing by using interchangeable retainers. The base is precision surface ground to 0.003 inch in all directions.



C-265

C-265	Block Capping Fixture	130 lb
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Planeness Gauge Set

This set is used to determine the planeness (flatness) of platens and capping fixtures. The set consists of 6-in long precision ground parallel bar, feeler gauge set, 0.001-in feeler gauge and plastic case.



C-260

C-260	Planeness Gauge Set, 6 in	4 lb
Replacement Parts		
C-26001	Precision-ground parallel bar, 6 in long	
C-26002	Feeler gauge set, 0.003 to 0.018 in (marked w/ metric equivalent)	
C-26003	Feeler gauge set, 0.001-in thick, 12 in (L) x 1/2 in (W)	
C-26004	Case, plastic	
C-26005	Precision-ground parallel bar, 4 in long	

Warming Pot

Designed for melting and maintaining the heat level of paraffin sealing waxes and capping compounds. It has an adjustable thermostatic control operable up to 550 °F (228 °C).

The inner heating chamber is made of cast aluminum, encased in stainless steel and surrounded by 3 inches of fiberglass insulation. The aluminum top cover is fitted with a wooden handle. The pot has a pilot light and a 6 ft (2.4 m) 3-conductor grounded power cord.



GO-230

Available in 5 sizes with heating elements for 110 or 220 V, 60 Hz, single phase, 1000 or 1320 W, 8.3 A.

Warming Pots		
GO-230	Warming Pot. 4 qt, 110 V	16 lb
GO-23010	Warming Pot. 4 qt, 220 V	16 lb
GO-231	Warming Pot. 8 qt, 110 V	27 lb
GO-23110	Warming Pot. 8 qt, 220 V	27 lb
GO-232	Warming Pot. 12 qt, 110 V	29 lb
GO-23210	Warming Pot. 12 qt, 220 V	29 lb
GO-23220	Warming Pot. 20 qt, 110 V	43 lb
GO-23225	Warming Pot. 20 qt, 220 V	43 lb
GO-23228	Warming Pot. 28 qt, 120 V	52 lb
GO-23229	Warming Pot. 28 qt, 220 V	52 lb
Related Items		
G-29105	Capping Ladle, stainless steel, 8 oz (0.24 l) capacity	

Capping Compound

ASTM* C 617 * See Standards Buyer's Guide at www.DGSI.info/3000.

Melting point is 240 °F (115 °C), best flow at 260 - 280 °F (126-137 °C).

Made in two formulations with two-hour setting time compressive strengths of:

- 5500 psi (38 MPa) Capping Compound Powder or Ingots
- 8000 psi (55 MPa) High-Strength Compound Chips
- 4000 psi (28 MPa) Gypsum Powder



Capping Compounds

C-281	Capping Compound (ingot), 50 lb (23 kg) box
C-282	High-Strength Capping Compound (chips), 50 lb (23 kg) bag
C-283	Hydra Stone (powder), 50 lb (23 kg) bag



C-270

Vertical Capping Set

ASTM C 31, C 192, C 617

AASHTO T 23, T 126

Cylinder test specimens must have flat and level end surfaces perpendicular to the cylinder body to assure compression test accuracy. The cylinder ends may be either ground or capped to achieve conformity with ASTM C 617.

The Vertical Capping Set provides all the needed items for capping 6 x 12 in (15.2 x 30.5 cm) concrete cylinders.

C-270	Vertical Capping Set, 110 V, 60 Hz	45 lb
Set Includes		
C-275	6 x 12 in Vertical Capping Fixture	
GO-230	4 qt Warming Pot, 110 V, 60 Hz	
G-29105	Capping Ladle, stainless steel, 8 oz	
C-246	Carrier for 6 x 12 in cylinders	
G-153	Dual Scale Thermometer	
Related Items		
C-280	Capping Compound (powder), 50 lb (23 kg) bucket	
C-281	Capping Compound (ingot), 50 lb (23 kg) box	
C-282	Hi-Strength Capping Compound (chips), 50 lb (23 kg) bag	
G-530	Hi-Temp Cotton Gloves	

Caution!

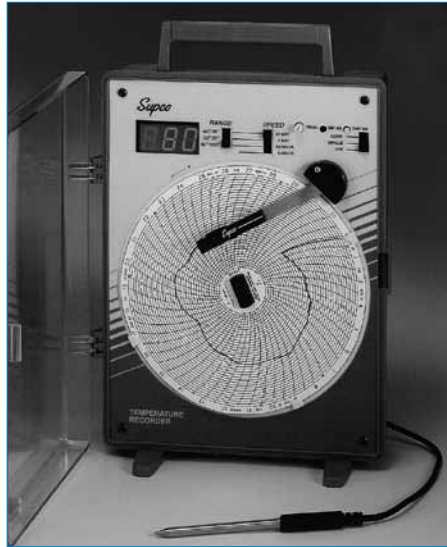
Personnel capping cylinders should wear safety glasses, protective clothing and gloves. Melting pots with capping compound should be used under a hood exhausted to outdoors and the capping area well ventilated. The Flash Point of sulphur-based compound is about 400 °F (204 °C) and the mixture can ignite if overheated.

MSDS sheets available on www.durhamgeo.com

Digital Temperature Chart Recorder

The G-184A Digital Temperature Recorder with remote sensor accurately measures and records temperature in air, gas, liquids, powders, solids and semi-solids.

Two selector switches on the face panel allow for recording of three different temperature ranges at four different recording speeds.



G-184A

Temperature / Humidity Recorder

- Chart dia.: 6 in.
- Front panel touch pad
- Real time data view
- Battery backup
- Field replaceable probes
- Field calibration of probes
- Independent channel alarms
- Temperature and humidity probe



G-183A

- Temperature ranges: -40 ° to 30 °F, -20 ° to 50 °F, 50 ° to 120 °F.
- Temperature accuracy: ± 2 °F.
- Chart speeds: 6 hr, 24 hr, 7 days, 31 days.
- Chart speed accuracy: better than 1%.
- Chart diameter: 6 in.
- Relative Humidity: 96% Max.
- Remote readings from up to 100 ft (with optional sensor wire). Remote sensor accurately measures and records temperatures in air, gas, liquids, powders, solids and semisolids.
- Programmable speed and temperature ranges.

The temperature probe has a 15-ft long cable with a 4-in long stainless steel submersible tip. 115 V, 50/60 Hz. Battery back-up. Optional adapter for 12 V vehicle operation.

Furnished complete with 2 cartridge pens and sixty 6"-diameter assorted charts.

G-184A Digital Temperature Recorder, Fahrenheit Model 5 lb

Range and Accuracy:

Temp: -40 °F to 130 °F ±2 °F (-40 °C to 55 °C ±1 °C).

RH: 0-95% (non-condensing) at 32 °F to 130 °F ±2% (0 °C to 55 °C) ambient.

G-183A Temp/Humidity 6-in Chart Recorder 5 lb

Digital Max/Min Thermometer

With dual sensors, the G-180E Digital Max/Min Temperature Recording Thermometer is perfect for monitoring job site curing tanks with one instrument!



G-180E

Seven day high/low memory for each sensor. Selectable °F or °C degree scale.

Range:
40 °C to +120 °F; -40 °C to 50 °F.

Accuracy:
± 1.8 °F; ± 1 °C.

Waterproof probes on 10 ft cable.

G-18050 Digital Min/Max Temperature Recording Thermometer 1 lb

Sling Psychrometer

The Sling Psychrometer is used to determine relative humidity, dew point and vapor pressure. G-140 has tubes recessed in gray metal back, folding swivel handle and boxed with spare wicks and instructions.



G-142

G-142 Pocket Sling Psychrometer has self-contained sling-pocket case and slide rule. Range: 20 ° to 120 °F. High-impact plastic.

G-140 Sling Psychrometer 1.0 lb
G-142 Pocket Sling Psychrometer 1.0 lb

Specifications for Sling Psychrometers

Operation: Whirl for 15 seconds until matching readings result
Thermometers: Two mercury-filled, wet and dry bulb types
Construction: Metal back holds thermometers and attached folding swivel handle

See page 117 for laboratory thermometers

Armored Case Concrete Thermometer

ASTM E 1

The Armored Case Concrete Thermometer may be used for temperature measurement of aggregates and concrete. 6 in (15.2 cm) long.



G-15910

G-15910	Armored Case Concrete Thermometer, 0° to 130°F, 2° divisions	1.0 lb
G-15915	Refill for G-15910	

Humidifier

Designed to provide humidity levels up to 95% for a concrete cylinder curing room. An adjustable brass float controls water usage at variable pressures up to 75 psi (517 kPa). The humidifier is provided with 1/8-in NPT water inlet and 1/4-in FPT water overflow fittings and a sealed motor section. 14 1/2-in diameter x 10-in high (37 x 27 cm). Shown with one-way directional flow. Available with half and full-blow.



C-250

C-250	Humidifier, 115 V, 60 Hz, 3250 RPM, .76 A. Produces 5 lb. vapor per hour. Suitable for 2000 ft ³ room.	40 lb
C-25050	Humidifier, 115 V, 60 Hz, 3250 RPM, 1.15 A. Produces 10 lb. vapor per hour. Suitable for 4000 ft ³ room.	45 lb
Accessory		
C-25010	Humidistat Controller, 115 V, 60 Hz	3 lb

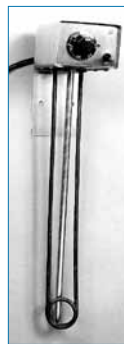
Tank Heater and Circulating Pump

Designed for curing tanks, the heater (C-255) will provide temperature controlled heated water. The thermostat is adjustable between 35°F and 95°F. The element is protected by a thermal cut-out. Internal wiring is within a steel cover with a conduit fitting for the input power, 115 V (ac), 850 W, and a mounting bracket. The heating element is 19 in (48 cm) long.

The Circulation Pump is compact enough to fit in most curing tanks. Size: 4 in H x 3 3/4" W x 4 1/2" L. Rated flow: 170 gal/hour. 1/4 in outlet diameter. 115 V, 60 Hz, 1 Ph, 1.1 A. Cast aluminum construction with Nylon plastic filter guard.



C-256



C-255

C-255	Electric Tank Heater, 115 V	6 lb
C-256	Submersible Circulating Pump, 115 V, 100-170 gph	10 lb
C-257	Submersible Circulating Pump, 115 V, 70-300 gph	12 lb

Concrete Cylinder Curing Box

ASTM C 192, C 511, C 31 AASHTO M 201, T 126, T 23

Field-portable curing box with built-in temperature controlled system. C-251 features a heat pump that both heats and cools. C-252 contains a heater only. Made of durable plastic with a steel bottom rack. Designed and factory tested to accommodate ASTM specified curing temperature requirements (73.4°F ± 3°F for 48 hours). It will hold up to 22 standard 6x12-in cylinder molds. Meets or exceeds DOT specs. Outside dim. (LxWxH): 75 x 25 x 21 in (190 x 63 x 53 cm). Inside dimensions (LxWxH): 54 x 18 x 17 in (137 x 46 x 43 cm).



C-252

C-251	Deluxe Concrete Curing Box, 110 V Heating and Cooling	162 lb
C-252	Economy Cylinder Curing Box, 110 V, 15 A Heating Only	74 lb
C-25210	Economy Cylinder Curing Box, 220 V, 7.5 A Heating Only	74 lb

Pi Tape

The Pi Tape directly measures the diameter of concrete cylinders from 2 to 12 inch diameter to an accuracy of ±0.001 inch. It gives the average diameter in one reading and eliminates the averaging of several when using a micrometer. Manufactured from type 1095 spring steel.

The Pocket Pi Tape is similar but measures from 1- to 23-in diameter with 0.01 accuracy. It's diameter is 1 3/4 in. and features a 1/4 x 72-in retractable steel tape. It does not have the averaging feature.



C-196

C-196	Pi Tape in case	1 lb
C-19610	Pocket Pi Tape	

Field Curing Box and Transportation Rack

ASTM C 31
AASHTO T 23

The C-20710 Portable Field Curing Box is a zipper-sealed polymer and vinyl chest with 1/2 inch of insulating foam and a rigid floor plate. It is designed to accommodate the optional C-208 Transportation Rack, a lightweight, rugged, plastic device designed to hold eight 6 x 12 inch concrete cylinders in an upright position. A center square opening accommodates a heater (not supplied).



C-207

C-207	Field Curing Box and Transportation Rack
C-20710	Portable Field Curing Box
C-208	Transportation Rack, 6 -to- 8-in cylinder capacity
C-20804	Transportation Rack, 4 -to- 16-in cylinder capacity

Curing Tank for Cylinders or Beams

ASTM C 192
AASHTO T 127

For curing cylinder or beam specimens that require complete immersion. Two materials are offered: galvanized steel and formed plastic. The corrugated steel tanks have a single seam secured with elastic packing and rivets, top edge is rolled around steel pipe.

Steel and Plastic Curing Tanks		
C-253	Metal Curing Tank, 137 gal (519 l) capacity. Size: 24 x 24 x 60 in (0.6 x 0.6 x 1.5 m)	55 lb
C-254	Metal Curing Tank, 330 gal (1136 l) capacity. Size: 36 x 96 x 24 in (0.9 x 2.4 x 0.6 m)	120 lb
C-25420	HD Polyethylene Curing Tank, 150 gal (568 l). Size: 37 x 56 x 25 in (0.9 x 1.4 x 0.6 m)	50 lb

Canvas Cylinder Wrap

The Canvas Cylinder Wrap is used to contain fragments when the cylinder is compression tested. It is reusable and is provided with Velcro tabs for easy installation and removal.

C-226	Canvas Cylinder Wrap, 6 x 12 in	1 lb
C-227	Canvas Cylinder Wrap, 4 x 8 in	1 lb

Single-Use Plastic Cylinder Molds

ASTM* C 39, C 192, C 470

* See Standards Buyer's Guide at www.DGSI.info/3000.

The Cylinder Molds are dimensionally accurate and are used to make test specimens of wet concrete. Made from a non-absorbing and non-adhering plastic, designed to withstand rough handling. They are economical to use as they require no preparation and can be easily stripped from the specimen using the Stripping Tool. Max temp of product placed in mold is 212° F.



Plastic Cylinder Molds

Four mold diameters available:

- 6 in. (15.2 cm)
- 4 in. (10.2 cm)
- 3 in. (7.6 cm)
- 2 in. (5 cm)



C-211

Domed Plastic Lids for the 6-in size do not touch the specimen and seal the end of the mold to prevent specimen moisture loss.

Single-Use Plastic Cylinder Molds, Plastic Lids, Stripping Tool		
C-209	Lipped Single-Use Plastic Cylinder Mold, 6 x 12 in (15.2 x 30.5 cm), 20/case	17 lb
C-210	Single-Use Plastic Cylinder Mold, 6 x 12 in (15.2 x 30.5 cm), 20/case	17 lb
C-220	Single-Use Plastic Cylinder Mold, 4 x 8 in (10.2 x 20.3 cm), 36/case	15 lb
C-215	Single-Use Plastic Cylinder Mold, 3 x 6 in (7.6 x 15.2 cm), 80/case	17 lb
C-218	Single-Use Plastic Cylinder Mold, 2 x 4 in (5.1 x 10.2 cm), 84/case	18 lb
C-21510	Flat Plastic lid for 3-in (7.6 cm) Plastic Mold	1 lb
C-21810	Flat Plastic lid for 2-in (5 cm) Plastic Mold	1 lb
C-20910	Lipped Plastic lid for 6-in (15.2 cm) Plastic Mold, C-209	1 lb
C-212	Domed Plastic lid for 6-in (15.2 cm) Plastic Mold, C-210	1 lb
C-221	Domed Plastic lid for 4-in (10.2 cm) Plastic Mold, C-220	1 lb
C-211	Mold Stripping Tool	2 lb
Related Items		
C-352	Tamping Rod, graduated, rounded on one end	
C-21010	Reusable Plastic Cylinder Mold, 6 x 12 in (15.2 x 30.5 cm)	
G-191	Micrometer Caliper	
C-246	Cylinder Carrier	
C-246L	Cylinder Carrier for Lipped Molds	

For more information visit www.DGSI.info/3096

Steel Cylinder Mold

ASTM* C 39 * See Standards Buyer's Guide at www.DGSI.info/3000.

The reusable Steel Cylinder Mold is used for preparing concrete test specimens for compression testing. It comprises the mold with a clamping system to keep it tightly closed and a base plate that is clamped to the cylinder when being used. Both items are plated to resist corrosion. Size: 6 x 12 in (15.2 x 30.5 cm).



C-22505



C-225

C-225	Steel Cylinder Mold, 6 x 12 (15 x 30.5 cm), w/o handle	27 lb
C-22505	Steel Cylinder Mold, 6 x 12 (15 x 30.5 cm), with handle	28 lb
C-22550	Steel Cylinder Mold, 4 x 8, (10 x 20 cm) without handle	10 lb

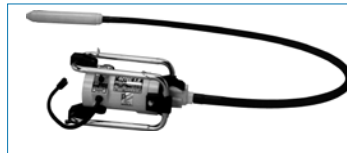
Related items

C-22510	Base Plate (replacement)
C-35710	Straight Edge
C-352	Tamping Rod, graduated

Concrete Vibrator

ASTM C 31, C 138, C 132
AASHTO T-23, T-121, T-126

Consolidation of fresh, molded concrete specimens is easily accomplished in the laboratory or at the work site with this electric driven (UL Listed) unit.



C-345

- Power: 1¼ hp (0.9 kW)
- Head Frequency: 10,000 vibrations/min in 1-in slump
- Amplitude: 0.092 in (2.3 mm) in air
- Head size: ¾ in x 12 in (19 x 30.5 cm)
- Shaft Length: 36 in (91.4 cm)
- Compaction Capacity: 2 to 4¼ yd³/hr (1.5 to 3.6 m³/hr)

C-345	Concrete Vibrator, 115 V, 60 Hz	21 lb
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Pocket Tachometer



Check vibration, in CPM and speed, in RPM as well as find "dead spots" or unwanted vibrations with the Pocket Tachometer. Used to determine the effectiveness of vibrators setting concrete in forms. It comprises an aluminum body, steel wire reed and tuning slide. The speed is read directly off the etched scale in a range of 2,000 to 21,000 CPM or RPM.

C-540	Pocket Tachometer, 2000 to 21,000 cpm or rpm	1 lb
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Cylinder Carriers

The Cylinder Carrier is used to move 6 x 12-in concrete cylinders in the field or in the lab. Made from formed steel.



C-246

The C-246 Gripper Carrier secures the cylinder by hand-grip, pincer action, rubber-lined jaws. The C-246L carrier is designed to be used with plastic cylinder molds having an upper reinforcing lip. It is sold individually.



C-246L

C-246	Cylinder Gripper Carrier (for 6-in cylinders)	4 lb
C-24650	Cylinder Gripper Carrier (for 4-in cylinders)	3 lb
C-246L	Lipped Mold Carrier	1 lb

Replacement Part

C-24601	Replacement Rubber Grips for C-246
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Steel Beam Mold

ASTM C 31

Molds are formed from heavy gauge steel plate to maintain dimensional shape and can be easily disassembled for cleaning. Fitted handles assist with easy movement.



C-230

Steel Beam Mold		
C-230	Steel Beam Mold, 6 x 6 x 20 in (15 x 15 x 51 cm)	22 lb
C-23560	Steel Beam Mold, 6 x 6 x 6 in (15 x 15 x 15 cm)	20 lb

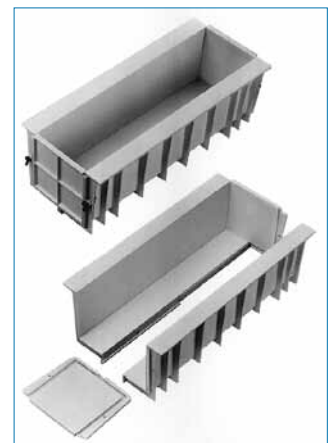
Plastic Beam Mold

ASTM C 31, C 78, C 192, C 293

Lightweight copolymer plastic beam mold for forming 6 x 6 x 21 in (152 x 152 x 533 mm) beams. Ribbed interlocking parts assemble easily with thumb screws while providing a stable, dimensionally correct mold.

Inside surfaces are smooth and water tight to eliminate need to apply sealant to joints.

Note: The number of uses depends upon the care exercised. Abusive use, dropping, striking the mold, etc. can cause damage or mold distortion.

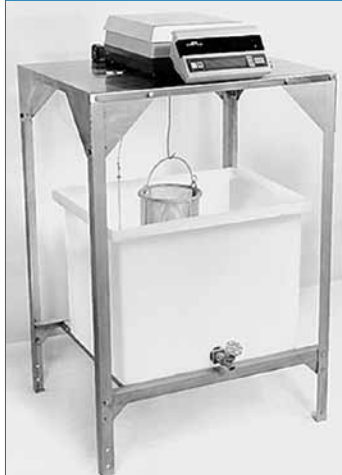


C-234

C-234	Plastic Beam Mold, 6 x 6 x 21 in	8 lb
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Specific Gravity Bench

Designed to enable measurement of the specific gravity of aggregates as well as compacted and uncompacted bituminous mixtures as well as other materials. Each of the components are available separately, as shown below. Requires a weigh-below scale.



A-530 shown with accessories.

A-530	Specific Gravity Bench, w/ 115 V, 60 Hz outlet strip, 31 x 25 x 36 in (W x D x H)	75 lb
GW-30316*	Explorer Pro High Precision 22000 x 0.1g w/o Cal	10 lb
A-532	Water Tank, 45 gal, 28 x 18, 24 in deep	20 lb
A-535	Specific Gravity Cradle, 8 x 9 x 6 in	1 lb
C-625	Wire Basket, No. 6 wire mesh, 8 x 8 in	8 lb
C-255	Tank Heater, 1000 W, 115 V, 60 Hz	6 lb
C-256	Tank Circulator, 115 V, 60 Hz	10 lb
G-175	Thermometer, -30 to 120 °F x 1 °F	1 lb
G-170	Thermometer, -10 to 110 °C x 1 °C	1 lb

* For lighter-weight aggregates, consider scale GW-30315 (12000 x .1 g)

Density Basket

ASTM C 127
AASHTO T 85

The Density Basket is used to hold aggregates when weighed in water to determine the density and specific gravity. Constructed of #8 wire mesh over a steel frame with a rust-resistant finish for long life.



C-625

C-625	Density Basket, 8" dia. x 8" H (20.3 x 20.3 cm)	21 lb
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Yield Buckets

Determine the weight per cubic foot or fraction of aggregates of freshly prepared concrete with these Yield Buckets. Made from heavy gauge, rust resistant steel with all welded connecting edges. Available in four sizes from 1 ft³ to 1/10 ft³.



C-619 (back), C-611 (front)

Yield Buckets		
C-619	1 ft ³ Yield Bucket, 14 in dia. x 11.2 in H	20 lb
C-615	1/2 ft ³ Yield Bucket, 10 in dia. x 11 in H	13 lb
C-613	1/3 ft ³ Yield Bucket, 8 in dia. x 11.5 in H	10 lb
C-611	1/10 ft ³ Yield Bucket, 6 in dia. x 6.1 in H	4 lb

Unit Weight Measures

ASTM C 29, C 138, C 388
AASHTO T 19, T 121

Determine the weight per cubic foot or fraction of fine, coarse or mixed aggregates with these measures. Made from thick walled cast aluminum to retain form and not corrode in the presence of cement pastes. Precision machined for true measurements.

Available in four sizes from 1 ft³ to 1/10 ft³.



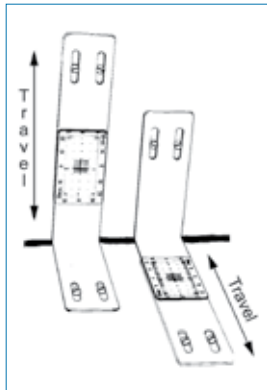
C-609 (back) and C-601 (front)

Unit Weight Measures		
C-609	1 ft ³ Unit Wt. Measure, 14 in dia. x 11.2 in H	20 lb
C-605	1/2 ft ³ Unit Wt. Measure, 10 in dia. x 11 in H	13 lb
C-603	1/3 ft ³ Unit Wt. Measure, 8 in dia. x 11.5 in H	10 lb
C-601	1/10 ft ³ Unit Wt. Measure, 6 in dia. x 6.1 in H	4 lb

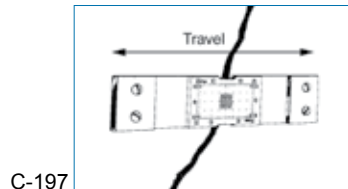
Related Items for Unit Weight Measures and Yield Buckets		
C-61130	Strike-Off Plate, 10 in (25.4 cm), acrylic, 1/2 in thick, can be cut to size	
C-61190	Strike-Off Plate, 16 in (40.6 cm), acrylic, 1/2 in thick, can be cut to size	
C-353	Tamping Rod, no graduations	
C-29201	Scoop, small, round bottom	
GW-135	Portable Bench Beam Scale	

Crack Monitor

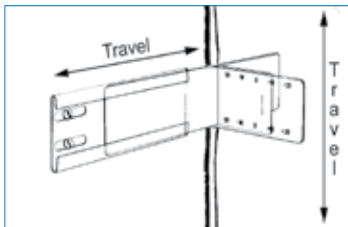
Detect and record movement of cracks in concrete, brick or masonry structures with these simple to use and inexpensive devices. They consist of two overlapping acrylic or rigid PVC plates. One plate is marked with a millimeter grid, the other with cross hairs centered over the grid. Once installed, any movement can be easily seen and recorded on the Crack Progress Chart which is included with each Crack Monitor.



C-19702



C-197



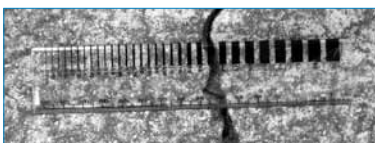
C-19704

C-197	Standard Crack Monitor	1 lb
C-19702	Corner/Floor Crack Monitor	1 lb
C-19704	Displacement Crack Monitor	1 lb

Specifications for Crack Monitors	
Overall size:	1.25 x 5.75 x 0.25 in (3.2 x 14.6 x 0.6 cm)
Plate length:	4 in (10.2 cm)
Grid size:	1.5 x 0.75 in (3.8 x 1.9 cm)
Discrimination:	0.5 mm
Max. width movement;	0.75 in (20 mm)
Max. vertical movement:	0.375 in (10 mm)
Coeff. therm. expansion:	3.80×10^{-5} in/in/°F (6.84 x 1 ⁻⁵ mm/mm/°C)

Crack Width Gauge

C-198 Crack Width Gauge is used to measure crack widths up to 7 mm wide on one scale and up to 160 mm on the other scale. For surveying damaged buildings and pavements.



C-198

C-198	Crack Width Gauge (acrylic)
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Electronic crack meters, strain gauges and data loggers are available. See www.SlopeIndicator.com or call us for details.

Concrete Test Hammers

ASTM C 805

Model C-500 is an Impact-type Concrete Test Hammer which tests in-place compressive strength within a range of 1500 to 8,000 psi (10 - 55 MPa). The hammer is placed on the test surface and impact force is released. The rebound value is noted and compared to a supplied table. Set includes hammer, rubbing stone, canvas case, instructions and calibration curves.



C-500

Model C-506 is a Digital Concrete Test Hammer which features automatic calculation and LCD screen display of the mean rebound number. It indicates the following in two digit figures:



C-506

- Impact Number
- Rebound Number
- Average Value
- Mean Value

The data may be displayed in one lot after all the measurements have been taken. The hammer has an impact energy level of 1.6 lbf-ft (0.225 kg·m) and comes with a carborundum stone and carrying case. Uses 4 "AA" batteries.

C-500	Concrete Test Hammer, Impact	6 lb
C-505	Concrete Test Hammer, Digital (without printer)	13 lb
C-506	Concrete Test Hammer, Digital	16 lb

Related Items

C-50010	Rubbing Stone
C-50020	Calibration Test Anvil

Vapor Emission Kit

Calcium Chloride Vapor (Moisture) Emission Test Kit is used to determine the dryness of a concrete floor prior to applying a covering.

The vapor kit contains the following items:

- (3) Clear, plastic, self-adhesive domes.
- (3) Anhydrous Calcium Chloride desiccant cartridges (individually packaged & sealed).
- (1) pH Test Kit for concrete.
- Instructions and recording log/calculation worksheet.



C-566

C-566	Vapor Emission Kit (pack of 3)
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Windsor Probe Test Systems

ASTM C 670, C 803

The Kit provides the driver gun, templates for guiding the fired probe gauge and a graph to evaluate results. A Moh's Hardness Scratch Test Kit is also included. It is supplied in a carrying case.



C-510

The probe gauges are supplied separately as kits of 3 or 25

with matched explosive power loads:

- Silver Probe Kit certified for testing coarse, natural stone aggregate (standard weight concrete), having a density greater than 125 lb/ft³ (2.00 g/cm³).
- Gold Probe Kit certified for lightweight aggregate such as expanded shale and having a density less than 125 lb/ft³, (2.00 g/cm³).

Windsor Probe Test System		
C-509	Windor Probe Test System, Standard	18 lb
C-510	Windor Probe Test System, with Readout	18 lb
C-520	Silver Probe Kit, 3 packets	1 lb
C-520-25	Silver Probe Kit, case of 25 packets	8 lb
C-530	Gold Probe Kit, 3 packets	1 lb
C-530-25	Gold Probe Kit, case of 25 packets	8 lb
Related items		
C-500	Concrete Test Hammer, Impact Type	
P-411	Round Brush	

R-Meter MK III Rebar Locator

ACI 318, BS 1881 #204, DIN 1045, CP 110, EC 2, SIA 162, DGZFP B2.

The rugged R-Meter MK III utilizes the latest in eddy current sensing and micro-processor technology to accurately locate, determine depth, and estimate diameter of metal objects in concrete.



C-558

It is not influenced by small metal particles in the concrete, whether the concrete is fresh or hardened, wet or dry. The eddy current sensor allows the unit to locate ferrous and non-ferrous metals in concrete, thereby finding steel accurately reinforcing bars, tendons, copper tubing, conduit and more.

- Eddy current sensor design for greater accuracy
- Single sensor for all depth ranges
- Locates rebar, post tension cable, conduit and copper pipe
- Determine bar size up to 4.5 in (115 mm) deep
- Rugged and splash resistant case
- Locates up to 8 in (200 mm) deep

Memory capacity: 80,000 data points

Battery life: 4–6hrs continuous run time.

Recharging voltage: 18 V.

Size: (L x W x H)

Basic Unit: 10.63 x 9.68 x 4.88 in (27 x 24.5 x 12.4 cm).

Probe: 5 x 2.4 x 1.6 in (12.7 x 6 x 4.1cm).

Scan Cart: 8.25 x 5.6 x 2.25 in (20.1 x 14.2 x 5.7 cm).

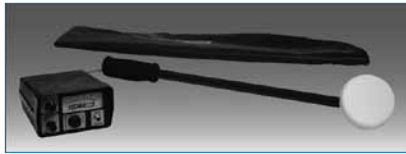
C-558	Basic unit	6 lb
C-55810	Basic Unit with software	
C-55820	Scan Cart upgrade (turns the C-558 Basic unit into a complete system)	
C-55830	Complete system	

Kit Components:

	C-558	C-55810	C-55820	C-55830
C-55801 Main Unit	■	■		■
C-55802 Probe	■	■		■
C-55821 Scan Cart			■	■
C-55822 Extension Rod			■ (2 ea)	■ (2 ea)
C-55803 8 ft Cable	■	■		■
C-55823 12 ft Cable			■	■
C-55806 Headphones	■	■		■
C-55804 Sizing Template	■	■		■
C-55805 Charger	■	■		■
C-55812 Basic Software		■		■
C-55824 Scanning Software			■	■
C-55811 RS-232 Cable		■		■

Rebar Locator

The instrument is used to locate rebar, conduit pipe or other metallic objects in concrete or non-metallic structures. Adjustable controls are provided for sensitivity, sound volume and depth of penetration. Audio and visual (meter) indications of detection are provided. It is capable of detecting the precise location and definition of a 1/2 in (13 mm) rebar at up to 8 in (20 cm) deep in concrete. Sensitivity: 0.2 mV RMS for full scale. Output: Meter and speaker or optional headphones. Power: ± 9 V (12 x 1.5 V AA batteries).



C-550

C-550	Rebar Locator	5 lb
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Moisture Meter

Uses a high-frequency capacitive sensor to sample material and measure moisture in most solid materials. Color coded LED indicates moisture condition. Two modes of operation: Pin Mode for low density materials and Search Mode for high density materials. Measures moisture content in concrete, masonry, hard woods, soft woods, gypsum and brick. Alarm values can be set by user.



C-564

Measurement range: 0-80.0%
Resolution: 0.1%
Temperature range: 0 ° - 50 °C
Size: 6.5 x 2.4 x 1 in (165 mm x 62 mm x 26 mm)
Weight: .4 lb (6 oz). Operates on four "AAA" batteries.

C-564	Moisture Meter	1 lb
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Portable Moisture Meter with Probe

Microwave technology is used to measure the content of sand, aggregates and other coarse grained materials up to 25 mm dia. having moisture content up to 20% by weight. Powered by 4 "AA" batteries, the unit can store up to 150 readings and download to a PC via RS-232 interface. Unit comes calibrated for



C-569

both sand and natural aggregate; however, for greater accuracy, the device can be calibrated by the user for specific materials. Accuracy of ± 0.2% can be achieved when calibrated for sands. Unit consists of the meter with digital readout and sensor probe.

C-569	Portable Microwave Moisture Meter	4 lb
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Digital Construction Moisture Tester

Resistance-type meter designed to detect moisture level in concrete, masonry, wood, plaster, gypsum, roofing and insulation—virtually any hygroscopic building material. Plastic case and integral 5/16 in (7.9 mm) con-



C-567

contact pins permit easy one-hand operation with fingertip controls. Cable-mounted accessory electrodes with short 5/16-in or long 3¼-in (83 mm) pins and 36-in cable are also available for attachment to the built-in connector. Three separate scales are able to average up to 50 accumulated readings.

Meter measures 7.5 x 3.0 x 1.8 in (191 x 76 x 44 mm).

Short 5/16-in max. penetration pins, as attached to meters or electrodes, are for concrete, brick, wood, plaster, masonry, etc. Order longer 3.25 in pin electrodes for below-surface testing of roof decks or in roof or wall insulation. Contact pins are replaceable in both types and 6 spare short pins are provided with each order. Vol.: 0.1 ft³

C-567	Digital Construction Moisture Meter	2 lb
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Maturity Meter System

ASTM C 1074, C 918

Used to easily and completely monitor fresh concrete to optimize setting time and avoid premature stripping of forms, thus eliminating reworking of un-cured concrete that doesn't meet strength requirements.



C-575

C-57501	Single Channel Maturity Meter System	7 lb
Related Items		
C-57502	Maturity Meter Software w/ RS-232 Cable	
C-57503	Thermocoupler Sensor, 3 ft	

Chloride Test Kit

ASTM C 1202
AASHTO T 277



C-563

This kit measures acid-soluble chlorides in concrete. Chloride ion concentration in concrete is used to determine the need for maintenance on concrete structures. Measures 0.002% to 2% chloride by weight. The digital display shows direct reading of lbs/cu. yd. and percentage of chloride by weight.

The Chloride Test Kit includes:

- Chloride/Temperature combination electrode with cables and connectors
- Electronic meter with temperature compensation circuits for direct conversion to percent chloride
- 12 pre-filled extraction liquid jars and 5 calibration solutions in plastic jars
- Accessory pack: Spray bottle of distilled water, electrode wetting solution, dust collecting pan, clamp, anchors, drill bit, scales, instructions and briefcase

C-563	Chloride Test Kit	10 lb
Related Item		
C-56320	Extraction Liquid, pack of 12 plastic jars, 20 ml	

Corrosion Parameter Analyzer

Used to measure the corrosion rate of steel reinforcement in concrete and several related parameters. The C-562 contains:

- Two sensors
- Connecting cable, 100 ft (30 m)
- The Analyzer, (a verification box)
- RS-232 interface cable
- Communication software
- Carrying case.



C-562

Sensor A is a 7-in (17.8 cm) circular, flat, multiple electrode sensor that allows measurement of corrosion rate by the polarization resistance technique; also measures half cell corrosion potential, concrete resistance.

Sensor B is a hand held multiple sensor probe which measures concrete resistivity, capacitance relative humidity (3 to 95%) and temperature (-10° to 80°C). The instrument will store 100 complete readings with time, date and location code for later downloading to a PC.

C-562	Corrosion Parameter Analyzer	26 lb
Related Item		
C-56240	Jar of Copper Sulphate (30 ml)	

Impact Echo System

Used for measuring the thickness or quality of concrete slabs. The C-570 utilizes impact-generated stress waves that propagate through concrete and are reflected by both the material's external surfaces and internal flaws. Can be used to locate delaminating and voids in concrete slabs and structures. The system consists of transducers, impactor set, transducer spacer, PC software and battery charger. Powered by 12 V. rechargeable battery.



C-570

C-570	Impact Echo System	17 lb
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Ultrasonic Testing System

ASTM C 597 BS 1881-203

The Ultrasonic Concrete Testing System is used primarily for quality control and inspection of concrete structures. Use it to survey complete structures, new, old, fire damaged or weathered. It measures the speed of ultrasonic pulses through the concrete to correlate concrete strength to standard strength. It will identify nonhomogeneous conditions in structures such as honeycombs, voids, cracks, frozen concrete, etc. The large LCD display shows a graphic waveform and the elapsed time in 0.1 microsecond increments.

The system includes two 54 kHz transducers with connecting cables, readout unit, power cord, built-in rechargeable batteries, carrying case and coupling grease. The system facilitates automatic calculation of ultrasonic pulse velocity, Poisson's ratio and modulus of elasticity.



C-561

Specifications for Ultrasonic Concrete Testing System

Dimensions:	4.5 x 8.5 x 10.5 in (114 x 223.5 x 267 mm)
Frequency Range:	24 to 500 kHz, based on transducers selected
Receiver Sensitivity:	250 microvolts, between 30 kHz and 100 kOhms
Transit Time:	0.1 to 6553.5 microseconds, direct digital display
Accuracy:	0.1 microseconds
Transmitter Output:	Pulse 1000 V / 500 V, 2 microseconds
Battery:	14 V, 4-10 hours continuous use (L-ion)
Display:	320 by 240, backlit for daylight use
Storage:	1800 + readings
Software:	Windows® XP compatible
Temperature:	0° - 50° C

C-561	Ultrasonic Concrete Testing System	17 lb
C-56101	Ultrasonic Concrete Testing System w/o Software	
C-56102	Ultrasonic Concrete Testing System w/o Transducers	

Related Item

C-56130	Coupling Grease
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Coring Bits

Continuous Coring Bits are popular with State Highway Departments, government agencies and private contractors for retrieving cores up to 14-in (35 cm) long from asphalt and concrete pavements, pre-stressed material, reinforced concrete, concrete block, brick and stone.



C-71042

Open-back bits accept three-piece expanding adapters to connect the bit to the coring machine. The open back design allows access to the core should the core become wedged in the hole. Solid backed bits are one piece construction for ease of operation. The bit adapter is permanently welded to the bit.

Bits are available for cores from 1 to 14 in (2.5 to 35.6 cm). The most requested sizes are shown below. Other sizes are available upon request.

Concrete Coring Bits				
		Concrete	Asphalt	
Bit Size	Core Diameter	Solid Back Bit		Weight
2 1/4 in	2 in (5.1 cm)	C-71022	C-71122	4.0 lb
3 1/4 in	3 in (7.6 cm)	C-71032	C-71132	6.0 lb
4 1/4 in	4 in (10.2 cm)	C-71042	C-71142	.0 lb
6 1/4 in	6 in (15.2 cm)	C-71062	C-71162	14.0 lb
Bit Size	Core Diameter	pen Back Bit		Weight
2 1/4 in	2 in (5.1 cm)	C-72022	C-72222	3.0 lb
3 1/4 in	3 in (7.6 cm)	C-72032	C-72232	4.0 lb
4 1/4 in	4 in (10.2 cm)	C-72042	C-72242	6.0 lb
6 1/4 in	6 in (15.2 cm)	C-72060	C-72262	12.0 lb
Bit Size	Core Diameter	anding Adapter		Weight
2 1/4 in	2 in (5.1 cm)	C-72122		2.0 lb
3 1/4 in	3 in (7.6 cm)	C-72132		4.0 lb
4 1/4 in	4 in (10.2 cm)	C-72142		5.0 lb
6 1/4 in	6 in (15.2 cm)	C-72162		10.0 lb

Shaft Extension Rods

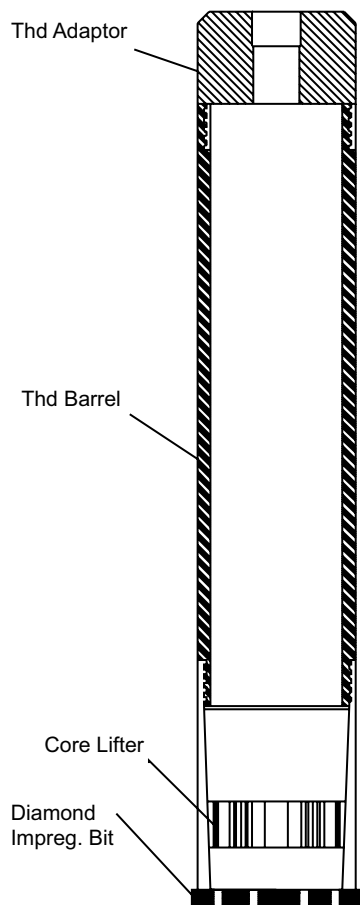
Shaft extension rods permit greater drilling depths when using standard bit lengths.

Shaft Extension Rods		
C-72506	6 in (15.2 cm) Rod, 5/8-11 Thr.	2.0 lb
C-72512	12 in (30.5 cm) Rod, 5/8-11 Thr.	4.0 lb
C-72606	6 in (15.2 cm) Rod, 1 1/4-7 Thr.	3.0 lb
C-72612	12 in (30.5 cm) Rod, 1 1/4-7 Thr.	6.0 lb

Thin Walled Core Barrel Assembly

The thin walled core barrel assembly allows continuous coring with a standard concrete coring machine to depths greater than the normal 14 inches long thin walled core barrel. Excellent tools for coring thick zones of soil-cement or near surface coring of roller compacted concrete dams.

Basic assembly includes: 3.437-in diamond bit, core lifter, threaded barrel and adapter head. Threaded barrels are added to achieve greater sampling depth and the core catcher retains the cut core during retrieval. Standard bit size is 3.437-in OD; however, bit sizes and ancillary components available in 2.437-in OD and 4.437-in OD.



Portable Electric Concrete Core Drill

The Coring Drill enables easy cutting of cores from pavements, floors and other horizontal surfaces. Easily moved with built-in wheels and slide handle, the base may be fixed with anchors or by application of a vacuum. Powered by an 18 A "Cardi" electric motor to allow use of bits up to 10-in (25.4 cm) diameter. 3-speed gear box. It also features a control panel with an amp meter and dual switch/outlets. Spindle thread size: 1 1/4 in - 7 tpi.



C-752

A recirculation ring and pump is available.

C-752	Portable Electric Core Drill, 110 V, 18 A.	140 lb
C-75215	Portable Electric Core Drill, 220 V, 50 Hz,	140 lb
C-821	Portable Core Drill, w/ 15 hp gasoline motor	300 lb

Related Items:

- C-75250 Collection Pan
- C-72606 6-in Rod, 1 1/4 in - 7 thread
- C-72612 12-in Rod, 1 1/4 in - 7 thread
- C-72615 Sub AW Box to 1 1/4 in - 7 tpi Pin
- C-73030 Diamond Closed Bit, 3.437 x 2.875 in
- C-73131 1-ft Threaded Barrel for C-73030
- C-73132 2-ft Threaded Barrel for C-73030
- C-73133 3-ft Threaded Barrel for C-73030
- C-73134 4-ft Threaded Barrel for C-73030
- C-73138 Core Lifter for C-73030 Bit
- C-73139 Threaded Adaptor for C-73030

Thin Walled Core Barrel Assembly		
C-73030	Diamond Bit, 3.437 in OD	2.0 lb
C-73131	Threaded Barrel, 1-ft length	3.0 lb
C-73132	Threaded Barrel, 2-ft length	6.0 lb
C-73133	Threaded Barrel, 3-ft length	.0 lb
C-73134	Threaded Barrel, 4-ft length	12.0 lb
C-7313	Core lifter for C-73030 bt	1.0 lb
C-7313	Adaptor head with 1-1/4 - 7 tpi	6.0 lb

Trailer Mounted Coring Drill



C-82212

The gasoline engine powered Coring Drill is mounted on a single axle custom trailer with a built in 200 gallon water supply tank. The trailer has a 3500 lb rating and is provided with a tongue jack and two rear levelers to provide a stable drilling platform. Designed to use coring bits up to 16 in (41 cm) diameter, the drilling system has 21 in (53 cm) column travel.

C-822	Trailer mounted Core Drill, 15 hp gasoline engine	2850 lb
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Masonry Saw

The Electric Masonry Saw accepts a 14-in diameter blade with a 1-in diameter arbor. The saw can be used for wet or dry cutting of concrete, cores, blocks, rock and masonry. A 5-hp gasoline engine version available upon request. Blade not included.



C-825

C-825	Electric Masonry Saw, 110/220 V, 60 Hz	145 lb
C-82515	Electric Masonry Saw, 220 V, 50 Hz	145 lb

Related Items

C-82520	Diamond masonry blade, 14 x 0.110 in
C-82521	Diamond blade, wet / dry, 1 in arbor

Specifications for Electric Masonry Saw

Electric Motor:	2.5 hp, w/ dual voltage switch for 115 or 220 V, 60 Hz, 15 Amp. operation
Blade Capacity:	14 in (356 mm), 1 in (25 mm) arbor
Stand:	Adjustable, removable legs
Water Stand:	Sloping water pan directs water to rear of saw. Adjustable water supply uses circulation pump
Cutting Table:	16 1/2 in x 14 in (419 x 355 mm) with lockable cart wheels for greater stability

Cube Mold Set

The Cube Mold is used to prepare 2-in (5.1 cm) cube specimens of high strength materials for compression testing, such as lime, Portland cement, mortars, capping compound and gypsum. The three gang, in-line mold is made from cast aluminum and employs polyethylene liners to contain the samples and eliminate mold clean-up. Sold as a kit. Order C-23707 for replacement plastic liners. Meets applicable standards.



C-237

C-237	2 in Cube Mold Set	12 lb
Includes:	C-23702	Mold Frame, Brass, 2 in with 27 liners
	C-23703	Retainer Caps, set of 2
	C-23704	Compressive Pads, set of 4 *
	C-23706	Cover Plate
	C-238	Hard Rubber Tamper

Related Item

C-23707	Plastic Liners, box of 198
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* Square capping pads are supplied in two (2) strengths. Red pads will withstand strengths up to 4000 psi and amber pads are capable of withstanding strengths in excess of 4000 psi.

Plastic Cube Mold

The Plastic Cube Mold is an economical polyethylene 3-gang Cube Mold. Forms 2-in (50.8 mm) cube samples for compression strength testing. The mold is supplied complete with a top and compaction tamper.



C-236

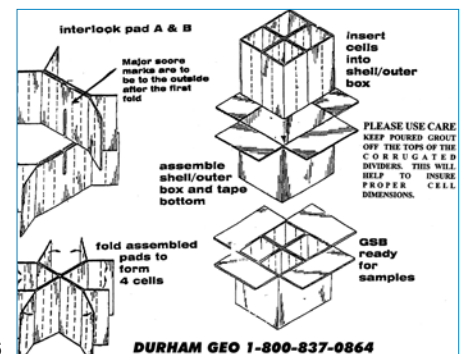
C-236	Plastic Cube Mold, 2 in sq., 3 gang	2.0 lb
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Related Item

C-23605	Silicone Mold Release, 18 oz can
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Grout Sample Box

The Grout Sample Box is used to form grout prisms 3 x 3 x 6 in. as specified in ASTM C 1019, Note 6. The C-266 offers an alternative to stacking concrete blocks and lining them with paper towels.



C-266

C-266	Grout Sample Box (case of 25)	18 lb
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2-in Cube Mold (Machined/Forged Brass)

ASTM C 87, C 109, C 141, C 257, C 267, C 306,
C 472, C 379, C 396

AASHTO T 106

This Cube Mold is used to prepare 2-in (5.1 cm) cube specimens of high strength materials for compression testing. Wing nuts secure the mold halves and base plate for easy disassembly and removal of specimens without damage.



C-235

C-235	Cube Mold, 2 in square, 3 gang	15 lb
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Related Items

C-23510	Cube Mold Cover Plate with holes (for ventilation)
C-23511	Cube Mold Cover Plate without holes
C-238	Hard Rubber Tamper

Hard Rubber Tamper

ASTM C 109, C 157, C 185, C 596

AASHTO T 106, T 137, T 160

Molded from hard rubber for durability.
6 x 1 x 1/2 in (L x W x Thick.) (15.2 x 2.5 x 1.3 cm).

C-238	Hard Rubber Tamper	1.0 lb
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Cube Test Sand and Tensile Sand

ASTM C 91, C 109, C 144, C 185, C 349,
C 359, C 593, C 778

AASHTO T 71, T 106, T 132

* See Standards Buyer's Guide at www.DGSI.info/3000.

DGSI Cube Test Sand is used to prepare mortar specimens for strength testing. It is specially graded to ASTM and AASHTO specifications to retain:

- 2% on #30 sieve
- 72% on #50 sieve
- 98% on #100 sieve

DGSI Tensile Sand is used for standardizing mortar for tensile strength testing. It is specially graded to pass a #20 sieve, be retained on a #30 sieve and have a specific gravity of 2.65.

C-401	Cube Test Sand, 50 lb bag (green)	50.0 lb
C-402	Tensile Sand, 50 lb bag (blue)	50.0 lb

Flasks

C-425	Le Chatelier Density Flask	1 lb
C-424	Chapman Specific Gravity Flask	2 lb

Length Comparator

ASTM C 151, C 227, C 490,
C 531, C 359

AASHTO T 107, T 160

* See Standards Buyer's Guide at www.DGSI.info/3000.

The instrument is provided with substantial rigidity through the use of a solid frame and cast steel base. The lower fixed anvil and the upper movable anvil are designed to accept the cast-in points of the specimen bars. The comparator includes a precision dial indicator and an Invar steel reference bar.



C-24550

C-24550	Length Comparator, English Units	13.5 lb
C-24555	Length Comparator, Metric Units	13.5 lb

Specifications for Length Comparator

Size:	7.5 x 7.75 x 17.75 in (19 x 19.7 x 45cm)
Indicator:	English- 0.3000 in x 0.0001 in division Metric- 8.000 mm x 0.002 mm divisions

Specimen Contact Points

ASTM C 151, C 227, C 490

The precision machined, stainless steel Specimen Contact Points, 0.25-in dia. x 0.75-in long, are cast into the specimen cement bars. They are used as reference points when placed in the Length Comparator.



C-24556
(1 piece shown)

C-24556	Specimen Contact Points, 10 pack	1 lb
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Mortar Mixer

ASTM C 305
AASHTO T 162, T 107

Mortar Mixer is used for mixing cement and mortar pastes. The heavy duty mixer has 3 operating speeds, lever to adjust the height of the 5-qt (4.73 L) bowl and a planetary mixing action to ensure thorough and complete mixing. Supplied complete with a stainless steel bowl, flat beater and a wire whip.



G-251

G-251	5-qt Mixer w/ adjustment bracket, 115 V - ASTM	55 lb
G-25110	5-qt Mixer w/ adjustment bracket, 230 V/50 Hz - ASTM	55 lb

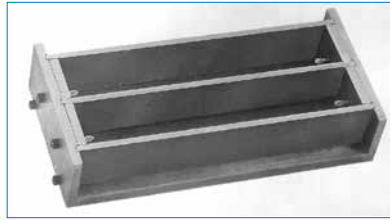
See page 119 for other sizes.

Bar Molds

ASTM
C 141, C 151
AASHTO T 107

The Test Bar Molds are designed to allow standard sized specimens to be made for accelerated soundness testing using the autoclave.

Available in three types for 10-in (25.4 cm) long bar specimens.



C-24542

C-24541	Single Bar Mold, 1 x 1 x 10 in	10.0 lb
C-24542	Dual Bar Mold, 1 x 1 x 10 in	20.0 lb
C-24543	Single Bar Mold, 3 x 3 x 10 in	25.0 lb
C-24544	Single Bar Mold, 4 x 4 x 10 in	26.0 lb

Cement/Mortar Autoclave

ASTM C 88, C 141, C 151
AASHTO T 107

The Cement/Mortar Autoclave is used to conduct accelerated soundness test or autoclave expansion test on cement mixtures. Designed to provide a constant steam pressure, adjustable between 60 to 350 psi (414 to 2413 kN/m²), at a constant temperature.



C-245

C-245K	Cement/Mortar Autoclave, 110 V, 50/60 Hz, 1800 W, 1 ph	200 lb
C-24510	Cement/Mortar Autoclave, 220 V, 50/60 Hz, 1800 W, 1 ph (w/ transformer)	240 lb

Related Item

C-540	Pocket Tachometer, 2000 to 21,000 cpm or rpm
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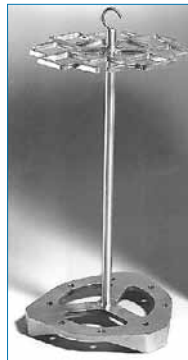
Specifications for Cement/Mortar Autoclave

Size, Int:	6-1/8 in (15.5 cm) diameter x 16 in (41 cm) tall
Size, Ext:	17 x 48 x 28 in (43 x 122 x 71 cm)
Pressure:	60 to 350 psi (414 to 2413 kN/m ²)
Safety:	Pop-out rupture disc 350 psi (2413 kN/m ²)
Controls:	Pressure gauge w/ regulator, heater and power switches w/ indicator lights

Test Specimen Holder

ASTM C 141, C 151 AASHTO T 107

The Test Specimen Holder is used to hold bar specimens in an upright position when placed in the Cement/Mortar Autoclave. It ensures that each of up to eight specimens are exposed to the pressurized steam in the same way. Made from corrosion resistant materials. Holds eight 1 x 1 x 10 in (25.4 x 25.4 x 254 mm) bar specimens.



C-24520

C-24520	Test Specimen Holder	5.0 lb
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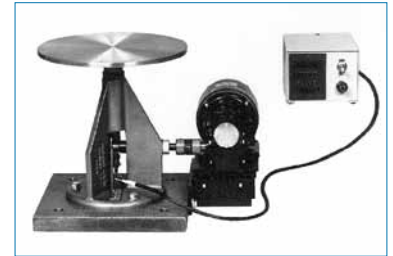
Flow Table

ASTM* C 87, C 105, C 185, C-230, C 243, C 348
AASHTO* T 71, T-106, T 137

* See Standards Buyer's Guide at www.DGSI.info/3000.



C-248 (right), C-24801 (left)



C-24810

The Flow Table provides an efficient means of determining the flow of cement pastes and hydraulic cement mortars. Using the flow mold provided, a specific volume of material is molded on the table. The mold is removed and the table subjected to a specific number of 1/2 in (12.7 mm) drops using the crank handle. The increase in average diameter of the sample indicates the flow.

C-248	Flow Table, Hand Operated	22 lb
C-24810	Flow Table, Motorized, 110 V, 60 Hz	100 lb
C-24815	Flow Table, Motorized, 220 V, 50 Hz	110 lb

Accessory

C-24801	Flow Mold
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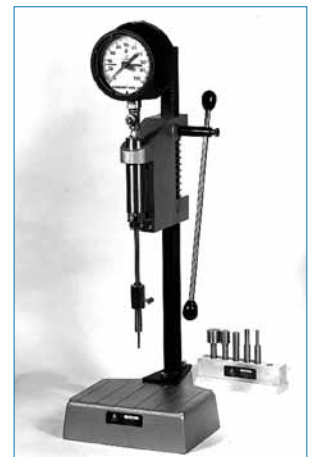
Specifications for Flow Table

Table:	Diameter, 10 in (254 mm), cast bronze. Weight w/ shaft: 9 lb ±0.1 lb (4.1 ±0.05 kg)
Frame:	Heavy duty steel with cam to produce a 1/2 in (12.7 mm) drop
Flow mold:	2 in (9. mm) Top .D., 4 in (101. mm) base .D., 2 in (50.0 mm) high

Mortar Penetrometer

ASTM C 403

The Mortar Penetrometer is used to determine the rate of hardening of the mortar component of fresh concrete. The mortar is extracted by sieving. Measurement is made by first attaching one of the six penetration needles to the calibrated spring dynamometer. The Penetrometer is then pushed into the sample and the sliding will indicate the maximum test reading on the handle stem.



C-261

C-261	Mortar Penetrometer Kit	7 lb
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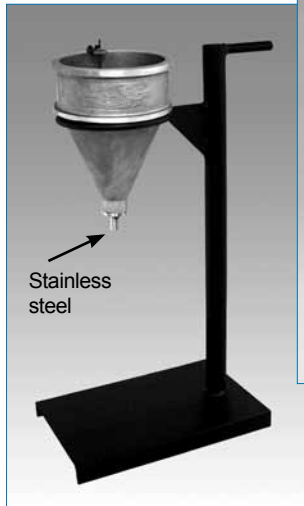
Specifications for Mortar Penetrometer Kit

Scale:	130 lb with 10 lb and 1 lb divisions
Needles:	1, 1/2, 1/4, 1/10, 1/20 & 1/40 in 2 end area

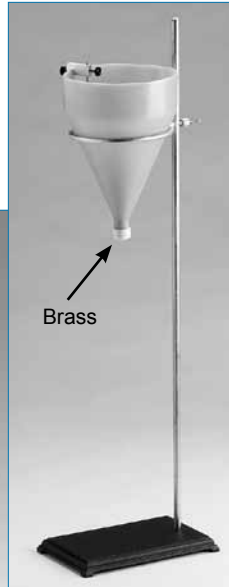
Grout Flow Cones

ASTM C 939

The Flow Cone is used for measuring the fluidity of grout mixes in the field or laboratory.



C-243 shown resting in optional stand, C-24301



C-242

C-242K	Flow Cone, polyethylene, 3/4 in orifice, w/ stand	7 lb
C-24250K	Flow Cone, polyethylene, 1/2 in orifice, w/ stand	7 lb
C-243	Flow Cone, cast aluminum, dual orifice (1/2 & 3/4 in)	10 lb

Replacement Items

C-24201	Flow Cone, polyethylene, 3/4 in orifice
C-24202	Point Gauge Level Indicator
C-24203	Flow Cone, polyethylene, 1/2 in orifice
C-24298	Cast-iron Support Ring
C-24299	Cast-iron Support Base w/ 1/2 x 36-in steel rod

Accessory Item

C-24301	Flow Cone Stand for C-243	23 lb
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Alkali Reactivity Container

ASTM C 289

The Alkali Reactivity Container is used to determine the potential alkali reactivity of aggregate materials. It will assess the extent of abnormal expansion when the aggregates are used with cement with a high alkali content. Made from stainless steel, it has a capacity of 50-75 ml.

C-420	Alkali Reactivity Container	3.0 lb
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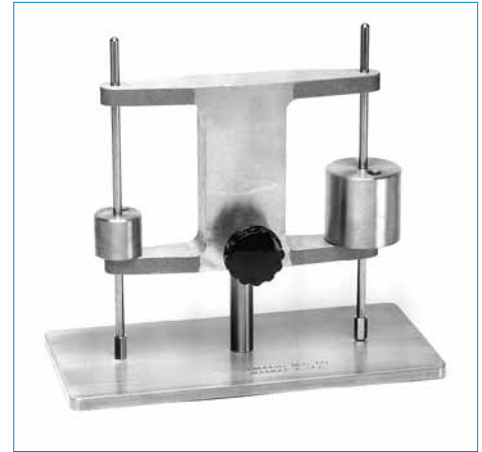
Specifications for Alkali Reactivity Container	
Size:	2 in (5.1 cm) dia. x 2.25 in (5.7 cm)
Capacity:	50-75 ml
Construction:	Stainless steel with air-tight clamp and cover

Gilmore Apparatus

ASTM C 91, C 141, C 266

AASHTO T 154

The Gilmore Apparatus determines the time of set for cement. It comprises a rigid aluminum and steel frame with two precisely machined stainless steel points and associated weights.



C-249

C-249	Gilmore Apparatus	8.0 lb
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Specifications for Gilmore Apparatus

Needles:	Large 1/24 in (1.06 mm) dia. point w/ 1 lb (453.6 g) weight
	Small 1/12 in (2.12 mm) dia. point w/ 1/4 lb (113.4 g) weight

Portable Mixers

Portable Mixers are used in the laboratory to prepare concrete or cement/mortar batch mixes. They have a dry batch capacity of 3 1/4 ft³. Optional wheel kit available to move mixer about laboratory. Inquire as to other models available as special orders from 1 1/2 to 9 ft³ and powered by either electric motor or gasoline engines.



C-860

Overall dimensions (L x W x H): 46 x 30 x 48 in.

C-860	Portable Mixer, 115 V, 60 Hz, 1.5 hp electric motor	260 lb
C-86015	Portable Mixer, 230 V, 50 Hz, 1.5 hp electric motor	260 lb

Accessories:

C-86020	Wheel Kit for C-260	45 lb
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Masonry Saw

The Electric Masonry Saw accepts a 14-in diameter blade with a 1-in diameter arbor. The saw can be used for wet or dry cutting of concrete, cores, blocks, rock and masonry. A 5-hp gasoline engine version is available upon request.

C-825	Electric Masonry Saw, 110/220 V, 60 Hz	145 lb
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For specifications, see page 92.