

### Designing, Manufacturing, & Distributing the Finest in Material Testing Equipment

Winter 2019 Edition



### New to this Edition

Sleeved DCP Hammer Pg. 4



Load, Pressure & Displacement

Sensors

Pgs. 8-9

Type B Air Meter Parts Pg. 13



2.8 x 5.6 Soil Remolding Kit Pg. 6



Expanded Scales and Ovens Pg. 15

## CetecCorp.com

T: 770.817.7810

CETEC offers quality control equipment for Civil Engineering construction. The products highlighted in the following pages represent just some of our current offerings. If you require ancillary products not shown in this listing, we will purchase from one of our quality suppliers to streamline your ordering process while at competitive prices. Please contact us for price and delivery.



### Notice

- 1. Our General Terms and Conditions for Sale are posted on our web site.
- 2. Some illustrations on the following pages are 3-D modeling of parts and color is used for clarity.
- 3. We reserve the right to change details of design, specifications, materials and finish at any time without prior notice.



Phone: 770.817.7810 Email: sales@CetecCorp.com Website: CetecCorp.com

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# Laboratory Compaction and CBR/LBR

#### **Compaction Molds**



Compaction Molds and Spacers

Compaction Molds (Mild Steel, Zinc Plated)	
41001	Compaction Mold, Standard, 4" ID
41002	Compaction Mold, Tapered, 4" ID
41002	Compaction Mold, Split, 4" ID
41004	Compaction Mold, 6" ID
41005	CBR Mold, 6" dia x 7" high
41012	Spacer for CBR Mold, 2.416" high
41006	LBR Mold, 6" dia x 6" high
41013	Spacer for LBR Mold, 1.416" high
41007	Compaction Mold, 6" Split, Soil/Cement

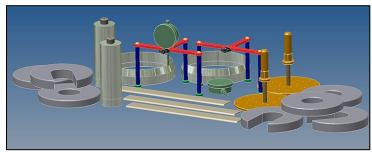
#### **Compaction Rammers**



Compaction Rammers (T) 5.5-lb mass, (B) 10-lb mass

Compaction Rammers (Mild Steel, Zinc Plated)	
41008	Compaction Rammer, 5.5-lb mass, 12" drop
41009	Compaction Rammer, 10-lb mass, 18" drop

#### Accessories



#### Main CBR/LBR Accessories

Access	Accessories	
41025	Straight Edge, HD, 0.188" x 1.25" x 12" length, ground w/beveled edge	
41018	CBR Filter Paper, 100 sheets per box, No. 613	
41019	LBR Filter Paper, 100 sheets per box, No. 631	
41031	4-in dia. Filter Paper, 100 sheets per box, No. 601	
41016	CBR Piston w/ ¾"-16 threads (Others available on request)	
41010	Swell Plate, 5 <sup>7</sup> / <sub>8</sub> " dia	
41014	Surcharge Weight, circular hole	
41015	Surcharge Weight, slotted	
41011	Tripod Attachment to measure swell	
41022	Steel Cutting Ring, 6" dia	
91001	Dial Indicator, 1" range x 0.001" graduations, CW	
97001	Rubber Mallet, 1-lb (not shown)	

#### Sample Ejector

CETec's Sample Ejector provides for easy removal of soil samples from any of our compaction molds by simply inserting a disk to convert from 6-in to 4-in molds. A pin connected head assembly allows for changes for various mold heights.

The 6-kips, 6-in travel hydraulic jack assumes ample force to extract even the most heavy clays form the mold.

An accessory kit is available for removal of soil from 3-in thinwalled sampling tubes up to 6-in in length.

All components (except hydraulic jack) are made of mild steel and are zinc plated or powder coat painted.

Assemblies	
41020	Sample Ejector w/upper plate and piston for both 4" & 6" dia molds
Replacement Parts and Accessories	
41024	Upper plate & piston for 3" dia thin wall tubes

# **Hand Augers**

#### **Auger Device**

D-clip Connected Components - Augers and components are offered in plated steel and stainless steel. The cutting blades are hard surfaced and flared to cut a borehole slightly larger than the head. The head assembly is heat treated.

Windowed augers are available to facilitate easy removal of stiff, sticky plastic clays.

Heads are offered in three nominal sizes:  $2\frac{1}{4}$ -in (57 mm),  $3\frac{1}{4}$ -in (83 mm) and 4-in (100 mm). Other sizes available on request.

Connector Auger Sets		
Zinc Plated Steel	Stainless Steel	Description
31023	31024	Basic 3¼" Set: Includes (1) 3¼" Head; (1) 36" Exten- sion; (1) Cross Handle
31025	31026	Extended 3¼" Set: Includes (1) 3¼" Head; (4) 36" Exten- sion; (1) Cross Handle
Replace	ement Parts	and Accessories
31052	31053	2¼" Auger Head, Threaded
31027	31028	3¼" Auger Head w/ D-Clip
31029	31030	3¼" Windowed Auger Head w/ D-Clip
31035	31036	4" Auger Head, Threaded
31037	31038	4" Windowed Auger Head, Threaded
31007	31009	36" Extension w/ D-Clip
31008	31010	48" Extension w/ D-Clip
31011	31012	Cross Handle Incl. w/ Sets Above
31013	31014	Cross Handle with Molded Grips
31001	31002	D-Clip
Adapters for Pin to %" - 11 Thread (Other adapters available)		
31041	Female D-Clip to Nut 5⁄8" - 11	
31042	31042 Male D-Clip to Bolt 5/8" - 11	
Ratchet	Head Cross	s Handle
31047	Ratchet Hea	ad Cross Handle, Threaded



Basic Auger Set with Standard Auger Head



(L-R) Standard Auger Head, Windowed Auger Head





Auger Adapters

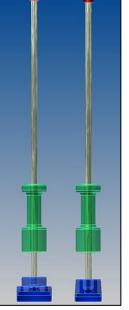
## **Field Density**

#### Thin Walled Density Drive Device

ASTM D2937 is the test method for determining the in-place density of compacted earthworks by driving a thin walled cylinder, of known volume, into the soil.

The driving device consists of a sliding 10-lb mass, guide rod and anvil into which the drive tube is inserted.

The driving device is offered in two sizes for 3-in and 4-in cylinders. The density cylinders have a beveled cutting edge. The drive devices and drive tubes are zinc plated.



Density Drive Hammer Assemblies (L) 33003 (R) 33001

Assemblies		
33001	Density Drive Device w/ 3" Head	
33003	Density Drive Device w/ 4" Head	
Replacement Parts and Accessories		
33002	Drive Tube, 3" cyl, 0.01 ft <sup>3</sup> vol. Box of 10	
33004	Drive Tube, 4" cyl, 0.033 ft <sup>3</sup> vol. Box of 10	
800207	Plastic end caps for 3" Drive Tubes	
800270	Plastic end caps for 4" Drive Tubes	

#### Sand Cone Device

Device conforms to ASTM D1556. Consists of 6½-in metal cone with valve and plastic 1-gal jug that connects to the valve. The Base Plate is cast aluminum and is sold separately.

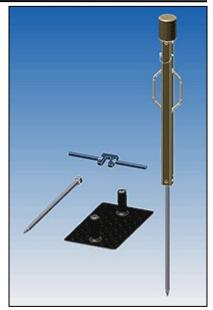


Sand Cone Device shown w/ Base Plate and spares

Assemblies	
33005	Sand Cone and 1-gal plastic jug
33008	Base Plate, Cast Aluminum Alloy
Replacem	nent Parts and Accessories
33006	Sand Cone, 6 <sup>1</sup> / <sub>2</sub> " diameter
33007	Plastic Jug, 1-gal
33009	Density Sand, Ottowa, 50-lb bag

#### Nuclear Gauge Drive Hammer

CETEC's Probe Hole Drive Hammer provides a convenient and safe way to prepare a probe hole for a nuclear density gauge. А sliding mass and anvil assembly allows the operator to prepare the test hole using a standard foot plate usually provided with the nuclear gauge.



Probe Hole Drive Hammer and Accessories

33010	Probe Hole Drive Hammer
33011	Foot Plate
33012	Forged Steel Drive Pin
33013	Drive Pin Removal Tool
33023	Sledge Hammer, 4#, Hickory Handle

#### Laboratory Vane Apparatus

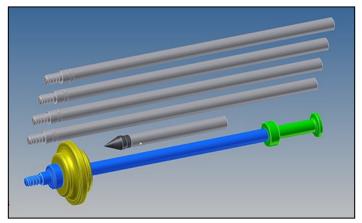
The laboratory vane apparatus may be provided with a wide range of vane sizes; it is usually sold with the 12.7 mm<sup>2</sup> vane and a set of four calibrated springs. The test can be performed directly on the sample.



Assemblies	
45001	Laboratory Vane Apparatus. Incl. 12.7mm <sup>2</sup> vane and set of four calibrated springs
Replacem	ent Parts and Accessories
45002	Motorizing Attachment
45003	Vane, Std, 0.5" x 0.5" (12.7 mm)
45004	Vane, 1" x 1" (25.4 mm)
45005	Vane, 0.5" x 1" (12.7 x 24.5 mm)
45006	Vane, 0.5" x 0/75" (12.7 x 19 mm)
45007	Sample Tube Attachment of 38mm or 100mm
45008	Calibrated Springs, set of 4
45009	Replacement Belt

email: sales@CetecCorp.com

#### **Sliding Mass Dynamic Cone Penetrometer**



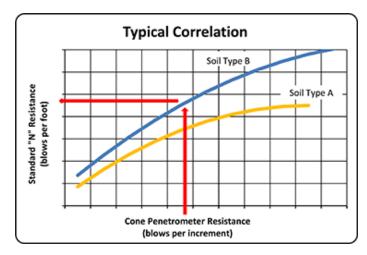
#### DCP Hammer Kit

The Sliding Mass DCP consists of a 15-lb mass that drops 20-in to strike an anvil driving a 45° cone into the bottom of a hand augered borehole. The original version was first published in ASTM's STP 399 and authored by the late Georgia Tech Professor Emeritus George Sowers. The device was developed to allow engineers an alternative method to model N values derived by the Standard Penetration Test (ASTM D1586) where site conditions would not facilitate the use of normal drilling equipment.

Published correlations have been made between the number of blows for DCP to achieve 1<sup>3</sup>/<sub>4</sub>-in penetration and standard N values for in-place and compacted soils common to the Southeast US. Users are encouraged to develop similar correlations for site specific or regional soils.

DCP set includes detailed instructions for use and published correlations.

DCP Hammer Kit	
32004	Sliding Mass DCP Includes: (1) Drive Hammer Device; Cone w/ 1-ft lead E-rod; (4) 2.5-ft E- rods; Operating Instructions
Replacer	nent Parts and Accessories
32005	Sliding Drive Hammer Device
32007	45° Heat Treated Cone affixed to 1-ft E-rod
32009	1.0-ft E-rod
32010	2.5-ft E-rod
32011	5.0-ft E-rod
32008	Replacement Cone w/ Pin
32012	Operating Instructions



#### N Values Correlation

By replacing the cone assembly with a thin walled (Shelby) tube head, the Drive Hammer Device can be used to drive and retrieve a 12-in long Shelby tube of inplace soil from the bottom of an augered borehole. Thin walled tubes have swaged ends in accordance with ASTM D1587.

32027	DCP Shelby Head
33019	Galvanized Sampler, 3" dia x 12" L, box of 9
800207	Plastic end caps for 3" Drive Tubes



#### Part No. 32006 Sleeved Style DCP Hammer

CETec, under license, manufactures the patented sleeved style DCP Hammer as a substitute to the original sliding weight style.

The design uses a 15-lb sliding weight which the operator lifts 20-in and allows it to free fall striking the anvil within the sleeve.

The sleeved style hammer eliminates many of the pinch points of the sliding weight style.

Users are encouraged to develop correlations with SPT "N" values for site specific or regional soils.

## **Field Testing**

#### **Pocket Penetrometer**



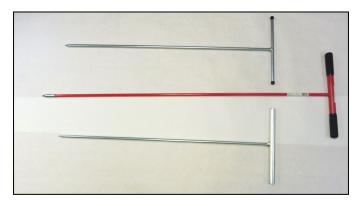
Reading in tons/ft<sup>2</sup> (kg/cm<sup>2</sup>), this direct reading device is used in the field for instant classification of on-site soils based on OSHA cohesive soils classifications. Used during trenching and excavation for inspection, it helps determine whether side walls require shoring.

The ¼-in dia shaft is pushed into the soil to the ¼-in depth mark and then withdrawn. A max indicator ring then retains the value so it can be conveniently read from the permanent scale. This value gives the approximate unconfined compressive strength of the soil.

An optional Adaptor Foot increases the piston diameter 16 times for use with very soft soils.

32001	Pocket Penetrometer
32026	Adaptor Foot

#### Probe Rod



The field engineer's hand tool used to locate soft zones in compacted earthworks or shallow foundations. Available in two versions, plated steel and fiberglass. The steel version Probe Rod, #32003, is 36-in long, made from  $\frac{1}{2}$ " diameter mild steel and plated for a long, noncorrosive life; #32032 is the same with a larger 1" diameter handle. The fiberglass version, #32029, is nonconducting and excellent for areas where electrical components might be buried. It has a  $\frac{1}{2}$ -in diameter shaft with a steel tip and a convenient 13-in long handle.

32003	Probe Rod, Steel, 36"L, Small Handle
32032	Probe Rod, Steel, 36"L, Large Handle
32029	Probe Rod, Fiberglass, 48"L

#### Pocket Vane Shear Device



The Vane Shear Device measures the shear strength, Su, of saturated fine grain soils. The vanes are constructed of stainless steel and come in three sizes: 0 to 1 kg/cm<sup>2</sup>, 0.2 kg/cm<sup>2</sup> and 2.5 kg/cm<sup>2</sup>. Packaged in a convenient plastic case with instructions included in the lid.

Assemblies		
32022	Pocket Vane Shear Device w/ 3 Heads	
Replacement Parts and Accessories		
32023	Vane, 2.5 kg/cm <sup>2</sup> (small)	
32024	Vane, 1.0 kg/cm <sup>2</sup> (standard)	
32025	Vane, 0.2 kg/cm <sup>2</sup> (large)	
32030	Replacement Case, Vane Shear	

#### Thin Walled Soil Samplers

Thin Walled (Shelby) Samplers are constructed of 3-in dia x 0.065-in galvanized seamless tubing with the cutting edge swaged in accordance with ASTM D1587.

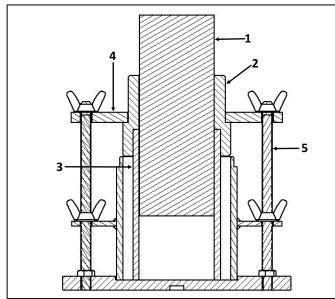


Sampler Head, AW Thrd

33019	Galvanized Sampler, 3" dia x 12"L, box of 9	
33020	Galvanized Sampler, 3" dia x 24"L, box of 9	
33021	Galvanized Sampler, 3" dia x 30"L, box of 9	
33014	AW Head Assembly for 3" Tubes	
33015	AWJ Head Assembly for 3" Tubes	
800207	Plastic end caps for 3" Drive Tubes	

### **Soils Accessories**

#### 2.8 x 5.6-in Soil Remolding Kit



Use your CETec standard 4-in compaction mold (PN 41001) as the support to remold soil test specimens for shear and permeability testing.

Kit includes 2.8 x 5.6-in mold, collar that aligns the mold to the center of the compact mold, aluminum anvil scribed at 1.867-in intervals to aid in compacting each soil lift to the correct height, and a clamp plate.

4-in compact ion	mold assembly not	included (see pg 1).
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ID	PN	Description
	41100	2.8 x 5.6-in Soil Remolding Kit
1	800611	2.8 x 5.6-in Soil Remolding Anvil
2	800613	2.8 x 5.6-in Soil Remolding Collar
3	800612	2.8 x 5.6-in Soil Remolding Body
4	800621	2.8 x 5.6-in Sample Remolding Clamp Plate
5	800649	Threaded Rod, Plated, 3/8" - 16 UNC x 7.0"

#### **Standard Test Sands**

**Density Sand**—For sand cone density testing. This clean, dry sand is free flowing and meets ASTM D1556 & AASH-TO T191.

**Cube Test Sand**—Specially graded sand meeting requirements for ASTM C109, C778 and AASHTO T106.

**Tensile Sand**—"ASTM 20-30" test sand meets ASTM C778 and AASHTO T132.

All sand bags are packed individually in heavy-duty, colorcoded, reinforced plastic bags before shipping.

33009	09 Density Sand, Ottawa, 50lb	
68010	Cube Test Sand, ASTM C109, C778, Green, 50 lb	
68011	Tensile Sand, ASTM 20/30, Blue, 50 lb	

#### Mud Balance



The Mud Balance is used to measure fluid density. Built from heavy-duty aluminum alloy, this balance is rugged enough for rig use, and is designed to reduce the need for re-calibration. It is engineered so that the mud cup at one end of the beam is balanced by a fixed counterweight at the other end, with a sliding weight rider that moves along a laser etched graduated scale. A level bubble is mounted on the beam to ensure accurate balancing.



#### Marsh Funnel Viscometer

The Marsh Viscometer has been used for many years to obtain an indication of the relative viscosity of drilling fluids. It is calibrated to outflow one quart (946 ml) of fresh water at a temperature of  $70 \pm 5 \degree F(21 \pm 3 \degree C)$  in  $26 \pm 0.5$  seconds. The Marsh Funnel is molded from a tough, durable plastic that resists breaking or cracking. A brass orifice assures consistency in all readings.

#### Marsh Cup

The Measuring Cup is graduated in fluid ounces (2 - 32 oz) and cubic centimeters (100 - 1,000 cc) and is designed to be used with the Marsh Funnel Viscometer. The heavy duty plastic measuring cup features a double spout and has the two scales molded into the inside of the cup for convenience.

33025	Marsh Funnel Viscometer
33026	Marsh Cup

#### Liquid Limit Device with Counter



#### Liquid Limit Device and optional Grooving Tools

The Liquid Limit Device is used to determine the moisture content at which clay soils go from a plastic to a liquid state. The device consists of a base, removable brass cup, adjustable crank and cam mechanism, and blow counter. This device is available manually operated. The grooving tools are not included and must be ordered separately.

#### Conforms to ASTM D4318.

40001	Liquid Limit Device with counter
40005	Grooving Tool, Plastic, 10 pack, ASTM
40003	Grooving Tool, Steel, Each, AASHTO-T89
40004	Grooving Tool, Flat, Metal w/ Gauge Block, ASTM

#### Speedy 2000 Moisture Tester, 20g

The Speedy<sup>™</sup> Moisture Tester is used throughout the testing community to measure the moisture content of materials including soils, aggregates, concrete, sand and powders.

A portable system, the device is comprised of a cast aluminum vessel with an integral pressure gauge, an electronic balance with large scale pad, and a molded waterproof and shockproof carry case.

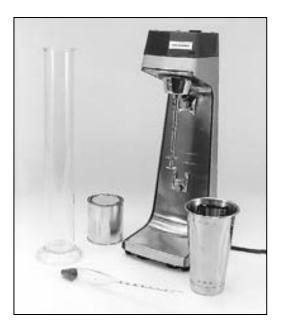


To use, a small sample of material is prepared, weighed, and placed in the vessel. Reagent is added to the vessel, then shaken to mix with the sample. Moisture within the sample reacts with the reagent to produce a gas and pressure rise proportionate to the amount of moisture. The moisture content value is read directly form the calibrated pressure gauge.

Complies with ASTM D4944 and AASHTO T217.

Part No.	Wt	Dimension	Moisture Measuring Range	Sample Wt
33028	6 kg	51 x 38 x 20 cm	0-20%	20 gr
33027	Reag	ent, 1 Pint Can, Qt	y 24	

### Hydrometer Test Equipment



Assemblies			
55003	Soil Dispersion Mixer with Cup and Paddle		
55009	Soil Dispersion Mixer, 115V/60Hz		
Replace	Replacement Parts and Accessories		
55001	Sodium Hexametaphosphate, 1-lb		
55002	Sodium Hexametaphosphate, 5-lb		
55004	Soil Dispersion Cup w/ Baffles		
55005	Soil Dispersion replacement paddle		
55007	Soil Hydrometer, ASTM 152H (-5 to 60g/L SG)		
55008	Soil Hydrometer, ASTM 151H (0.995 to 1.038 SG)		
55010	Hydrometer Jar, 1000ml		
93060	Rubber Stopper for Hydrometer Jar		

## **Sieves**



The sieves offered by CETEC, INC are manufactured to ASTM E11 standards. All frames and mesh cloths are available in brass or stainless steel. The most common are 8" or 12" diameter Brass frame with Stainless Steel mesh. If you desire another configuration, please specify when you call. Also, the standard frame size is Full Height, or 2" from mesh to the top of the frame. Half Height is available as well.

51022	8" Brass Cover w/ Handle	
51023	8" Brass Pan, Full Height	

	1			
8" Part No.	12" Part No.	Alt Desig.	Sieve Opening	Std Desig.
51018	51036	No. 200	0.074 mm	75
51017	51048	No. 140	0.105 mm	106
51016	51030	No. 100	0.149 mm	150
51015	51047	No. 60	0.25 mm	250
51014	51035	No. 50	0.297 mm	300
51013	51046	No. 40	0.42 mm	425
51012	51034	No. 30	0.595 mm	600
51011	51045	No. 20	0.841 mm	850
51010	51033	No. 16	1.19 mm	1.18 mm
51009	51044	No. 10	2 mm	2.00 mm
51008	51032	No. 8	2.38 mm	2.36 mm
51007	51029	No. 4	4.76 mm	4.75 mm
51003	51028	3/8 in	9.51 mm	9.5 mm
51019	51027	3/4 in	19 mm	19.0 mm
51020	51038	1 in	25.7 mm	25.0 mm
51021	51039	1-1/2 in	38.1 mm	38.1 mm
51004	51043	2 in	50.8 mm	50 mm
51005	51042	3 in	76.1 mm	75 mm

## Linear Measurement



Dial Indicators				
Part No. Range		Divisions	Rotation	
91001	1.0 in	0.001 in	CW	
91015	2.0 in	0.001 in	CW	
Also Availab	le: Indicator F	oot 1" and Extension	ns	
Calipers				
Part No. Range		Graduation	Jaw	
Dial Calipe	er			
91014 0-6"		0.001"	1.6"	
Electronic Caliper				
91019	0-12"	0.0005"	2.5"	
91020	0-12"	0.0005"	2.3"	

#### Strain Gauge Displacement Transducer



Excitation Voltage: 10V dc Rated Output: 35-65 mv FS Bridge Resistance: 350 ohms

Part No.	Stroke Range	Accuracy
46410	10 mm (0.14 in)	<±0.1% FS
46415	25 mm (1 in)	<±0.1% FS
46420	50 mm (2 in)	<±0.2% FS
45425	100 mm (4 in)	<±0.2% FS

# **Strain Gauge Sensors**

#### Load Cells





S-Type

Low Profile

S-Type Load Cells—Tension or Compression Excitation: 10V dc Rated Output: 3mv/v max Hysteresis: 0.03% FS Non-Linerity: 0.03% FS Bridge Resistance: 350 Ohms

Part No.	Range, Ibf	Readability, Ibf	Thread (both ends)
46301	500	0.10	1/2 - 20 UNF
46302	2000	1.00	1/2 - 20 UNF
46306	6000	1.00	3/4 - 16 UNF
46310	10,000	10.00	3/4 - 16 UNF

Low Profile Load Cell—Tension or Compression Excitation: 10V dc Rated Output: 3mv/v max Hysteresis: 0.1% FS Non-Linerity: 0.1% FS Bridge Resistance: 350 Ohms

Part No.	Range, ibf	Readability, ibf	Center Thread
46320	2000	1.0	1/2 - 20 UNF
46322	5000	1.0	1 - 14 UNF
46325	10,000	10.0	1 - 14 UNF

### Pressure Transducer and Pore Pressure Transducer





Excitation Voltage: 10V dc Rated Output: 30mv FS Bridge Resistance: 350 Ohms Readability: 0.1 psi Supplied with 6-ft 4 Conductor Cable terminating in 5-pin Din plug

Part No.	Description	Range, psi	Connect Thread
46210	Pore Pressure Transducer	75 psi	1/8 in SwgLck
46211	Pore Pressure Transducer	150 psi	1/8 in SwgLck
46212	Pore Pressure Transducer	300 psi	1/8 in SwgLck
46220	Pressure Transducer	30 psi	1/4 in MNPT
46221	Pressure Transducer	75 psi	1/4 in MNPT
46222	Pressure Transducer	150 psi	1/4 in MNPT
46223	Pressure Transducer	300 psi	1/4 in MNPT

If the transducers and readouts shown do not meet your needs, please call one of our sales reps.

## **Smart Digital Readout**

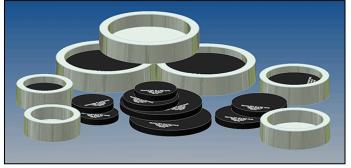
Key features of the Smart Meter are:

- Stable power supply providing 10 V DC excitation
- 5-digit display
- Universal power supply 85-264 Vac, 50-60 Hz
- Standard Transducer board has 200 mV range
- Optional output boards
- 50 60 readings per second
- User selectable scaling
- Front panel programming

46110	Smart Meter housed in plastic encl. & tilt stand
46115	Smart Meter only for panel mounting
46120	Optional Analog Output Board
46121	Optional Relay Output, 8 amp
46122	Optional RS 485 Board
46123	Optional USB Board



#### **Capping Receivers and Pads**



For meeting ASTM C1231 and AASHTO T22, the Capping Pad Receivers are machined from high strength steel and plated for a long, non-corrosive life. Elastomeric capping pads are available in three hardness grades, allowing them to distribute the test load and even out any imperfections in the concrete sample. They are extremely cost effective since they can be reused as many as 100 times.

Capping Pad Strengths are rated as follows:

50D (Soft)	1500- 6000 psi (10 - 40 MPa)
60D (Std)	2500-7000 psi (17 - 50 MPa)
70D (Hard)	4000-12,000 psi (28 - 80 MPa)

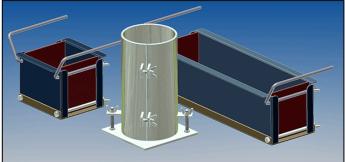
Capping Pad Receivers			
63019	Steel Receiver, 2" Round, Pair		
63023	Steel Receiver, 2" Square, Pair		
63020	Steel Receiver, 3" Round, Pair		
63024	Steel Receiver, 3" Square, Pair		
63021	Steel Receiver, 4" Round, Pair		
63022	Steel Receiver, 6" Round, Pair		

Cappir	Capping Pads				
Hardness		s	Size		
50D 60D 70D		70D			
63001	63002	63003	Pads, 2" Round, Pair		
63004	63005	63006	Pads, 3" Round, Pair		
63016	63017	63018	Pads, 4" Round, Pair		
63007	63008	63009	Pads, 5" Round, Pair		
63010	63011	63012	Pads, 6" Round, Pair		

2" Square Capping Pad Strengths are rated as follows: 70D < 4000 psi (27 MPa) 85D > 4000 psi (27 MPa)

Capping Pads, 2" Square			
Hardness		Size	
70D 85D			
63015 63014		Pads, 2" Square, 4/set	

#### Steel Molds



(L-R) 6" size - Cube Cylinder and Beam molds

CETec's reusable Steel Cylinder Mild is available for molding  $6 \times 12$  in cylinders. The Steel Cube Mold is used to mold  $6 \times 6 \times 6$  in cubes. The Steel Beam Mold is used to mold  $6 \times 6 \times 21$  in beams.

61001	Steel Cylinder Mold, 6" dia x 12"
61003	Steel Cube Mold, 6" x 6" x 6" (by request)
61002	Steel Beam Mold, 6" x 6" x 21"
61029	Plastic Beam Mold, 6" x 6" x 21"



#### **Plastic Cylinder Molds**

Plastic cylinder molds for single-use applications. Molds are available only by the case. Lids are sold individually.

Custom Labeling available.	Call us for a quote.
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Specimen Size	Mold Lipped	Molds per Case	Mold Part No.	Lid Part No.
2" dia x 4" L	No	84	61023	61025
3" dia x 6" L	No	80	61024	61026
4" dia x 8" L	Yes	50	61018-50	61020
6" dia x 12" L	Yes	24	61019-24	61021

#### Mold Stripping Tools and Ladle

61022	Plastic Mold Stripping Tool, Screw Driver Handle
61030	Plastic Mold Stripping Tool, T-handle Type
93003	Capping Ladle, 4" dia bowl

#### **Cube Molds**



2" Brass Cube Molds

CETec's Brass Cube Mold is used to prepare 2" cube specimens of high strength material for compression testing. Use of wing nuts to secure mold halves to base plate allows molds to be disassembled for easy specimen removal.

68005	2" 3-gang Cube Mold	
68008	Cube Mold Cover Plate w/ out holes (for #68005)	
68009	Plastic Cover Plate for Cube Molds	
68004	Econ-o-Cube Mold, 3-gang, plastic	
68006	Aluminum Cube Maker, 3-gang w/ plastic liners	
68007	7 Plastic liners, 198/box (for #68006 above)	
68018	Plastic Tamper, ½" x 1" x 6"L	
68019	Hard Rubber Tamper, ½" x 1" x 6"L	

### Slump Testing

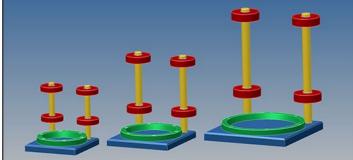


Slump base, cone, funnel, puddling rod and tamping rod

Set consists of cast aluminum base, graduated tamping rod and spun metal slump cone.

Test Set		
61005	Slump Set (base, steel cone and graduated rod)	
Replac	ement Parts and Accessories	
61007	Aluminum Base	
61027	Slump Cone, plated steel	
61006	Slump Cone, plastic	
61008	Graduated Tamping Rod	
61009	Tamping Rod	
61010	Puddling Rod, ℁" dia x 12"L	
61028	Slump Cone Filling Funnel	
93002	Round Bowl, Alum. Scoop, 20 oz cap., 8¼"L x 5"W	

#### **Capping Fixture**



(L-R) Cylinder Capper, 3" x 6", 4" x 8" and 6" x 12"

63028	Capping Fixture for 2 x 4" Cylinder
63025	Capping Fixture for 3 6" Cylinder
63026	Capping Fixture for 4 x 8" Cylinder
63027	Capping Fixture for 6 x 12" Cylinder

#### Capping Compound—Sulfur Based

50-lb bag of flake-style and 50-lb ingot-style sulfur based capping compound.

Part No.	Description	PSI Test	Pour Temp
63029	Ingot Style	6500	280-300°F
63030	Flake Style	9000	265-290°F

### Capping Compound—Hydro Stone

63031 High Strength Capping Compound
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### Cylinder Carriers—4" Plastic & 6" Steel



The 6" x 12" Gripper Carrier secures the cylinder with a hand grip pincer action. The 6" x 12" Ring Carrier secures the Cylinder by a bottom pad and a constraining ring. The 4" Carrying Storage Unit hold (8) 4" x 8" test cylinders and is stackable to save space in curing tanks and moist rooms.

61013	6" x 12" Cylinder Gripper Carrier
61014	6" x 12" Cylinder Ring Carrier
61032	4" x 8" Cylinder Carrying Storage Unit

#### email: sales@CetecCorp.com

#### Concrete Test Hammer, Type N



The Concrete Test Hammer is used to evaluate the surface hardness of hardened concrete to determine the strength in various locations of the structure. Built from a heavy duty aluminum housing, it includes a protective case, grinding stone and instructions.

Conforms to ASTM C805

67001	Concrete Test Hammer
67010	Digital Concrete Test Hammer (not pictured)

#### Windsor® Probes



The Windsor® Probe System is used to evaluate the compressive strength of concrete. The complete system is sold separately.

Silver probes are for standard density and high strength concrete. Gold probes are for light weight (low density) concrete.

Probes are available in packages of 3 or a box of 75.

67012	Silver Windsor Probes, 75/case
67013	Silver Windsor Probes, 3/pkg
67015	Gold Windsor Probes, 75/case
67016	Gold Windsor Probes, 3/pkg

Note: Call for pricing on Windsor Probe Set

#### Pressure Meter w/ Molded Plastic Case, ASTM C231

New updated pressure meter is used to determine air content, specific gravity, and free moisture of Four stainaggregates. over-center steel less clamps provide a uniform load against the O-ring seal ensuring a watertight seal. Large gauge is rugged and easy to read. Pump is all brass resisting corrosives commonly found in concrete with a large easy to use handle. Comes with a tough plastic storage travel case.



62001	Pressure Meter w/ Molded Plastic Case
61011	Strike Off Bar

#### Volumetair™ Kit

Uses the rolling method to easily measure entrained air in any type of concrete.

- Ultra lightweight; weighs one third of brass unit
- Weighs one half of "lightweight" aluminum unit
- Robust design; no threads to strip with an easy to use expansion plug top. Over-center type, all stainless steel "V" clamps securely hold the unit's top and bottom together.



Compressed O-ring creates a rugged leakproof seal.

• Easy to clean, PVC and fiberglass reinforced plastic construction makes water clean-up easy; can be dipped in muriatic acid for periodic cleaning.

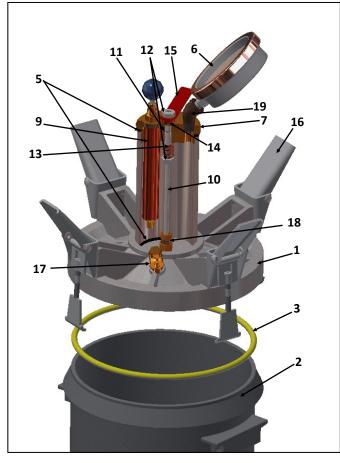
Kit contains Meter, Funnel, Syringe, Tamper, Calibrated Cup, Mallet, Plastic Case, Strike-off Bar.

Meets ASTM C173

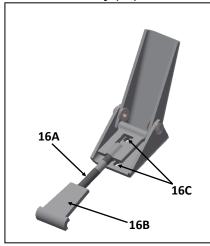
62003 Volumetair™ Kit w/ Molded Plastic Case

## Type B Air Meter

#### Air Meter Assembly

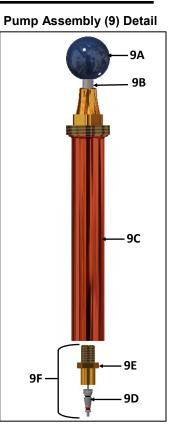


Latch Assembly (16) Detail



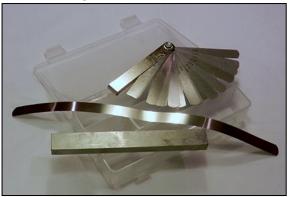
If our Air Meter does not meet your needs, please call one of our sales reps for assistance.

Is your Air Meter in need of service or calibration? We can do that too! Just give one of our reps a call to schedule your service appointment.



ID	PN	Description	ID	PN	Description	ID	PN	Description
1	62119	Top Plate, Air Meter	14	62114	Needle Valve Spacer	*	62122	Bronze Clamp with Stud
2	62028	Measuring Bowl (Base)	15	62113	Needle Valve Lever	*	62123	Clamp Nut
3	62120	Cover O-Ring	16	62025	Complete SS Latch Assembly, 3 hole	*	62124	Clamp Trunnion
4	62101	Pressure Chamber Body	16A	62024	Latch Tab Stud for SS Latch	*	62125	Clamp Spring
5	62104	Pressure Chamber Gaskets (2ea)	16B	62023	Latch Tab for SS Latch	*	62126	Clamp Toggle
6	62022	Complete Pressure Gauge	16C	62026	Clamp Screw (Set of 3)	*	62127	Toggle Set Screw
7	62102	Pressure Chamber Cap	17	62032	Pet Cock Valve	*	62128	Toggle Lock Nut
9	62021	Complete Super Pump Assembly	18	62118	Needle Valve Seat Assembly	*	62163	Replacement O-Ring, Piston Pump Body
9A	62167	Pump Piston Knob (800633)	19	62103	Pressure Chamber Gauge/Elbow	*	62164	Pump Piston Assembly
9B	62160	Piston Pump Plunger Stem	*	62130	Base Handle	*	62105	Pressure Chamber Air Release Stem
9C	62162	Pump Tube Assembly	*	62131	Calibration Vessel	*	62106 Pressure Chamber Air Release Cap	
9D	62166	Check Core	*	62132	Calibrating Tube (Outer)	*	* 62161 Replacement O-Ring, Piston Pump Plunger	
9E	62169	Pump Check Core Valve	*	62133	Calibrating Tube (Inner)	*	62117	Needle Valve Spring Retainer
9F	62165	Pump Check Kit	*	62134	Watts Strike Off Bar	*	62034	Pressure Chamber Release Cap Gasket
10	62111	Needle Valve Stem	*	62135	Tamping Rod	*	62030	Blue Plastic Case for B-Type Air Meter
11	62115	Needle Valve O-Ring	*	62136	Syringe	*	61011	CETec Strike Off Bar
12	62112	Needle Valve Nut	*	62137	Gauge Glass		Note: It	ems with asterisk (*) are not pictured
13	62116	Needle Valve Spring	*	62020	Calibration Canister, Brass, 5%	above		

#### **Planeness Gauge Set**



The Planeness Gauge Set is used to determine the flatness of testing machine platens, capping fixtures, and other testing accessories.

61004	Planeness Gauge Set, consists of:
61015	Feeler Gauge, .001 x 0.5 x 12"L
61017	Feeler Gauge Set, 15 leaves, .002—.025
61016	Parallel Bar, 6" L
800265	Plastic Case

#### **Chace Air Indicator Kit**



The Chace Air Indicator Kit is used for quick estimations of air content in fresh concrete. Method is ideal for rapid field tests or to supplement air meter tests. A sample is placed in the vial and filled with alcohol. Percentage of air is determined by number of lines the alcohol drops in the stem of the vial.

The kit includes vial with stopped, square bottle for alcohol, brush and instructions. Packed in a plastic case.

62002 Chase Air Indicator Kit

#### Calcium Chloride Moisture Vapor Test Kit



This test is used to model the amount of moisture that emits from 1000 sq-ft of slab surface in 24 hours. Results are expressed as pounds which are the equivalent weight of water, emitted as vapor, over 1000 sq-ft in 24 hours.

Tests are packaged n 3-packs and include pH test kits.

	Calcium Chloride Moisture Vapor Test Kit, 3 pack
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Grout Sample Box and Fixture

#### Grout Sample Box

The Deslauriers Grout Sample Box is specifically designed for use in casting 3.125" x 3.125" x 6.250" prisms of masonry grout for verification of comprehensive strength.

#### **Grout Sample Box Fixture**

Simplifies the assembly of the Grout Sample Box and assists in maintaining the squareness and consistency of the unit. Durable steel construction.

68002	Grout Sample Box
68003	Grout Sample Box Fixture
63016	Pads, 3" Square, 50D
63017	Pads, 3" Square, 60D
63018	Pads, 3" Square, 70D

## **Scales and Ovens**

	Part No.	Description (capacity x readability)	Select Weighing Units	AC/ Rech.Batttery	AC/"AA" Battery	Tare Feature	Platform Size
	95001	Triple Beam Balance, 2610g x 0.1g	N	NA	NA	Y	R 6 in.
	95002	Valor 1000 Compact Scale, 66-lb. x 0.01-lb.	Y	Y	Ν	Y	9.9 x 7.1 in.
	95003	Valor 7000 Scale 60-lb. x 0.002-lb.	Y	Y	N	Y	8.9 x 11.8 in.
C' SCRIES	95014	Scout Pro Scale, 400g x 0.1 g	Y	N	Y	Y	6.7 x 5.5 in.
	95004	Scout Pro Scale, 620g x 0.1g	Y	N	Y	Y	6.7 x 5.5 in.
	95005	Adventurer Pro Scale, 8200 g x 0.1g, w/Auto Cal	Y	AC	Ν	Y	7.7 x 6.9 in.
	95023	Compact Scale, 200g x 0. 1g, CS Series	Y	N	Y	Y	R 5.75-in.
	95009	Compact Scale, 5000g x 1g, CS Series	Y	N	Y	Y	R 5.75-in.
La parte	95011	Navigator NV Scale 1100g x 0.1g	Y	Ν	Y	Y	5.4 x 7.5 in.
	95016	Navigator NV Scale 2100g x 0.1g	Y	Ν	Y	Y	5.4 x 7.5 in.
	95017	Explorer Scale, 6200 g x 0.01g w/Auto Calibration	Y	AC	Ν	Y	7.5 x 8 in.
	95018	Explorer Scale, 6200 g x 0.01g w/o Auto Calibration	Y	AC	Ν	Y	7.5 x 8 in.
	95022	Explorer Scale, 10,200g x 0.1g	Y	AC	Ν	Y	7.5 x 8 in.
	95029	Explorer Scale, 10,200g x 0.01g w/Auto Calibration	Y	AC	Ν	Y	7.5 x 8 in.
A luetender	95019	Explorer Scale, 12,000 g x 0.1g w/Auto Calibration	Y	AC	Ν	Y	14.8 x 12.2 in.
	95020	Pioneer Scale, 3200g x 0.01g, w/InCal	Y	AC	Ν	Y	R 7.1-in.
	95021	Pioneer Scale, 3200g x 0.01g, w/o InCal	Y	AC	Ν	Y	R 7.1-in.
	95027	Defender 3000 Scale, 132-lb. x 0.02-lb., Large Pan	Y	Y	N	Y	21.7 x 16.5 in.
	95024	Defender 3000 Scale, 660-lb. x 0.1-lb.	Y	Y	N	Y	25.6 x 19.7 in.
	95025	Defender 3000 Scale, 132-lb. x 0.02-lb.	Y	Y	N	Y	14 x 12 in.
0.00	95030	Defender 7000 Scale, 300-lb.x 0.02-lb.	Y	AC	Y	Y	21.7 x 16.5 in.
	95013	A&D Compact Scale, 6100g x 0.1g	Y	N	Y	Y	5 x 5.5 in.
24	95026	A&D Industrial Series Scale, 21kg x 0.1g	Y	N	Y	Y	8.3 x 10.6 in.
Same	95015	Adam GFK Floor Scale, 165-lb. x 0.002-lb.	Y	Y	Ν	Y	15.7 x 19.7 in.



Bench Oven

Double Wall Lab Oven

Part No.	Description	Max Temp, °F / °C	Voltage std 110V, Opt. 230V	Gravity Conv or Forced Draft	Optional Stainless Steel Lining	
94010	Double Wall Lab Oven, 1.3 cu ft	450F/232C	110V	Gravity	Ν	
94005	Double Wall Lab Oven, 2 cu ft	450F/232C	110V	Gravity	Ν	
94007	Bench Oven, 7 cu ft	450F/232C	110V	FD	Y	
94009	Bench Oven, 7 cu ft, Digital	450F/232C	110V	FD	Y	
94008	Bench Oven, 10.6 cu ft	450F/232C	110V	FD	Y	
Note: Di	Note: Digital Bench Oven available with circular chart recorder for QA Verification					
94011	Hot Plate, Double Burner, 120V, 1650W					

## **Miscellaneous Laboratory**

#### **Dial & Pocket Thermometers**



**Thermometer, Pocket Type**, 25-125 °F, 1" dia Designed for field use, comes complete with pocket case with clip. Stainless steel 5-in stem and 1-in dia dial.

**Thermometer, Dial Type**, 50-550 °F/10-280 °C, 2" dia F/C dual scale thermometer. Dial is 2-in in diameter and is made of 304 stainless steel. Accuracy to 1% of range. Calibration reset screw sets to known temperature. Thermometer has indicating point and adjustable clip.

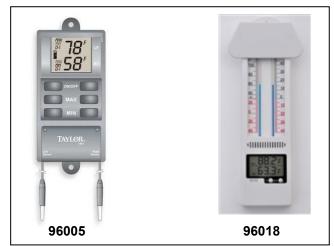
96001	Pocket type thermometer, 1" dia dial
96002	Dial type thermometer, 2" dia dial



Adjustable thermostatic control up to 550°F. Inner chamber of cast aluminum. Models shown are 110 Vac 60 Hz, but 220 Vac 50/60 Hz available upon request. Larger capacities available.

94001	Melting Pot, 4-qt capacity
94002	Melting Pot, 8-qt capacity
94003	Melting Pot, 12-qt capacity
94004	Melting Pot, 20-qt capacity

#### Max/Min Thermometers



**96005** Digital Dual Channel with seven day memory for both sensors. Temperature range of  $-20^{\circ}$  -  $120^{\circ}$ F (-29° -  $50^{\circ}$ C). Powered by one AA battery.

**96018** Hybrid Dual Range -  $40^{\circ}$  -  $120^{\circ}$ F (- $40 - 50^{\circ}$ C) 8-in long. Current temperature displayed in F and C on spirit filled sticks and in F and C on the digital readout.

#### Scoops



93001	Round Scoop #0 (5" L x 3" W)
93051	Round Scoop #1 (7" L x 4" W)
93002	Round Scoop #2 (8¼" L x 5" W)
93004	Flat Bottom Scoop #2 (5½" L x 3" W)
93005	Flat Bottom Scoop #3 (6¼" L x 4" W)

## **Miscellaneous Laboratory**

#### Laboratory/Sieve Brushes

CETec offers brushes to meet all laboratory requirements.

93027	Small wire sieve brush
93028	Small round sieve brush
93029	Wire scratch brush, 7¾ x 25/8" x 2"
93030	Table brush, 8" horsehair
93031	Brass wire brush, wood handle
93032	Sieve brush, 8" handle
93034	Scrub/Crete brush, acid proof. 20" wood handle
93035	Scrub/Crete brush, acid proof. 8" wood handle



Laboratory & Sieve Brushes



Sample Tins, Evaporating Dishes, Graduated Cylinders & Tongs

Graduated Cylinders		
93017	Plastic, 250ml	
93047	Plastic, 500ml	
93048	Plastic, 100ml	
93018	Glass, 100ml	

Pans	
93013	Pan, Rectangle, SS, 20¾" x 12¾" x 2½"
93014	Pan, Rectangle, SS, 6 <sup>7</sup> /₃" x 12³/₄" x 6"
93015	Pan, Rectangle. SS 13 <sup>7</sup> ⁄₃" x 12⁵⁄₃" x 2¹⁄₂"
93016	Pan, Rectangle, Alum, 9½" x 13" x 1½"
93025	Pan, Rectangle, Galvanized Iron, 18" x 18" x 3"

# Curing Tank Heater and Circulating Pump63032Curing Tank Heater, 120 VAC

63033 Curing Tank Circulating Pump, 120 VAC

Sample Tins	
Moisture Cans, Alum, 2" x 1", 1.76oz, doz/pkg	
Moisture Cans, Alum, 3.5" x 2", 10.7oz, doz/pkg	
Moisture Cans, Alum, 2.5" x 1.75", 4.75oz, doz/ pkg	
Moisture Cans, Alum, 3" x 1", 3.92oz, doz/pkg	
Evaporating Dishes	
Evaporating Dish, 150ml, High Temp	
Evaporating Dish, 250ml, High Temp	
Beaker Tongs, Rubber Coated, 50-1500ml size	
Crucible Tongs, 10" Long, Plated Steel	
Mixing Bowl, SS, 1.5 Qt, 7 <sup>7</sup> / <sub>8</sub> "OD x 3" Deep	
Mixing Bowl, SS, 1.5 Qt, 7 <sup>7</sup> / <sub>8</sub> "OD x 3" Deep Mixing Bowl, SS, 3 Qt, 9 <sup>3</sup> / <sub>8</sub> "OD x 3 <sup>1</sup> / <sub>2</sub> " Deep	
Mixing Bowl, SS, 3 Qt, 9 <sup>3</sup> / <sub>8</sub> "OD x 3 <sup>1</sup> / <sub>2</sub> " Deep	
Mixing Bowl, SS, 3 Qt, 9% "OD x 3½" DeepMixing Bowl, SS, 5Qt, 11½" OD x 3½" Deep	
Mixing Bowl, SS, 3 Qt, 9¾"OD x 3½" DeepMixing Bowl, SS, 5Qt, 11½"OD x 3½" DeepMixing Bowl, SS, 8 Qt, 13¼"OD x 5½" Deep	
Mixing Bowl, SS, 3 Qt, 9¾"OD x 3½" DeepMixing Bowl, SS, 5Qt, 11½"OD x 3½" DeepMixing Bowl, SS, 8 Qt, 13¼"OD x 5½" DeepMixing Bowl, SS, 16 Qt, 17½"OD x 5" Deep	
Mixing Bowl, SS, 3 Qt, 9% "OD x 3½" DeepMixing Bowl, SS, 5Qt, 11½ "OD x 3½" DeepMixing Bowl, SS, 8 Qt, 13¼ "OD x 5½" DeepMixing Bowl, SS, 16 Qt, 17½ "OD x 5" Deeps and Flasks	
Mixing Bowl, SS, 3 Qt, 9% "OD x 3½" Deep   Mixing Bowl, SS, 5Qt, 11½ "OD x 3½" Deep   Mixing Bowl, SS, 8 Qt, 13¼ "OD x 5½" Deep   Mixing Bowl, SS, 8 Qt, 13¼ "OD x 5½" Deep   Mixing Bowl, SS, 16 Qt, 17½ "OD x 5" Deep   s and Flasks   Glass Beaker, 50ml	
Mixing Bowl, SS, 3 Qt, 9¾"OD x 3½" Deep   Mixing Bowl, SS, 5Qt, 11½"OD x 3½" Deep   Mixing Bowl, SS, 8 Qt, 13¼"OD x 5½" Deep   Mixing Bowl, SS, 8 Qt, 13¼"OD x 5½" Deep   Mixing Bowl, SS, 16 Qt, 17½"OD x 5" Deep   s and Flasks   Glass Beaker, 50ml   Glass Beaker, 250ml	



P.O. Box 2256 Suwanee, GA 30024

1039 Industrial Court Suwanee, GA 30024

### **CETec Service and Repair**

CETec's machining and welding facility serves to produce many of the items that are offered for sale in our catalog and web site. In addition, our production facility is coupled with design capacity allows us to custom produce products for customers from a wide range of industries. Further, using our many years of experience in the materials testing industry, we offer repair and upgrades to customers' testing equipment.

### **Examples of Repair and Upgrades Include:**

- Replace and upgrade pneumatic, hydraulic and drive train for geotextile interface friction devices
- Repair drive systems for controlled strain load frames
- Repair right angle gear box for mechanical drill rig
- Using reverse engineering, produce parts for test equipment no longer supported by the original manufacturer

### **Examples of Custom Equipment and Support Production**

- Custom load frame and hydraulic drive system for full scale testing of concrete culvert pipe
- Support frame for hydraulic drive system to install auger anchors for cable anchoring systems
- Mechanical components for structural jacking system
- Housing components for pressure transducers
- Components for pneumatic and mechanical environmental pumps

### CetecCorp.com

### T: 770.817.7810