# AGGREGATE

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# SAMPLE SPLITTER (G-080) ASTM C136 • AASHTO T27 • EN 933-3 • EN 933-3

- The sample splitter equipment is designed to halve/divide aggregates, soils, sands and gravel into two representative halves.
- Made of powder coated enameled steel.



• SUPPLIED WITH:

Pans (2 ea)

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Sample Splitter (G-080)

Code Chute Width (mm) Number of Chutes G-080/09 9.0 12 G-080/12 12.5 12 G-080/19 19.0 10 G-080/25 25.0 10 37.5 8 G-080/37 G-080/50 50.0 8 G-080/62 62.5 8 G-080/75 75.0 8

Approximate Weight (kg)

46

## UNIVERSAL SAMPLE SPLITTER (G-081)

- Used to halve/divide large amount of aggregates, soils, sands and gravel into two representative portions.
- The width of each chute bar is 1/2".
- Equipped with lever and release hoppers.
- Made of heavy-duty steel.
- Supplied with two collecting pans



Dimensions (± 1 cm)

72 x 50 x 87 (h)

#### • SUPPLIED WITH:

- Collecting Pans (2 ea)
- TECHNICAL SPECIFICATIONS
- Chutes: Adjustable, Width: 1/2" each.

### FLAKINESS SIEVE SET (AG-030)

 Used to determine whether the aggregate particle is flaky or not, that is to determine whether the thickness of the particle is less than 60% of its nominal size or not. The sieve is made from robust stainless steel.

#### TECHNICAL SPECIFICATIONS

Model of Steel

Code	Dimensions (± 1 cm)	Approximate Weight (kg)
AG-030	26 x 45 x 7.5 (h)	2.4

- The sieve sizes for the set are:
  - 4.90 mm x 30.00 mm

Code

G-081

- 7.20 mm x 40.00 mm
- 10.20 mm x 50.00 mm
- 14.40 mm x 60.00 mm
- 19.70 mm x 80.00 mm
- 26.30 mm x 90.00 mm
- 33.90 mm x 100.00 mm

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# THICKNESS / FLAKINESS GAUGE (AG-032)

- Used to determine whether the aggregate if flaky or not, that is to state whether its thickness is less than 60% of its nominal size.
- Made of a heavy-duty stainless steel.

Thickness / Flakiness Gauge (AG-032)

- TECHNICAL SPECIFICATIONS
- Used for determining the thickness
- Made of stainless steel

Code	Dimensions (±1cm)	Approximate Weight (kg)
AG-032	38 x 16	0.8

# **LENGTH GAUGE (AG-034)**

- Used to determine the amount of elongation occurred on the aggregate sample.
- Supplied with a wooden base.

#### • TECHNICAL SPECIFICATIONS

- Used for determining the length
- Supplied with:
  - Wooden Base

Length Gauge (AG-034)

Code	Dimensions (±1cm)	Approximate Weight (kg)
AG-034	40 x 8 x 2 (h)	0.3

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AGGREGATE

GRID SIEVE SET (AG-038) EN 993-3

- Used to determine the flakiness index for the aggregate particles and determine the particle shape.
- The sieve is made from robust frame with stainless steel bars.
- Consists of 14 sieves with openings as the following (mm):
  - 50.00 40.00 31.50 25.00 20.00 16.00 12.50 10.00 8.00 6.30 5.00 4.00 3.15 2.50



Grid Sieve Set (AG-038)

#### TECHNICAL SPECIFICATIONS

- Metal frame
- Stainless steel parallel bars
- Set of 14 sieves (mm):
  - 50.00 40.00 31.50 25.00 20.00 16.00 12.50 10.00 8.00 6.30 5.00 4.00 3.15
    2.50

Code	Dimensions (±1cm)	Approximate Weight (kg)
AG-038	39 x 35 x 8 (h)	3.5

### AGGREGATE SHAPE GAUGE (AG-036) EN 993-4 • DIN 4226

 Used to measure the ratio between the length to the thickness of any individual particle.



Aggregate Shape Gauge (AG-036)

#### • TECHNICAL SPECIFICATIONS

Made of steel

Code	Dimensions (±1cm)	Approximate Weight (kg)
AG-036	40 x 15	0.5



# SAND EQUIVALENT SHAKER (AG-040/SS)

- Provides a constant, uniform and precise shaking for the sand sample.
- The stroke of the shaker is 200 mm ± 10 mm. and the rate of shaking is 175 stroke per minute.
- Equipped with a digital stroke indicator.



- Stroke : 200 mm ± 10 mm
- Rate : 175 str/min
- Digital Stroke Indicator

Power Supply: 220 - 240 V / 50 or 60 Hz (110 V / 60 Hz is also available)

Code	Dimensions (± 1 cm)
AG-040/SS	45 x 35 x 45 (h)

Sand Equivalent Shaker (AG-040/SS)



## SAND EQUIVALENT TEST SET (AG-040) EN 933-8 • ASTM D2419 • AASHTO T-176

 The test is used to determine the relative portion of undesirable clay-like or plastic fines and dusts that occur in granular soils and fine aggregates passing the No. 4 sieve.



#### • TECHNICAL SPECIFICATIONS

- Measuring Cylinder ( 4 ea )
- Rubber Stopper ( 2 ea )
- Measuring Can
- Plastic Bottle
- Irrigator Tube
- Syphon assembly jar
- Weighted Foot
- Funnel
- Ruler
- Stock Solution
- Case
- Sand Equivalent Shaker to be ordered separately

Sand Equivalent Test Set (AG-040)



# **ORGANIC IMPURITIES SET (AG-240)**

- Used to determine the impurities and their amount in the soil and the fine particles of aggregates.
- Equipped with organic color scale and organic impurities bottle.



Organic Impurities Set (AG-240)

- Set comprises:
  - Organic Color Scale (AG-240/CS)
  - Organic Impurities Bottle (AG-240/TB)



METHYLENE BLUE SET (AG-041) EN 933-9

 Used to determine the amount of clay in the fine proportions of aggregates.



#### TECHNICAL SPECIFICATIONS

- 50 cc burette x stopcock
- Support base x clamp
- Glass Rod and filter discs
- 3000 ml plastic beaker
- Methylene blue 250 gr
- Kaolinite 1000 gr
- Mixer 400 700 rpm
- Impeller: 75 mm dia
- Power Supply: 220-240 v/50 Hz.

Methylene Blue Set (AG-041)





### LOS ANGELES ABRASION TESTER (AG-191) EN 1097-2 • ASTM C131 • ASTM C535

- Used to measure the degradation of mineral aggregates of standard gradings resulting from a combination of actions including abrasion or attrition, impact, and grinding in a rotating steel drum containing a specified number of steel spheres.
- Consists of a hollow steel cylinder, with a wall thickness of 12 mm (1/2") closed at both ends having an inside diameter of 711 mm (28"), and an inside length of 508 mm (20").
- The drum rotates at 31 33 rpm.
- Supplied with an automatic digital counter that shows the number of revolutions for the drum.



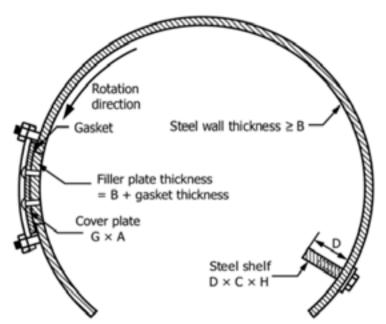


# **LOS ANGELES ABRASION TESTER (AG-191)**

EN 1097 - 2 • ASTM C131.

DRUM DIMENSIONS

A	1/4" 6 mm
В	1/2" 12 mm
С	1" 25 mm
D	3 1/2" 90 mm
G	7 1/2" 190 mm
H (Drum Width)	20" 510 mm
Ø (Drum Diameter)	28" 711 mm



#### • SUPPLIED WITH

Material catch pan

- Automatic digital counter
- The drum rotates at 31 33 rpm
- Power Supply: 220 240 V / 50 or 60 Hz (110 V / 60 Hz is also available)

Code	Dimensions	Approximate Weight
AG-191	44" x 35" x 40" 110 x 88 x 100 (h) cm	830 lb 376 kg
AG-191/SPC	51" x 45" x 44" 128 x 113 x 110 (h) cm	305 lb 138 kg

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# NOISE REDUCTION CABINET (AG-191/SPC)

- The cabinet is to decrease the noise.
- AG-191/SPC should be ordered separately.



Noise Reduction Cabinet (AG-191/SPC)

# ABRASIVE CHARGES (AG-191/AC)

- Abrasive charges are used with the Los Angeles Abrasion Tester to measure the abrasive-resistance for the aggregate particles.
- Standards (ASTM or EN) should be specified at the time of order.



Abrasive Charges (AG-191/SS)

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# ABRASION TESTER for NATURAL STONES and CONCRETE TILES (AG-197)

- Used to determine the abrasion-resistance of the natural stones and tiles.
- Equipped with abrasion disc of 70 mm thickness.
- Designed with "Automatic Revolution" selection feature for accurate and better results.
- Supplied with pack of white corundum.



Abrasion Tester for Natural Stones and Concrete Tiles (AG-197)

- Testing machine for Natural Stones and Tiles
- Abrasion Disc is 70 mm thick
- Automatic Revolution Selection
- Power Supply: 220 240 V / 50 or 60 Hz (110 V / 60 Hz is also available)

Code	Dimensions (±1cm)
AG-197	90 x 60 x 130 (h)



# **DORRY ABRASION TESTER - BÖHME (AG-199)**

- Used to determine the abrasion-resistance of the aggregate particles.
- Supplied with a horizontal abrasion disc with a diameter of 750 mm.
- Automatic revolution selection for better and accurate results.
- Equipped with sample holder, beam-loading device, and a pack of white corundum.



- Horizontal Abrasion Disc Ø 750 mm
- Automatic Revolution Selection
- Sample holder beam loading device & weight
- Power Supply: 220 240 V / 50 or 60 Hz (110 V / 60 Hz is also available)

Code	Dimensions (± 1 cm)	Approximate Weight (kg)
AG-199	174 x 102 x 114 (h)	374

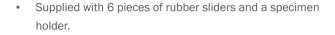


## SKID RESISTANCE TESTER (AG-190) ASTM E-103 • BS 812-144 • EN 1097

- Used to determine the surface friction of the curved aggregates, polished surfaces, concrete pavements and natural rocks.
- Suitable to measure the skid resistance for asphalt pavement.
- The mechanism is based on the energy loss from the rubber piece while sliding over the specimen. The amount of resistance is measured and transferred to a nearlyfriction-less pointer. This helps providing precise and accurate results.

#### SUPPLIED WITH

- 6 rubber sliders
- Specimen Holder
- TECHNICAL SPECIFICATIONS
- Measuring Surface Friction
- Free fall of pendulum arm
- Rubber Sliders





Skid Resistance Tester (AG-190)

# SAND ABSORPTION CONE & TAMPER (AG-200) BS 812

- Made of a very rigid and strong steel.
- Used to determine the specific gravity for the required specimens.

#### TECHNICAL SPECIFICATIONS

Made of Steel

Sand Absorption Cone And Tamper (AG-200)

Code	Dimensions (±1cm)	Approximate Weight (kg)
AG-200	9 x 9 x 16 (h)	0.4



MICRO-DEVAL ABRASION TESTER (AG-195) EN 1097-1

- Used to determine the abrasion-resistance of the aggregate particles.
- The machine is made of a rigid steel frame on which one of the following combinations can be mounted:
  - 4 cylinders (Ø 200 mm x 154 mm)
  - 2 cylinders (Ø 400 mm x 154 mm)
  - 2 cylinders (Ø 200 mm x 154 mm) and 1 cylinder (Ø 400 mm x 154 mm)
- Transparent safe guard is fixed on the machine to increase the safely level and insure fault-less environment.
- Equipped with automatic digital counter.
- Supplied with:
  - 2 cylinders (Ø 200 mm x 154 mm)
  - Abrasive Charges Ø 10 mm (20 kg)

#### • TECHNICAL SPECIFICATIONS

- Rigid Steel Frame
- Stainless Steel Drums Ø 200 mm x 154 mm (2 ea)
- Safety Guard, Transparent
- Automatic Digital Counter
- Abrasive Charges Ø 10 mm (20 kg)
- Power Supply: 220 240 V / 50 or 60 Hz (110 V / 60 Hz is also available)



Micro-Deval Testing Abrasion Tester (AG-195)

Code	Dimensions (± 1 cm)
AG-195	142 x 47 x 46 (h)



# AGGREGATE CRUSHING VALUE (AG-210) BS 812-110

- Used to determine the crushing value for the aggregate particles.
- Contains the standard Aggregate Crushing Value pieces.
- The cylinder supplied with the set is made of a heavy-duty steel to resist the impacts during the test.
- Includes a plunger, tamping rod and a base plate.



Aggregate Crushing Value (AG-210)

AG-210/075	AG-210/150
Used for aggregate passing 9.5 mm sieve	Used for aggregate passing 12.7 mm and retaining on 9.5 mm sieve (Ten Percent Fines Value Test)
Steel Cylinder (Ø 75 mm)	Steel Cylinder (Ø 150 mm)
Plunger	Plunger
Tamping Rod (Ø 8 mm x 300 mm)	Tamping Rod (Ø 16 mm x 600 mm)
Measure (Ø 57 mm x 90 mm)	Measure (Ø 115 mm x 180 mm)
Base Plate	Base Plate



BS 812

- Used to determine the aggregate particle resistance to impact.
- Contains the standard Aggregate Impact Value pieces.
- Supplied with automatic blow counter.
- Supplied with a sample cylinder, measuring cylinder and a tamping rod.



- Standard AIV set
- Measure of resistance to impact
- Automatic counter of Blows
- Sample cylinder
- Cylindrical measure
- Tamping Rod

Code	Dimensions (± 1 cm)	Approximate Weight (kg)
AG-220	22 x 44 x 82 (h)	42