Aggregate Crushing Value Test Set

LT-A0064 / LT-A0065 | ACV test assemblies in two diameters

Steel cylinder • Plunger • Base plate • Cylindrical measure and tamping rod



Ø75 mm

LT-A0064 • SMALL-DIAMETER SET

Ø150 mm

LT-A0065 • STANDARD-DIAMETER SET

BS 812-110 • BS 812-111 • Aggregate strength under gradually applied compression

LT-A0064 / LT-A0065

Photograph and Set Components

Steel cylinder, cylindrical measure, plunger, base plate and tamping rod

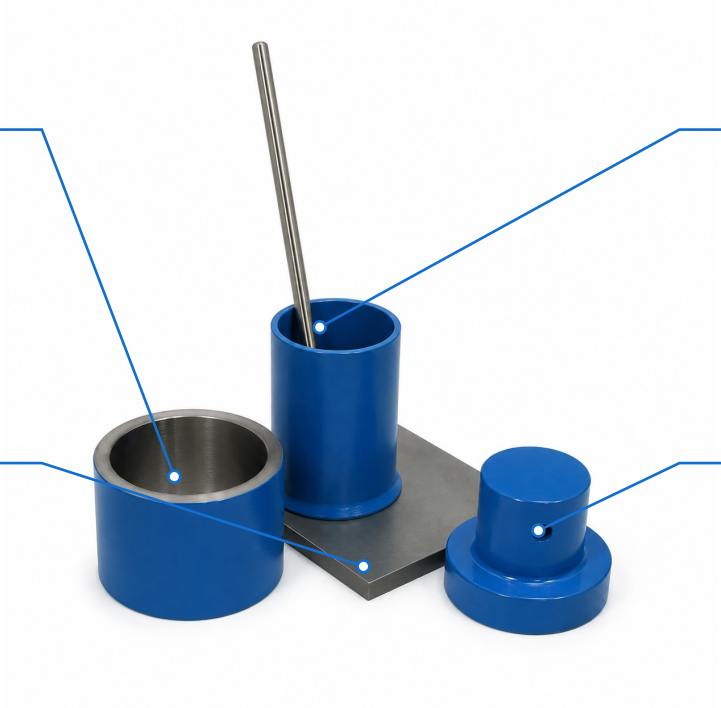
The set evaluates aggregate resistance to crushing under gradually applied compression. The cylinder contains the specimen and the plunger transfers the load. A cylindrical measure and tamping rod assist consistent sample preparation.

STEEL CYLINDER

Contains the prepared aggregate specimen throughout compression loading.

MEASURE AND TAMPING ROD

The measure prepares the sample quantity. The rod is used to place the specimen in controlled layers.



BASE PLATE

Supports the cylinder and forms the lower bearing surface of the test assembly.

PLUNGER

Transfers load from the compression testing machine to the aggregate specimen.



Steel cylinder and specimen working area



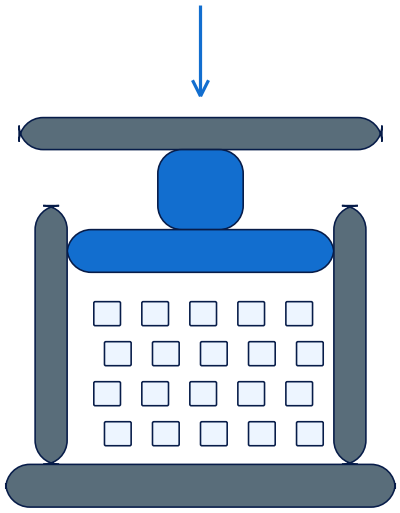
Plunger and load-transfer face

LT-A0064 / LT-A0065

Controlled Compression through a Plunger

Prepare sample • Fill in layers • Apply load • Weigh the fines

COMPRESSIVE LOAD • PLUNGER • AGGREGATE



GRADUALLY APPLIED LOAD

CONTROLLED CRUSHING INSIDE THE CYLINDER

M: INITIAL SPECIMEN MASS

ACV (%) = 100 × m / M

m: MASS PASSING THE TEST SIEVE • REPRESENTATIVE SECTION • NOT TO SCALE

Prepare the Sample

Select the prescribed size fraction and record initial mass. Use the appropriate cylindrical measure.

Fill and Apply Load

Place and tamp the aggregate in layers. Fit the plunger and apply load with a compression testing machine.

Sieve and Calculate ACV

Remove and sieve the material. Calculate percentage ACV from the mass of fines passing the test sieve.

A compression testing machine transfers load through the plunger to the aggregate particles. The cylinder and base plate support the specimen. After loading, sieve and weigh the fines generated. Under the same method conditions, lower ACV indicates greater resistance to crushing under compression.

Diameter and Sample Fraction

LT-A0065 is the standard Ø150 mm test assembly. The primary BS 812-110 method uses aggregate passing the 14 mm sieve and retained on the 10 mm sieve.

LT-A0064 is the smaller Ø75 mm set, offered for aggregates below 10 mm. Match other size fractions to the relevant method provisions. The two sets use different measure and tamping rod sizes.

ACV and Ten Percent Fines Value

BS 812-110 determines Aggregate Crushing Value (ACV). The method is unsuitable for aggregates with ACV above 30; use the BS 812-111 ten percent fines value method in these cases.

BS 812-111 covers both weak and strong aggregates. Do not equate ACV and ten percent fines results; identify the test method and specimen conditions in the report.

Model Options and Component Codes

LT-A0064 / LT-A0065 • Set dimensions and component matching

Set Code	Cylinder Diameter	Overall Dimensions	Weight
LT-A0064	Ø75 mm	120 × 120 × 350 mm	8.5 kg
LT-A0065	Ø150 mm	250 × 250 × 600 mm	32 kg

Set Component	Ø75 mm Set	Ø150 mm Set
Steel Cylinder	LT-A0064/1	LT-A0065/1
Base Plate	LT-A0064/2	LT-A0065/2
Plunger	LT-A0064/3	LT-A0065/3
Cylindrical Measure	LT-A0064/4 • Ø57 × 90 mm	LT-A0065/4 • Ø115 × 180 mm
Tamping Rod	LT-G0162 • Ø8 × 300 mm	LT-G0163 • Ø16 × 600 mm

Use a Suitable Compression Testing Machine for Loading

The set provides specimen preparation and load-transfer components. A suitable compression testing machine is required. Select force, loading duration and test sieve according to the applied method.

From Aggregate to Crushing Value

01
Prepare
Select the fraction and record initial mass.

02
Fill
Tamp the layers and position the plunger.

03
Load
Apply gradual compression by the method.

04
Calculate
Sieve and weigh the fines; calculate ACV.

Product Page | liyatest.com.tr/en/urun/aggregate-crushing-value-test-set/