TEST MAK
MATERIAL TEST EQUIPMENTS

AGGREGATE
PRODUCT BROCHURE

LOS ANGELES ABRASION MACHINE

AG1260

LOS ANGELES ABRASION MACHINE

PRODUCT MODEL

AG1260	Los Angeles Abrasion Machine, 220-240 V 50/60 Hz
AG1260/110	Los Angeles Abrasion Machine, 110 V 60 Hz

PRODUCT STANDARDS

Standards	TS EN 1097-2, 12697-17, 13450 | ASTM C131, C535 | AASHTO T96

INFORMATION

Manufacturer	TESTMACLAB LABORATUVAR TEST CİHAZLARI PAZ. VE DIŞ TİC. LTD. ŞTİ
Country of Origin	TÜRKİYE
Product name	Los Angeles Abrasion Machine

DESCRIPTION

The TESTMAK Los Angeles Abrasion testing machine is used for determine resistance to degradation testing of coarse aggregates with a smaller than 37.5 mm.

The test sample is consist of clean aggregate which has been dried in an oven at 105 to 110°C tosub-stantially constant weight and conform to one of the gradings. The test sample and the abrasive charge shall be placed in the Los Angeles abrasion testing machine and the machine rotated at a speed of 31 to 33 rev/min.

The machine is so driven and so counter balanced as to maintain a substantially uniformperipheral speed.

At the completion of the test, the material shall be discharged from the machine and a preliminaryseparation of the sample made on a sieve coarser than the l.70 mm IS Sieve.

Los Angeles Abrasion machine is consists of a hollow steel cylinder, with a wall thickness of 12 mm closed at both ends having an inside diameter of 711 mm, and an inside length of 508 mm. The drum rotates at 31 – 33 rpm. Supplied with an automatic digital counter that shows the number of revolutions for the drum. Abrasive charges should be ordered separately.

• 1.6 mm, 10mm, 11.2mm (or 12.5mm) and 14 mm sieves acc. to EN Standard should be ordered separately.

• 1.7 mm(No.12) sieve and other sieves which chance depending the grain size acc. to ASTM and AASHTO standards, should be ordered separately.

Telephone : +90 312 395 44 57
Fax : +90 312 395 36 42
Website : www.testmak.com
E-Mail : info@testmak.com
Ağaç Metal Sanayi Sitesi 1354 Cadde 1436 Sokak
No:16 Ivogsan Yenimahalle - ANKARA / TÜRKİYE

OPERATION

1- Firstly should prepare sample as described in the related standard.

2- Before operation, should check that the cover plate fits snugly into the loading aperture in the drum and that the retaining nuts are fully tight permitting no movement of the cover.

3- The digital counter should be set to 31-33 rounds.

4- The drum should be released by pulling back the safety pin.

5- Check that the tray sits squarely within its locations on the base framework.

6- Then the test is started by pressing the start button.

TECHNICAL SPECIFICATIONS

Dimensions	1000x940x1000 mm
Weight	340 kg
Power	220-240 V 50/60 Hz 750 W

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How to Perform Los Angeles Abrasion Test?

Purpose of Los Angeles Abrasion Test:

This test, made with the Los Angeles abrasion machine, is an important test in terms of determining the resistance of the rock against abrasion. The experiment is aimed at investigating the quality of the rock material in terms of its resistance to impact and abrasion.

Equipments to be Used in the Los Angeles Abrasion Experiment:

• Abrasive balls

How to Performing the Los Angeles Abrasion Experiment:

• Test samples are taken, sifted through the required sieves according to the abrasion class in three series, and the remaining aggregate on the sieves is washed on the sieve until it is thoroughly cleaned from dust and clay, and the values are recorded.

• After the aggregates leak their water, the sample is prepared by drying them to a constant weight under a temperature of 110±5°C and sieving them again through the sieve.

• The total mass of the test sample is recorded, the spheres with the abrasive bodies are put into the Los Angeles abrasion machine and the mouth is tightly closed to make it ready for the test.

• The machine is adjusted to make 30-33 revolutions per minute and the experiment is continued by making 500 revolutions according to the wear class, for example, for F class lightweight aggregates.

• Then, the opening in the cover of the machine is brought to the level of the tray under the machine, and all the material is taken out without material loss.

• After the desired number of cycles is completed, the sample taken is sieved through a 1.70 mm sieve, and the sample remaining on the sieve is weighed and recorded without loss of grain. (Number of abrasive spheres and number of revolutions are determined according to the aggregate class according to the applied standards).

Result:

Values such as the number of ball and sample amounts in the Los Angeles Test are specified in international standards.

After each experiment, the Los Angeles machine and the balls thrown into it must be carefully cleaned. This is important to obtain accurate results in later experiments.

The wear percentage is calculated from the formula below.

M1 : Initial weight of the sample (g)

M2: Final weight of sample (g)

Percent Wear = [(M1-M2)/ M1] 100

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THANK YOU

FOR CHOOSE US

Dear business partners, thank you very much for believing in us and recommending our products to your customers; We sincerely believe that our company will grow even more thanks to you, our esteemed business partners.

You can reach us than our phones or e mail address 24 hours a day.

CONTACT US

Ağaç Metal Sanayi Sitesi 1354 Cadde 1436 Sokak No:16 Ivogsan Yenimahalle - ANKARA / TÜRKİYE

info@testmak.com
marketing@testmak.com

TÜRKİYE / HEAD Office : +90 312 395 44 57
UKRAINE Office : +380 63 741 29 20
SOUTH AMERICA / Cuba Office : +53 5 073 96 12

www.testmak.com