Centrifuge Extractor Test Set

LT-AS0004 - LT-AS0005 | 1500 and 3000 g capacity

Stepless speed control • Extractor bowl • Filter papers



1500 / 3000 g

SPECIMEN CAPACITY OPTIONS

0-3600

ROTATION SPEED • rpm

EN 12697-1 • ASTM D2172/D2172M • AASHTO T 164 Method A

Photograph and Extraction Components

Extraction housing, cover clamps and speed control

The centrifuge extractor is used to determine soluble binder content in asphalt mixtures. Solvent dissolves the binder; rotation drives the bitumen-solvent solution through the filter medium and out of the bowl.

EXTRACTION HOUSING

The capacity-matched bowl and cover operate inside the upper housing.

COVER CLAMPS

Check cover fixing and gasket positioning before extraction.



SPEED CONTROL

Adjust rotation continuously from 0 to 3600 rpm through the front panel.

SOLUTION OUTLET

Separated bitumen-solvent solution passes through the side outlet to a collection vessel.



Front control panel and speed-adjustment knob



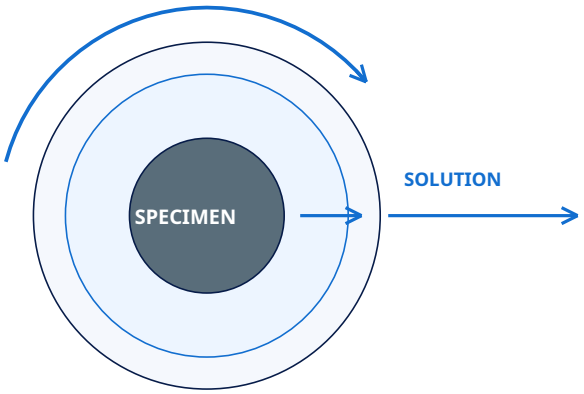
Cover clamp and solution outlet

LT-AS0004 - LT-AS0005

Centrifugal Binder Extraction

Prepare • Dissolve • Rotate • Separate and evaluate

ROTATING BOWL + FILTER + SOLUTION OUTLET



PLAN VIEW

ROTATION SPEED: 0-3600 rpm

FILTER: RETAINS MINERAL PARTICLES

BITUMEN-SOLVENT SOLUTION IS DISCHARGED

Binder content from dry aggregate and corrections

REPRESENTATIVE CENTRIFUGE DIAGRAM • NOT TO SCALE

Prepare Specimen and Filter

Weigh the specimen and fit the filter. Add solvent according to the method.

Close Cover and Rotate

Check gasket and cover fixing. Increase speed in a controlled manner.

Separate and Evaluate

Wait for the rotor to stop after extraction. Dry and weigh aggregate; calculate the result.

Solvent dissolves binder from the aggregate surface. The rotating bowl drives bitumen-solvent solution through the filter medium towards the outlet. Aggregate remains in the bowl; evaluate binder content using mass readings, moisture and fine mineral matter corrections.

Evaluating Binder Content

Weigh the initial specimen and the dry aggregate after extraction as specified by the method. Account for moisture and fine mineral matter carried into the solvent.

Calculate binder percentage using the applicable method. Do not treat the difference between two mass readings alone as binder content.

Bowl, Filter and Speed Selection

Use a matching bowl, cover and filter for the 1500 g LT-AS0004 or 3000 g LT-AS0005 model. Position the filter correctly and check cover fixing.

Increase speed in a controlled manner according to the method. Wait until the rotor stops before opening the cover; handle solvent under suitable local exhaust.

Models, Accessories and Specifications

Two capacity options | Matching filters, bowls and covers

Product Code	Capacity (g)	External (cm)	kg
LT-AS0004	1500	65 × 45 × 55	50
LT-AS0005	3000	65 × 45 × 55	50

Accessory Code	Component / Matching Model
LT-AS0004/1	Filter papers for 1500 g model • 50 papers
LT-AS0005/1	Filter papers for 3000 g model • 50 papers
LT-AS0004/2	Bowl and cover for 1500 g model
LT-AS0005/2	Bowl and cover for 3000 g model

Common Feature / Component	Value / Description
Rotation Speed	0-3600 rpm • Stepless adjustment
Power Supply	220 V, 50-60 Hz, single phase
Acceleration / Braking	Controlled acceleration • Approx. 10-15 s stop

Filter Positioning and Controlled Rotation

Select specimen mass and filter for the model capacity. Check cover fixing and increase speed in a controlled manner; wait for the rotor to stop completely after extraction.

From Asphalt Specimen to Binder Content

01
Prepare
Weigh specimen and position the filter.

02
Dissolve
Add suitable solvent as specified.

03
Centrifuge
Increase speed and collect solution separately.

04
Calculate
Use dry aggregate and method corrections.

Product Page | liyatest.com.tr/en/urun/centrifuge-extractor/