Reflux Extractor Test Set

LT-AS0001 - LT-AS0002 | 1000 and 4000 g capacity

Hot solvent • Condenser • Two cone-shaped baskets



1000 / 4000 g

SPECIMEN CAPACITY OPTIONS

1500 W

THERMOSTAT-CONTROLLED HOT PLATE

ASTM D2172/D2172M • AASHTO T 164 Method B

LT-AS0001 - LT-AS0002

Photograph and Extraction Components

Condenser, glass body, cone-shaped baskets and hot plate

The reflux extractor separates binder from aggregate in asphalt mixtures using hot solvent. Condensed solvent repeatedly passes through the specimen in the baskets to sustain the extraction cycle.

CONDENSER

Converts solvent vapour into liquid at the top; liquid returns to the specimen.

CONE-SHAPED BASKETS

Two stainless wire baskets hold the specimen together with filter papers.



TRANSPARENT GLASS BODY

Heat-resistant glass allows solvent circulation and extraction to be observed.

ELECTRIC HOT PLATE

The 1500 W thermostat-controlled hot plate supplies heat for the solvent reflux cycle.



Upper condenser and connection ports

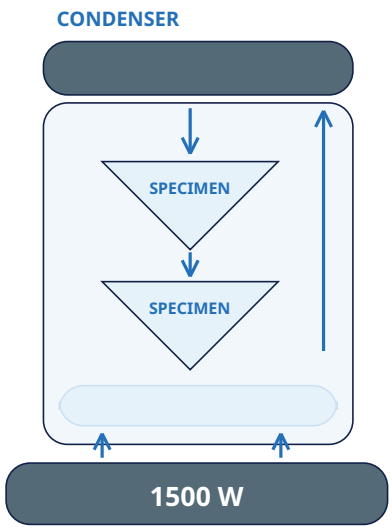


Analog thermostat and hot-plate front panel

LT-AS0001 - LT-AS0002

Hot-Solvent Reflux Cycle

Heat • Vaporise • Condense • Pass through specimen



Prepare Specimen and Filters

Weigh the specimen. Fit suitable filter papers in the cone-shaped baskets.

Start the Reflux Cycle

Check the condenser circuit. Set heating according to the test method.

Separate and Evaluate

Complete extraction as specified. Dry and weigh the aggregate; calculate the result.

Solvent at the bottom is heated; vapour condenses at the top. Returning liquid passes through the basket specimens and dissolves the binder. Repeated reflux separates binder from aggregate; evaluate the result using measured masses and method 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.

Test Preparation and Solvent Handling

Choose specimen mass for the model capacity. Check glass, filter positioning and condenser connections; use solvent as specified by the test method.

Perform extraction under suitable local exhaust. Switch off heating and allow the system to cool before separating and cleaning components.

Model Comparison and Set Components

Two capacity options | Overall dimensions and equipment

Product Code	Capacity (g)	External (cm)	kg
LT-AS0001	1000	26 × 26 × 62	10
LT-AS0002	4000	26 × 26 × 62	12

Common Feature / Component	Value / Description
Power Supply	220 V, 50-60 Hz, single phase
Hot Plate	LT-G0244 • 1500 W • Analog thermostat
Extractor Jar	Heat-resistant transparent glass body
Specimen Support	Two stainless wire cone-shaped baskets
Filter Paper Diameter	LT-AS0001: Ø300 mm / LT-AS0002: Ø400 mm
Filter Paper Quantity	50 papers
Extraction Method	ASTM D2172/D2172M
Reflux Method	AASHTO T 164 Method B

Check Filters, Specimen and Calculations

Select specimen mass and filter papers for the model capacity. Evaluate final mass readings, moisture and fine mineral matter corrections according to the test method.

From Specimen to Binder Content

01
Prepare
Weigh specimen and position the filters.

02
Extract
Maintain heating and condensation.

03
Dry / Weigh
Dry and weigh the separated aggregate.

04
Calculate
Apply corrections to obtain binder content.

Product Page | liyatest.com.tr/en/urun/reflux-extractor-test-set/