Thin Film Oven
Loss on Heating Oven

LT-AS0041 | Controlled heating of bituminous materials

Digital PID • Rotating shelf • Air circulation



200 °C

MAXIMUM OPERATING TEMPERATURE

120 L

CHAMBER CAPACITY

EN 12607-2 • ASTM D1754 • Thin-film and loss-on-heating tests

LT-AS0041

Photograph and Oven Components

PID controller, observation window and air circulation system

The thin film oven is used to assess changes in bituminous specimens exposed to heat and air. Controlled temperature, a rotating shelf and circulating air provide consistent test conditions.

DIGITAL PID CONTROL

Set target temperature on the digital thermostat and monitor it during testing.

AIR CIRCULATION

The fan system supports heated-air circulation inside the chamber.



GLAZED FRONT DOOR

Double-layer tempered glass allows observation without opening the door.

CABINET CONSTRUCTION

The 120 litre interior is 304 stainless steel; the outer body is powder-coated sheet steel.



Chamber, circulation fan and rotating shelf



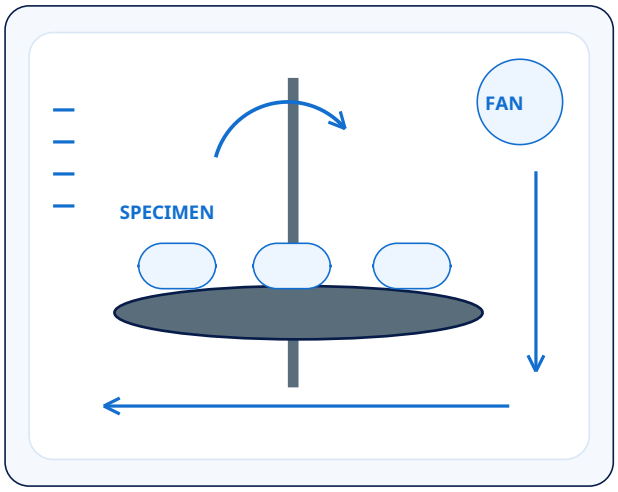
Digital controller and front-panel controls

LT-AS0041

Controlled Heating and Specimen Rotation

Prepare and weigh • Heat • Cool • Reweigh and evaluate

TEMPERATURE + AIR + ROTATING SPECIMEN SHELF



SHELF ROTATION: APPROXIMATELY 5-6 rpm

PID CONTROL • HEATED-AIR CIRCULATION

INITIAL AND FINAL SPECIMEN MASSES WEIGHED EXTERNALLY

Evaluate the mass change after heating

REPRESENTATIVE OVEN DIAGRAM • NOT TO SCALE

Prepare and Weigh

Select the container and specimen as specified. Obtain the initial mass on a suitable balance.

Heat as Specified

Fit the appropriate shelf. Select temperature, duration and arrangement from the method.

Cool and Evaluate

Cool as specified, reweigh and assess the residue using the relevant tests.

Specimens on the rotating shelf are exposed to controlled heat and air. Circulation supports temperature distribution. Initial and final masses are measured on a suitable external balance; evaluate mass change and residue properties according to the applicable method.

Thin-Film and Loss-on-Heating Setups

The LT-AS0041/1 shelf supports loss-on-heating applications; LT-AS0041/2 is intended for thin-film testing. Small tins and wider shallow pans provide different specimen geometries.

Select container, specimen quantity, temperature and duration from the test method. 200 °C is the oven limit, not the target temperature for every test.

Mass, Residue and Temperature Checks

Account for container tare when determining initial and final specimen mass. Evaluate mass change and heated residue as specified and record the test conditions.

The oven supports EN 12607-2, EN 13303, ASTM D6 / D1754 and AASHTO T47 / T179 applications. Audible and visual alarms alert the operator to over-temperature conditions.

Technical Specifications and Specimen Accessories

LT-AS0041 | Rotating shelf and specimen container options

Product Code	Accessory / Description
LT-AS0041/1	Loss-on-heating rotating shelf • Ø250 mm
LT-AS0041/2	Thin-film rotating shelf • Ø342 mm
LT-G0152	Specimen tin • Ø55 × 35 mm • Pack of 9
LT-G0157	Specimen pan • Ø140 × 9.5 mm • Pack of 4

Technical Specification	Value / Description
Temperature Range	Room temperature to 200 °C
Chamber Capacity	120 litres
Shelf Rotation Speed	Approximately 5-6 rpm
Temperature Control	Digital PID
Interior / Exterior	304 stainless steel / Powder-coated sheet steel
Front Door	Double-layer tempered glass
External Dimensions	60 × 45 × 70 cm
Weight	60 kg

Match Shelf, Container and Test Conditions

Use the shelf, container and specimen quantity specified by the method. Select target temperature and duration accordingly and record initial/final masses and heating conditions.

From Specimen to Post-Heating Assessment

01
Prepare / Weigh
Prepare the specimen and determine initial mass.

02
Heat
Apply the specified temperature and duration.

03
Cool / Weigh
Cool the specimen and measure final mass.

04
Evaluate
Record mass change and residue properties.

Product Page | liyatest.com.tr/en/urun/thin-film-oven-loss-on-heating-oven/