

**ROLLING THIN FILM OVEN TEST
OF BITUMEN - RTFOT
ASTM D 2872, EN 12607**



ROLLING THIN FILM OVEN TEST OF BITUMENS

The test is used to determine the effect of heat and air on a moving film of semi-solid asphaltic material. The effects of this treatment are determined by measurement of the properties of the asphalt before and after heating in a oven for 75 minutes at 163°C.

The apparatus consists of a forced air circulation oven suitable for temperatures up to 180°C and is equipped with a rotating shelf inside along a coil that preheats the air directed into the sample container.

ACCESSORIES

Glass sample container

Pt100 simulator

Official Certificate for
Pt100 simulator

CONSUMABLES

ASTM 13C thermometer
(+155°C/+170°C)

FEATURES

- Enamel finished outer case.
- Stainless steel internal walls with 38 mm air plenum and glass wool and ceramic fibers heating insulation.
- Door with double tempered glass window for internal view.
- Chromium plated coiled air line, 8 mm diameter and 7.6 m long, with 1 mm diameter orifice. The orifice is placed 8 mm from the opening of the glass containers.
- Adjustable flow meter for the regulation of the air jet inside the oven: the flowmeter is complete with a regulation valve and is placed on the left side of the case.
- Squirrel cage fan, 135 mm diameter and 75 mm height, placed at a midpoint in the width of the oven and 150 mm from the face of the carriage. The speed of the fan is electronically regulated at 1725 rpm: fan motor disposed externally.
- Vertical circular aluminium carriage 300 mm diameter, placed 160 mm from the upper inside wall of the oven, excluding the air plenum, and 110 mm from the rear inside wall. The carriage is equipped with stainless steel clips for firmly holding eight glass containers.
- The location of the thermometer support permits to check the thermometer through the door window during the test.
- Electronically controlled motor with reducing gear for a 15 rpm precise carriage rotation.
- Microprocessor controlled thermostat with PID action with built-in digital display 0.1°C accuracy showing the set point and the current temperature inside the oven. Probe: Pt100 RTD. For working temperature of $163^{\circ}\pm 0.5^{\circ}\text{C}$.
- Overheating warning
- Test interruption safety measures.
- For 220 V/50 Hz connections: 2200 W power consumption.
- Approx Dimensions: 940mm L x 890mm W x 910mm H
- Weight: 115 kg approx.
- CE marked.