

# APPARATUS FOR THE ROLLING THIN FILM OVEN TEST OF BITUMENS ASTM D 2872 - EN 12607

This test is used to determine the effect of heat and air on a moving film of semi-solid asphaltic materials. The effects of this treatment are determined from measurements of the properties of the asphalt before and after having heated in an oven for 75 minutes at 163°C a moving film of asphaltic material while air at a rate of 4 l/min is directed against the sample. The apparatus consists of a forced air circulation oven suitable for temperatures up to 180°C and equipped with a rotating shelf placed inside along with a coil that preheats the air directed into the sample container.



- Enamel finished steel case benchtop version.
  - Stainless steel inside walls with 38 mm air plenum. 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 flowmeter 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±0.5° C.
  - Safety device against overheating.
  - Safety device that stops the carriage in case the door is opened during the test.
  - English written user manual.
  - For 220 V/50 Hz connections: 2200 W power consumption.
  - Dimensions (l x w x h): mm 940 x 890 x 910 approx. Weight: 115 kg approx.
  - CE marked.

AD2872-100    Apparatus

#### ACCESSORIES

AD2872-A00    Glass sample container  
CAL001        PT100 simulator  
CAL003        Official Certificate for Pt100 simulator

#### CONSUMABLES

TA013C-N00    ASTM 13C thermometer (+155°C/+170°C)

Specifications may vary without notice.

**The apparatus includes the items listed aside the picture, accessories etc. should be purchased separately.**

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