ROLLING THIN FILM OVENS (RTFO)

These ovens are used for measuring the effect of heat and air on a moving ?lm of semi-solid bituminous materials. The internal chamber is made from stainless steel, insulated with ?berglass or similar, with an external frame made from engine-turned stainless steel and a door with a centrally located window.

Special attention has been given to the safety features which conform to CE requirements.

The **Rolling thin film ovens (RTFOT)** can be used as part of your **Superpave performance based testing** program.

The oven is supplied complete with ?ow meter, ASTM 13C thermometer and 8 heat resistant glass containers (64 m high x 140 mm diameter).

The oven must be connected to a compressed air source supplying 2 bar minimum presure. If not available in the laboratory we recommend to order Diaphragm pump (see accessories).

Version available:

⌧**81-PV1632, PV1633 and PV1634** conforming to ASTM/AASHTO standards

⌧**81-PV1642** conforming to EN standard

ROLLING THIN FILM OVENS (RTFO)

SPECIFICATION

Construction: full stainless steel, interior and exterior **Temperature range:** from +50 to +200°C (default 163°C) ± 0.5°C **Air flow:** adjustable from 0.1 to 10’000 ml/min

External connections:

- USB connection for USB pendrive connection, allowing to upload or save test pro?les (including temperature, ?ow meter and carousel speed setpoints and PID settings)
- Serial connection allowing to remotely upload and download test profiles from PC

Safety features:

- Automatic over-temperature switch
- Door switch
- Internal light
- Alarm for door open
- Test phase completed alarm
- Magnetothermic switch

Power: 3000 W

External dimensions: 750 x 750 x 900 mm (w x d x h)

Weight: approx. 110 kg

STANDARDS

- ASTM D2872
- AASHTO T240
- EN 12607-1

FEATURES

- Capacitive touch-screen display with 7” color control panel, including temperature/time graph, timer function, visual warnings and digital air flow regulator
- Full conformity to temperature specifications (time to reach target temperature after switch on, target temperature adjustment after samples insertion) from the Standards
- Able to maintain a temperature of 163°C ± 0.5°C, or any other user defined test temperature between ambient and 200°C
- Safety features: Automatic over-temperature switch, door switch, internal light, alarm for door open with fan still running; magneto-thermic switch Integral stainless steel structure, internal and external
- Door with double-glazed window
- Door locking system allowing easy opening also with busy hands

ACCESSORIES

82-PV0160/10MF

Loss on heat thermometer IP 47C ASTM 13C, range +155 to +170°C, mercury free with alternative liquid

81-PV0161/10

Spare glass container

81-PV0161/12

Diaphragm pump for 81-PV16XX RTOFT oven 110-230V/50-60Hz/1Ph

81-PV0161/13

Scraper for RTFOT bottle

81-PV0161/14

Metal rack for holding/cooling RTFOT bottles

81-PV0161/15

RTFOT bottle tong

ORDERING CODE

81-PV1642

RFTOT Asphalt oven for rolling thin film oven test. EN version, complete with ASTM 13C thermometers and 8 glass container. 230V/50Hz/1ph

81-PV1632

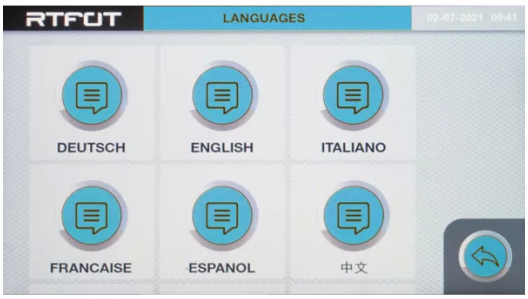
RFTOT Asphalt oven for rolling thin film oven test. ASTM version, complete with ASTM 13C thermometers and 8 glass container. 230V/50Hz/1ph

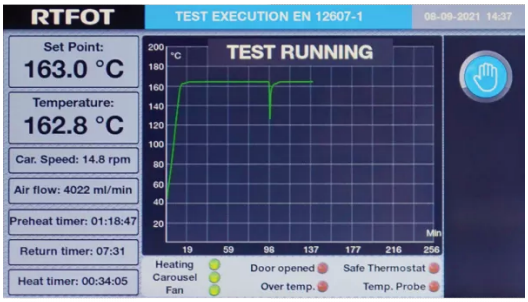
81-PV1633

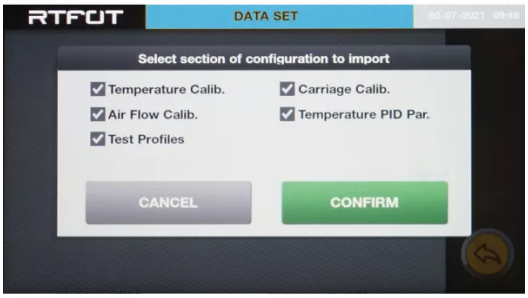
RFTOT Asphalt oven for rolling thin film oven test. ASTM version, complete with ASTM 13C thermometers and 8 glass container. 220V/60Hz/1ph

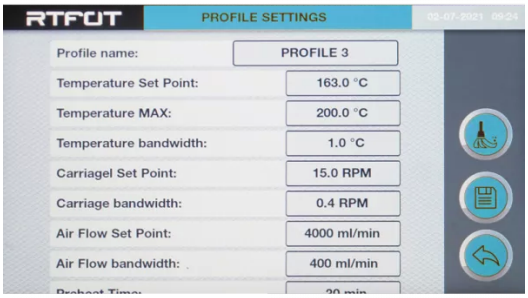
81-PV1634

RFTOT Asphalt oven for rolling thin film oven test. ASTM version, complete with ASTM 13C thermometers and 8 glass container. 110V/60Hz/1ph






RTFOT
DATA SET
Select section of configuration to import
Temperature Calib.
Carriage Calib.
Air Flow Calib.
Temperature PID Par.
Test Profiles
CANCEL
CONFIRM


RTFOT
PROFILE SETTINGS
Profile name:
PROFILE 3
Temperature Set Point:
163.0 °C
Temperature MAX:
200.0 °C
Temperature bandwidth:
1.0 °C
Carriagel Set Point:
15.0 RPM
Carriage bandwidth:
0.4 RPM
Air Flow Set Point:
4000 ml/min
Air Flow bandwidth:
400 ml/min