

Asphalt Rolling Thin Film Oven



CRT-OV-RTF-60 & CRT-OV-RTF-50

The RTFO accurately simulates the short term aging of asphalt binder which occurs during mixing

The Superpave PG binder specification looked for tests which would closely simulate field performance. Hotmix asphalt binder experiences significant aging during the manufacturing and laying process. Investigating this phenomenon within a laboratory environment, with a repeatable and simple test is very useful within the design process.

The Rolling Thin Film Oven (RTFO) test is used to measure the effect of heat and air on a moving film of semi-solid asphalt binder. The results of this treatment are determined from measurements of the binder properties before and after the test. Repeatability of the test is directly related to the accuracy with which the oven temperature can be maintained and the reproducibility of the thermal rise time of the system. The invention of RTFO by James Cox & Sons led to the present day AASHTO, ASTM and EN standards for Rolling Thin Film Oven test (RTFOT).

Standards

- AASHTO T240
- ASTM D2872
- EN 12591
- CTM 346

Key Features

- Super accurate P.I.D. controller
- Low thermal mass RTD
- Over temperature safety cut-out
- Double walled temperature cabinet
- Unique temperature control suppression

System Elements

- Long life sustainable bearings to overcome temperature fluctuation
- Integrated unique controller which allows for the quickest response time without excessive overshoot
- Testing jars (full set) supplied according to standard requirements
- Stainless steel interior
- Integral dual 4 digit LED displays allows viewing of the process temperature and set point simultaneously
- Heavy duty "flush fit" door locking system

Accessories

Accessories are not included in the price of main device (unless stated otherwise) and may be purchased separately if required.

CRT-OV-RTF-GSC	Glass Sample Container for CRT-OV-RTFs
CRT-OV-RTF-GL	High Temperature Gloves
CRT-OV-RTF-DAS	Dry air system
CRT-OV-RTF-DFM	Digital Flowmeter, Panel Mount
CRT-OV-RTF-SG	Silica Gel (1.5 lb can)
CRT-OV-RTF-JAR	Jar Cooling Rack
CRT-OV-RTF-BS	Bottle Scraper
CRT-OV-RTF-STAND	Lab Stand

Specifications

Technical specifications are subject to change without notice.

Construction	<ul style="list-style-type: none">• Double-walled construction.• 16-gauge welded steel exterior.• 18-gauge corrosion resistant stainless steel interior
Insulation mm (inch)	89 mm (3.5) of high density fiberglass insulation
Controller	Programmable microprocessor UL listed
Temperature Display	<ul style="list-style-type: none">• Measured Temperature - 4 digit red LEDs• Temperature Set Point - 4 digit green LEDs
Thermal Protection	Prevents oven from overheating in the event of control failure
Temperature Range	Ambient to 200°C (390°F)
Vents	Double exhaust vents for dissipation of expended volatile from specimen
Air Flow Adjustment	Needle valve (long taper)
Air Pressure Gauge	Range 0 - 100 psi
Dimensions (W x D x H) mm (inch)	1016 x 660 x 915 (40 x 26 x 36)
Estimated Weight (approx.) Kg (lbs)	173 (380)

Datasheet Version: 19.07/02