



HUMBOLDT

Rolling Thin Film Oven



H-30069.2F

H-30068.2F

ASTM D2872; AASHTO T240; EN 12591; CTM 346

The Rolling Thin Film Oven (RTFO) is used to measure the effect of heat and air on a moving film of semi-solid asphaltic material and is an indicator of the approximate change in properties during conventional hot-mixing. The results of this treatment are determined from measurements of the asphalt properties before and after the test. Through the use of a programmable, temperature controller and a 4-digit, digital display system, along with a solid-state heater and 200-watt heating element, the oven accurately maintains the specified test temperature of $\pm 1^\circ\text{F}$ at 325°F ($\pm 0.5^\circ\text{C}$ at 163°C).

The oven also features: double-wall construction; door with double-pane viewing window; symmetrical top and bottom vents; air plenum, and squirrel-cage-type 1725 rpm fan

The RTFO is available in a standard model with a glass flow meter or with a digital flow meter. Both models are identical other than the meter.

The oven includes a 200 to 14,000 ml/min flow meter, moisture meter, 0 to 100 psi air pressure gauge with regulator, rotating (15rpm) test rack and eight glass specimen jars. Overall dimensions 40"W x 36"H x 26"D (1016 x 3292 x 660mm). A clean, dry compressed air source is required for oven operation.

Rolling Thin Film Oven, 208-230V 60Hz

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Rolling Thin Film Oven, 208-230V 50Hz

H-30068.5F

Digital RTFO, 208-230V 60Hz

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Digital RTFO, 208-230V 50Hz

H-30069.5F

Rolling Thin Film Oven



H-30068.6

Specifications	
Construction	Double-walled, 16-gauge welded steel exterior. 18-gauge corrosion-resistant, stainless steel interior
Insulation	Insulation 3.5" (89mm) of high density fiberglass
Controller	Programmable microprocessor, UL listed
Temperature Display	Measured Temperature: 4 digit red LEDs Temperature Set Point: 4 digit green LEDs
Thermal Protection	Prevents 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
Heat Exchanger	5/16" dia. copper tube

Rolling Thin Film Oven Accessories

Lab stand with wheels	H-30068.6
Silica gel, 1.5 lb can	H-30068.7
Dry air system	H-30068.8
Jar cooling rack	H-30068.3
Bottle scraper	H-30068.2
Digital mass flowmeter	H-30068.9
ASTM 13C Thermometer	H-2610.13C
Additional specimen bottles	H-30068.12
Oven Tongs	H-30068.1