

REVOLVING SHELF OVEN

The **B4305** and **B4306** oven is a rotating shelf-gravity convection unit that is used to perform the "Thin Film" test on asphaltic materials. The oven has a rotating tray in which a sample is placed and the effect of air and heat on the sample is measured. The oven has a temperature range of 40° to 260° C (500° F). The oven also has a viewing window and an inside dimension of 19" wide x 18" deep x 15" high. Available in 110V/60Hz and 220V/50Hz. Also available are thin film test pans which are used in testing the effect of heat and air on semisolid asphaltic materials. The pans meet ASTM D-1754 and AASHTO T-179 standards and are available in aluminum or stainless steel.



MODELS	DESCRIPTION	STANDARDS
B4305	REVOLVING SHELF OVEN, 110V / 60 Hz	ASTM D-6, D-1754 / AASHTO T-179, T-47
B4306	REVOLVING SHELF OVEN, 220V / 50 Hz	

ACCESSORIES	DESCRIPTION
B6301	THIN FILM, ALUMINUM, 5-1/2" X 3/8"
B6302	THIN FILM, STAINLESS STEEL, 5-1/2" X 3/8"

ROLLING THIN FILM OVEN

The Rolling Thin Film Oven meets the requirements for thin film and loss on heating tests and is the preferred oven of SHRP for simulation of short-term aging of asphalt binders. It measures the effect of heat and air on a moving film of semisolid asphaltic material. The oven is designed with a flow meter that is able to measure up to 10 liters per minute, moisture indicator and mounted air pressure gauge with regulator, complete for single point connection to air compressor. The test rack in the oven rotates at 15 RPM and holds up to 8 glass containers (included). The oven has a digital temperature controller with a relay heater control that is able to hold within ±1°F at 350°F.



MODELS	DESCRIPTION	STANDARDS
B4307	ROLLING THIN FILM OVEN, 110V / 60 Hz	ASTM D-2872 / AASHTO T-240 / CA 346
B4308	ROLLING THIN FILM OVEN, 220V / 50 Hz	

ACCESSORIES	DESCRIPTION
B4309	EXTRA GLASS CONTAINER
B7551	EXTRA 13 C ASTM THERMOMETER
G8133	AIR COMPRESSOR

LABORATORY PENETROMETER

The **B4401** penetrometer is the standard instrument for penetration measurements. This direct reading penetrometer accurately determines the consistency of bituminous materials, cement, petroleum, and waxes. The unit is ruggedly constructed and provides sensitive and accurate measurements. The plunger is calibrated to 50 grams when used with standard ASTM needle. The unit is furnished with standard ASTM needle and two additional weights (50gm and 100gm). The **B4405** ASTM needle is constructed from stainless steel with brass ferrule and is 3.2 mm diameter (weight 2.5 g).



MODELS	DESCRIPTION	STANDARDS
B4401	LABORATORY PENETROMETER	ASTM D-5, D-217, D-937, D-1168, D-1191, D-1321, D-1403, D-1831, D-1855 / AASHTO T-49, T-187 / FED SPECS. SS-R-406

ACCESSORIES	DESCRIPTION
B4405	NEEDLE, ASTM TYPE, W/ SHANK
B4406	NEEDLE, CERTIFIED, W/ SHANK
B4408	TRANSFER DISH
B4411	CONE BRASS, STAINLESS STEEL
B4412	CONE, STAINLESS STEEL