

# ASPHALT CONTENT TESTER

## BE 105

An Asphalt Content Tester, also known as an Asphalt Binder Ignition Furnace or Analyzer, is a laboratory instrument used to determine the percentage of asphalt binder (bitumen) in hot mix asphalt (HMA) samples. It operates on the principle of loss on ignition (LOI), where the asphalt is burned off at high temperatures (typically around 538°C or 1,000°F), and the weight loss is measured to calculate the binder content. This method is faster, more environmentally friendly, and cost-effective compared to traditional solvent extraction techniques, as it avoids the use of hazardous chemicals.

This process typically takes 30–45 minutes for standard samples, allowing for up to 5,000g at longer durations.

### FOLOWING STANDARD

ASTM D6307, AASHTO T308.

### KEY FEATURES

- **Automation and Safety:** Automatic door locking during operation, programmable endpoints, and temperature compensation for accurate results.
- **Versatility:** Supports automatic or manual modes; user-entered correction factors for aggregate types.
- **Efficiency:** Internal balance boosts productivity; 24/7 preheating timer.
- **Durability:** Modular refractory heating elements for easy maintenance; low-emission afterburner.
- **Data Handling:** RS-232 port for PC integration and graphical reporting.

SPECIFICATION	DETAILS
Temperature Range	392°–1,202°F (200°–650°C)
Sample Capacity	Up to 5,000g (standard: 1,200–1,800g)
Chamber Dimensions	14 x 14 x 14 in (356 x 356 x 356 mm) WxDxH
Overall Dimensions	25.75 x 21.75 x 36.75 in (654 x 553 x 933 mm) WxDxH
Weight (Net)	280 lb (127 kg)
Electrical (Model AP-20)	220–240V, 60Hz, 20/27 Amps, 4,879/6,379 Watts
Electrical (Model AP-20L)	208V, 60Hz, 28 Amps, 5,757 Watts
Accuracy	±0.11%

