

## Specifications for Asphalt Content Ignition Furnace

The asphalt content ignition furnace shall be capable of maintaining the temperature at 578 °C {1072 °F}. The furnace shall have an internal balance thermally isolated from the furnace chamber and accurate to 0.1 g. The balance shall be capable of weighing a 3500 g sample in addition to the sample baskets and catch pans included with the furnace. The furnace shall have a data collection system so that the weight can be automatically determined and displayed during the test. The furnace shall have a built in computer program to calculate change in mass of the sample and provide for the input of a correction factor for aggregate loss. The furnace shall provide a printed ticket with the initial specimen mass, specimen mass loss, temperature compensation, correction factor, correct asphalt content (percent), test time, and test temperature. The furnace shall provide an audible alarm and indicator light when the sample mass loss does not exceed 0.01 percent of the total sample mass for three consecutive minutes. The furnace door shall be equipped so that the door can not be opened during a test. The furnace shall be vented and equipped with an exhaust fan to pull air through the furnace preventing odors or smoke from escaping into the laboratory. The furnace shall allow the operator to change the ending mass loss to 0.02 percent.

### Miscellaneous Equipment to be included with the Furnace:

- 4 50' rolls of printer paper
- face shield
- cooling plate, lab counter protection
- 2 oz. bottle lubricant
- 16" cube guard box with warning sign
- 3' flexible exhaust hose
- loading handle for test baskets
- 14" thermal insulation gloves
- sample baskets and catch pans (mentioned above)