

Fast Take

- Automatic door lock prevents accidental opening.
- Automatic weight-change compensation.
- Automatic sample weighing with internal scale.
- No exposure to harmful solvents.
- Patented filter traps exhaust smoke.
- 24-hour/7-day timer with programmable furnace preheat.
- RS232 port for PC interface.
- Accessory baskets for easy loading/unloading.



reduced NCAT [Asphalt Content Furnace] testing time

Determine the asphalt content of bituminous mixtures
in *less time* with *accuracy to 0.11%*.

The industry standard

The NCAT Asphalt Content Furnace is the industry standard for determining asphalt content by the ignition method. Fast and accurate, this Furnace was an integral part of the drafting and passage of the ASTM D6307 and AASHTO T308 standards.

Reduced testing time

With the NCAT Furnace's ignition method, you can test a 1200 to 1800 gram asphalt sample in just 30 to 45 minutes, a major time savings over the more labor-intensive solvent-extraction method.

You can test larger samples too, since the unit accommodates samples up to 5000 grams. That reduces the number of samples needed for testing each day, and reduces labor and costs.

You don't even have to remove the samples to weigh them. Unlike other ignition-method furnaces that require you to remove samples, the NCAT Furnace's internal scale automatically monitors sample weight, saving time and increasing lab productivity.

PINE Instrument
Company

Cost savings

Unlike the solvent method, the Furnace's ignition method eliminates the cost of solvent purchase and disposal. In fact, cost analysis has shown that the average asphalt producer can pay for the cost of the NCAT Asphalt Content Furnace in 26 to 32 weeks based on solvent cost savings alone.

The NCAT Furnace saves on electricity too. Other furnaces require the more expensive 50-amp service, but the NCAT unit uses standard 30-amp service, which costs less to install and operate.

Then there's the modular design of the refractory heating elements. They offer extended service life and they're easy and inexpensive to replace, unlike those other furnaces that you have to ship back to the manufacturer.

Emissions reduced 95%

The NCAT Furnace is the only one that has a high-temperature afterburner used in conjunction with a patented ceramic filter to reduce ignition-process emissions by up to 95%. An independent lab test done with the California Transportation Department proved that furnace emissions were well within EPA regulations. And a lab hygiene study done in accordance with OSHA guidelines also proved that the system poses no health risk to lab technicians during proper use.

Adapts to your requirements

The NCAT Furnace adapts to your requirements in five ways. First, the unit accepts positive or negative correction factors for use with mixes containing hydrated lime.

Second, the furnace automatically detects endpoint within 0.01% of the sample weight. Stability of the sample is reached once the endpoint criterion has been met for 3 consecutive minutes. Endpoint sensitivity adjusts from 0.01% to 0.5%.

Third, the (included) software lets you choose automatic or manual test mode. In automatic mode, once the endpoint is detected, the software ends the test, prints the results, and beeps until the user presses Stop to unlock the door, in accordance with AMRL specs. In manual mode, the only difference is that the unit will continue to test until the user presses Stop, which unlocks the door and prints results.

Fourth, the software automatically compensates for weight change due to sample and basket assembly temperature change. The software computes this compensation for each sample tested, unlike other units that assign a fixed number to a given range of load sizes.

Fifth, the software computes test results as calibrated asphalt content per total weight of HMA sample or bitumen ratio per weight of dry aggregate.

Specifications

Volts (phase) – F85930: 240 (1); F85938: 208 (1); F85930-33: 220-240

Amps – F85930: 27; F85938: 23; F85930-33: 27

Watts – 4800

Temperature range – 200-650 °C

Chamber dimensions – 14" (35.5 cm) H x 14" (35.5 cm) W x 14" (35.5 cm) D

Overall dimensions – 36.75" (93.3 cm) H x 21.75" (55.2 cm) W x 25.75" (65.4 cm) D

Weight – 280 lb. (127 kg)



**Get Pine on the line:
discuss the NCAT Asphalt Content Furnace
with a Pine Instrument Company expert;
call 724-458-6391.**

***Road tested performance.
Time tested service.***