

LOUISIANA**DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT****SPECIFICATIONS****FORCED CONVECTION OVEN****DESCRIPTION:**

This specification covers the requirements for a forced draft oven for the analysis of cementitious materials and aggregates.

REQUIREMENTS:

- Bench-top oven with operating range of 40 to 204 Celsius.
- Shall have a 3.6 kW heater for rapid heating and a ¼ horsepower recirculating motor.
- Work chamber with 12 cubic foot capacity with interior dimensions 30 inch width x 20 inch depth x 35 inch height.
- Digital control with a minimum ¾-inch LED display that is capable of maintaining chamber temperature to within +/-3 Celsius of set-point.
- Overall external dimensions shall be 36 inch width x 28 inch depth x 51 inch height.
- Interior chamber shall be constructed of corrosion-resistant stainless steel.
- Oven shall be UL listed.
- Oven shall come with five reinforced adjustable shelves with a maximum capacity of 200 pounds per shelf.

ELECTRICAL:

- 240V/60 Hz, 17 A.

APPROVED BRANDS/MODELS:

- Despatch model LBB2-12-2 or equal.

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VIBRATORY SHAKER

DESCRIPTION:

This specification covers the requirements for a Vibratory Shaker used for the gradation of aggregates for materials testing.

REQUIREMENTS:

Shaker must hold seven (7) screen trays plus one (1) dust pan. Screen trays must be designed to allow screen cloth to be replaced. Shaker is to be of counter-balanced drive assembly and fully enclosed.

Must be/have the following:

- An electronic digital controller, with an LED display that shows the time remaining and produces an audible tone at the end of the test cycle. A controller capable of programming a test cycle up to 99 minutes, the controller must allow for the interruption of a cycle without loss of test time.
- Internal rotating counterweights of the drive system to equalize the vertical screening action to assure smooth, quiet operation and to prevent transfer of vibrations to other laboratory instruments.
- Capable of being placed anywhere within the laboratory without the need of permanent installation.
- An integrated, moveable materials hopper. The hopper is to be rear-hinged to allow sample to be introduced incrementally while the shaker is running.
- A panel that prevents dust from escaping into the atmosphere when the hopper is closed.
- Access doors that are vertically-hinged to allow access to the trays.
- Doors that are equipped with a safety interlock switch that disables the shaker when the doors are open.
- Equipped with an ergonomically operated foot-pedal to operate the hydraulic clamping and release system for the trays.
- One (1) operator's manual and parts list
- All specified screen trays and one (1) dust pan

ELECTRICAL:

- Standard power utilities of 115V, 60Hz with a capacitor start 1/3hp motor.

WARRANTY:

- Must include a standard manufacturer's warranty.

APPROVED BRANDS/MODELS:

- Gilson model TM-6 or equal.

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ULTRASONIC SIEVE CLEANER

DESCRIPTION:

This specification covers the requirements for an ultrasonic sieve cleaner for the cleaning of test sieves.

REQUIREMENTS:

The ultrasonic sieve cleaner must permit cleaning of both 8-inch and 12-inch test sieves. The tank portion of the cleaner shall be able to accommodate four (4) full height or six (6) half height 8-inch sieves or two (2) full height or three (3) half height 12" sieves to be cleaned with partial immersion and repositioning

Must include the following:

- A 0-30 minute timer.
- A cooling fan.
- A 10-gallon tank made of stainless steel, equipped with a drain valve. A sieve holding rack.

ELECTRICAL:

- 120V/60 Hz.

APPROVED BRANDS/MODELS:

- Gilson model UB-18 or equal.