

**CITY OF NEW YORK
DEPARTMENT OF BUILDINGS**

Pursuant to Administrative Code Section 27-131, the following equipment or material has been found acceptable for use in accordance with the Report of the Material and Equipment Acceptance (MEA) Division.

Satish K. Babbar, R.A., Acting Commissioner

**MEA 372-00-E
Report of Material and Equipment Acceptance Division**

Manufacturer - Industrial Equipment and Engineering Company, P.O. Box 547796, Orlando, Florida 32854.

Trade Name - All Crematory.

Product - Gas fired crematory incinerator.

Pertinent Code Section(s) - 27-800, 27-826, 27-849.

Prescribed Test(s) - RS 14-6 (UL 731 and UL 795).

Laboratory - Underwriters Laboratories Inc.

Test Report(s) - UL file MH14647 dated July 28, 1989.

Description - Crematory furnaces, gas fired, Models Elite Jrs., IE43-PPI, PPII, -SPP, -ET and -PPJ, 2500 Elite, 3000 and 4000.

These furnaces are intended to incinerate pathological waste. they are considered commercial-industrial incinerators, which must be connected to a chimney suitable for medium-heat appliances.

Each furnace consists essentially of a refractory lined retort chamber, secondary chamber, outer casing, control panel, main gas burners, and a gas-fired after burner. The furnace is designed for operation by means of timer switches located on the cover of the control cabinet, which is remote, mounted or mounted on the furnace.

The units are identical except for the firing rate, physical dimensions, and fan size. The Model IE43-PPI is identical to the Model IE43-PPII. The Model IE43-ET is similar except for larger primary and secondary chamber. The Model IE43-SPP is similar to the -PPII except that it is provided with front and area loading doors and a larger secondary chamber. Models IE43-PPII, -SPP, -ET, and -PPJ are identical to the Models 2500 Elite, 3000, 4000, and Elite Jr., respectively.

The furnaces are intended for indoor use only with the following clearances to combustibles: 48 in. front, 18 in. back, 6 in. sides, 6 in. chimney, and 6 in. top. They are provided with burners integral with the unit intended to fire natural gas. A negative pressure is maintained inside of the retort chamber and secondary chamber or by the natural draft of a refractory constructed chimney. The main fuel and primary air are piped separately to the burner head where they are mixed. As an alternate, the units may employ power burners. All burners are designed for on-off or low-high-low operation and have a spark ignited, proved pilot ignition of the main fuel. The combustion (flame) detector is the ultraviolet scanner type.

The control system is arranged for manual start of the blower motor, which provides pre-ignition purging of the primary and secondary chambers for approximately 30 seconds. The after burner is then fired to preheat the secondary chamber. After a preset period of time, the main burners are fired. the secondary chamber is equipped with a temperature regulating device which controls the high fire gas solenoid valve on the main and after burners. The burners operate at high and low fire rates until the timer deenergizes the burner gas valves. The blower operation is continued for a preset period of time to cool down the primary and secondary chambers.

The inlet of the combustion air/induced draft blower is mounted to an air duct which draws air from spaces between the exterior of the heat chambers and the casing of the furnace. Failure of the blower will deenergize the main and after burner gas valves. The blower also supplies secondary air to the primary chamber and the throat which connects the primary chamber to the secondary chamber.

Each furnace is provided with chimney sections as described in this report which are intended to be installed as the chimney connector or complete chimney on the furnace.

SIZES AND RATINGS:

The furnaces are manufactured in the following sizes and ratings.

Equipped with North American Burner	Furnace Model			
	IE43-PPI	IE43-SPP	IE43-ET(+)	IE43-PPJ
Main Burner, High Fire Btu/h	700,000	700,000	700,000	500,000
Main Burner, Low Fire Btu/h	300,000	300,000	300,000	200,000
After Burner, High Fire Btu/h	850,000	850,000	850,000	750,000
After Burner, Low Fire Btu/h	300,000	300,000	300,000	250,000

Units may be equipped with alternate Eclipse Model MVTA Series, 936SIBH or MBH.

Recommendation - That the above described crematory furnaces accepted for use in cemeteries only, when fired by natural gas only, under the following conditions:

1. Approval shall be obtained from the Department of Health for compliance with their rules and regulations for such use.
2. Application for chimney construction shall be filed and permit shall be obtained from the Department of Buildings, as per code requirements in Sections 27-800, 27-826, and 27-849.
3. All shipments and deliveries of such equipment shall be provided with a laboratory label and a metal tag, suitably placed, certifying that the equipment shipped or delivered is equivalent to those tested and acceptable for use, as provided for in section 27-131 of the Building Code.
4. Approval of all electrical equipment, apparatus, materials and devices shall be obtained from the Bureau of Electrical Control before installation.

Final Acceptance OCT 27, 2000

Examined by S. Deshpande