

## Report of Materials and Equipment Acceptance Division

NYC Department of Buildings 280 Broadway, New York, NY 10007 Robert D. LiMandri, Acting Commissioner (212) 566-5000, TTY: (212) 566-4769

Pursuant to Administrative Code Section 27-131, the following equipment or material has been found acceptable for use subject to the terms and conditions contained herein.

**MEA 326-07-E** 

Manufacturer: Industrial Combustion

351 21<sup>st</sup> Street Monroe, WI 53566

**Trade Name(s):** "V" and "LNV" series Burners

**Product:** Oil, gas combination gas-oil burners

MEA Index#80-10 – Combination Burners

**Pertinent Code Section(s):** 27-800, 27-807, 27-825, 27-831, RS 14-2 (ANSI Z2231)

**Prescribed Test(s):** RS 14-6 (UL 296, UL 726, UL 795)

**Laboratory:** Underwriters Laboratories, Inc.

**Test Report(s):** MP1473 issued September 5, 2007

Description: The "V/LNV" Series burners are combination gas-oil burners designed for boilers, dryers and heating equipment. The units are forced draft pressure-atomizing fuel oil nozzles in combination with a power-type gas burner. A separately driven fuel oil pump is burner-mounted with pressure set at 300 psi. Consistent fuel/air ratio is maintained regardless of firing rate. The burner may be configured to burn No. 2 oil, natural gas, either as a single fuel or in combination. A gas-electric pilot assembly is provided for the ignition of the main oil and gas supply. Single fuel oil and oil portion of combination gas/oil pressure-atomizing ASTM D396 No. 2 oil burners may be provided with a high tension electric ignition assembly. Oil burners equipped with this ignition system and having a maximum firing rate greater than 20 gal/h are provided with a guaranteed low fire start of not more than 20 gal/h. The "V"-series burners are intended for automatic firing with either on-off, low-high-off, low-high-low, or full modulation firing with low fire start on both oil and gas fuels. The "LNV"-series burners are intended for automatic firing with full modulation firing with low fire start on both oil and gas fuels. Cam trim may be provided as an option to allow fine adjustment to the burners for optimum firing performance. Fuel/Air ratio controller may also be provided in lieu of the modulating motor. The controller replaces the linkage type modulating system by the addition of motor actuators to drive the air intake louvers, oil metering valve, gas metering valve and/or the FGR valve. Combination fuel models are designed to burn No. 2 oil or gas with t he simple changing of the fuel selector switch and no other changes required.

## **Model /Sizes** are:

"V"-13, 15, 17, 20, 21, 25, 30, 34, 35, 40, 42, 45, 50, 54, 55, 60, 63, 70, 80, 84, 90, 100, 105 and 110.

"LNV"-13, 15, 17, 20, 21, 25, 30, 34, 35, 40, 42, 45, 50, 55, 60, 63, 70, 80, 84 and 90.

The complete burner model designation consists of the following:

$$\underline{LN}$$
  $\underline{V}$   $\underline{LG}$   $\underline{35}$   $\underline{-1}$  Example:  $\underline{LNVLG-035-1}$ 

- A. NOx Reduction (Natural Gas) LN – FGR Assembly – Low NOx
- B. Burner Model series

V – Industrial Combustion V series

A. Fuel Type

LG – Combination Gas-Oil

G - Single Fuel Natural Gas

L – Single Fuel Oil

B. Input Rating

C. Frame Size

1 - Size 1

2 - Size 2

3 – Size 3

**Terms and Conditions:** The above-described burners are accepted under the following conditions:

- 1. Burners shall be fired by fuel oil not heavier than No. 2 fuel and/or natural gas only.
- 2. Burners shall be equipped with safety controls as provided for in Sections 27-800 and 27-831 as applicable and installed in accordance with NFPA Standard 54 and Standard 31, and the Electrical Code of the City of New York.

- 3. Approval shall be obtained from the Department of Air Resources to show compliance with their rules and regulations for fuel oil burning equipment.
- 4. Approval of all electrical equipment, apparatus, materials and devices shall be obtained from the Bureau of Electrical Control before installation.
- 5. Units shall be used in compliance with the Energy Conservation Construction Code of New York State.
- All shipments and deliveries of such equipment shall be provided with a metal tag, suitably placed, certifying that the equipment shipped or delivered is equivalent to that tested and acceptable for use, as provided for in Section 27-131 of the Building Code.

Note: In accordance with Section 27-131(d), all materials tested and accepted for use shall be subject to periodic retesting as determined by the Commissioner; and any material which upon retesting is found not to comply with Code requirements or the requirements set forth in the approval of the Commissioner shall cease to be acceptable for the use intended. During the period for such retesting, the Commissioner may require the use of such material to be restricted or discontinued if necessary to secure safety.

Final Acceptance July 25, 2008

Examined By Sim Derkholen