



## Report of Materials and Equipment Acceptance Division

NYC Department of Buildings  
280 Broadway, New York, NY 10007  
Patricia Lancaster, FAIA, 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 6-08-E

**Manufacturer:** Webster Engineering & Mfg. Co. LLC  
619 Industrial Road, Winfield, KS 67156

**Trade Name(s):** HDS Burner

**Product:** Gas/oil combination forced-draft burners  
MEA Index #80 - Burners

**Pertinent Code Section(s):** 27-800, 27-807, 27-825, 27-831,  
RS 14-2 (ANSI Z223.1)

**Prescribed Test(s):** RS 14-6 (UL 795, UL 296, UL 2096)

**Laboratory:** Underwriters Laboratories, Inc.

**Test Report(s):** File MP2221, Vol. 3, Section 3, issued May 27,  
2005.

**Description:** Forced draft gas, oil and combination gas / oil burners. The oil and the oil side of the combination gas / oil burners are capable of firing #2 oil pressure atomized from 200 boiler horsepower thru 350 boiler horsepower and air atomized on all models.

#### Product Covered:

Models **HDSG** and **HDSXG** are single fuel-gas; models **HDSO** and **HDSXO** are single fuel-oil; and models **HDSC** and **HDSXC** are combination gas-oil burners. Model designation shall be suffixed and may be prefixed.

Units are mechanical draft-pressure or air-atomizing oil burners consisting of a pressure or air-atomizing gun-type oil burner. Combination gas-oil burners include the addition of a gas manifold for power type gas burner operation. Gas burners are less all oil burner components. The burners are intended for automatic operation. Pressure atomizing oil burners and oil portion of gas-oil burners are intended for operation with oil fuel not heavier than ASTM D396 No. 2. The maximum oil pressure is 300 psig. Air atomizing oil burners and oil portion of gas-oil burners are intended for operation on oil fuel not

heavier than No. 2. The maximum designated oil and air pressures are 100 psig. The gas and gas portion of gas-oil burners as well as the gas pilot are intended for operation on natural gas only. A proved gas-electric ignition system is provided for ignition of the main oil and gas supply. The gas pilot for single fuel-oil burners may be operated firing either natural gas or No. 2 fuel oil.

The Model HDSX series burners are identical in design, construction and equipment to the Model HDS Series burners, except for the addition of electrical and mechanical equipment to provide flue gas recirculation (FGR).

The flue gas recirculation (FGR) system is comprised of an electrically actuated metering valve which provides for 100% shutoff when in the closed position, the inlet of which is connected via minimum No. 14 gauge steel tubing to the flue gas outlet of the appliance on which the burner is installed. Minimum No. 14 gauge steel tubing downstream from the shutoff valve terminates at the manually actuated metering valve provided as an integral part of the combustion air fan housing.

<b>HDS Burner Offering</b>											
Burner Model	BHP	Head dia.	Housing	Fan dia.	Motor HP	Gas Input		Air Atomization Oil Input		Press. Atomization Oil Input	
						Min	Max	Min	Max	Min	Max
<b>Standard Gas - Oil - Combination Burners (no low Nox)</b>											
HDS*-200A	200	12	5	15	5	697	8400	6	60	18.9	60
HDS*-250A	250	12	5	15	5	872	10500	7.5	75	21.6	75
HDS*-300A	300	12	5	15	5	1046	12600	9	90	25.4	90
HDS*-350A	350	12	5	16	7.5	1220	14700	10.5	105	31.5	105
HDS*-400B	400	16	5	16	10	1395	16800	12	120	n/a	n/a
HDS*-450B	450	16	5	16	10	1569	18900	13.4	135	n/a	n/a
HDS*-500B	500	16	5	16	10	1743	21000	14.9	150	n/a	n/a
HDS*-600B	600	16	5	18	15	2092	25200	17.9	180	n/a	n/a
<b>Low Nox Burners with Induced FGR - Based on 30 ppm Nox on Natural Gas</b>											
HDSX*-200A	200	12	5	16	7.5	697	8400	6	60	18.9	60
HDSX*-250A	250	12	5	16	7.5	872	10500	7.5	75	21.6	75
HDSX*-300A	300	12	5	16	7.5	1046	12600	9	90	25.4	90
HDSX*-350A	350	12	5	18	15	1220	14700	10.5	105	31.5	105
HDSX*-400B	400	16	5	18	15	1395	16800	12	120	n/a	n/a
HDSX*-450B	450	16	5	18	15	1569	18900	13.4	135	n/a	n/a
HDSX*-500B	500	16	7	18	15	1743	21000	14.9	150	n/a	n/a
HDSX*-600B	600	16	7	20	25	2092	25200	17.9	180	n/a	n/a

Note:

- (1) \* The letter C, G or O is inserted here; C= Combination, G= Gas, O= Oil.
- (2) The Letter "X" in the model designates the addition of Induced Flue Gas Recirculation (IFGR) for Low Nox.

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

1. Burners shall be fired by No. 2 fuel oil or natural gas only.
2. Burners shall be equipped with safety-controls as provided for in Sections 27-831 and 27-800 as applicable.
3. Approval shall be obtained from the Department of Environmental Protection's Bureau 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 Department's Electrical Advisory Board before installation.
5. Units shall be used in compliance with the Energy Conservation Construction Code of New York State.
6. 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 accepted for use, as provided in Section 27-131 of the New York City 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 April 4, 2008

Examined By Simon Derfsholm