

SPECIFICATION FOR L.E.S. SCOTCH BOX BOILERS (Hot Water; ANSI/ASME CSD-1)

General

The contractor shall furnish and install _____ L.E.S. Model HW- _____-____-____. (or equal) packaged steel, 3-pass, horizontal firetube boiler(s) as shown on plans and described by these specifications for _____PSI Hot Water Heating.

Boiler(s)

The boiler(s) shall be designed and certified per ASME Heating Boiler Code (Section IV) and bear the ASME stamp. The output rating shall be _____ MBH with a minimum of _____ Sq.Ft. of Fireside Heating Surface and _____ Cu.Ft. of Furnace Volume. The packaged boiler(s) shall operate at a minimum of 82% efficiency at rated output firing specified fuel(s) with boiler fluid at 240°F. Maximum boiler dimensions (less burner) shall be _____ inches width, _____ inches height, _____ inches length.

Insulation and Jacket

The external surface of the boiler shell shall be covered with a minimum 1" foil-backed fiberglass blanket encased in painted steel jacket.

Skid and Lifting Holes

Boiler shall be welded to a heavy duty skid type base designed so that boiler can be moved using rollers or by lift truck. Lifting holes shall be available to permit raising or lowering boiler by crane.

Access

The front and rear smoke boxes shall be removable and have easy to remove insulated covers to facilitate cleaning or repair. The furnace to first pass of tubes rear reversing chamber must have waterwall sides and a removeable cover that exposes furnace and tubes for cleaning or repair.

Boiler Construction and Warranty

Boiler shall be of all welded construction and shall be designed to minimize stresses due to uneven temperatures of various metal parts during firing. Boiler shall be warranted for five (5) years against tube joint leaks or thermal stress induced damage to boiler tube sheets, furnace, or shell, excluding only failures caused by corrosion, scale accumulation, low water operation, or overfiring.

Trim and Controls

Each boiler shall include ASME labeled relief valve, 3½" Theraltimeter gauge, Honeywell L4006E High Limit and L4006A Operating controls (in wells), Honeywell _____ firing rate control, McDonnell & Miller PS-851M LWCO (manual reset with test feature), nipples and caps for inspection openings, and a ball type drain/blowdown valve.

Burner(s)

Each boiler shall include a factory-mounted forced-draft burner requiring _____ volt, _____ ph., _____ cycle electrical power and including an appropriate burner motor relay or starter. The control circuit shall be 115 volt, 1 ph. with On/Off Control Sw. and 6 amp fuse. Burner(s) shall bear UL "A" label, and satisfy requirements of _____ and CSD-1. Rated burner input shall be _____ MBH nat. gas and/or _____ GPH #2 fuel oil and burner shall be capable of _____ firing. Flame sensing shall be Ultraviolet using _____ Flame Safeguard Control and the burner console must include these signal lights: power on, main fuel on, _____, and _____.