

SUPERIOR **BOILER WORKS, INC.**

"Demand Superior Performance"



SEMINOLE

3-PASS WETBACK SCOTCH MARINE PACKAGE BOILERS

70 - 2500 BoHP

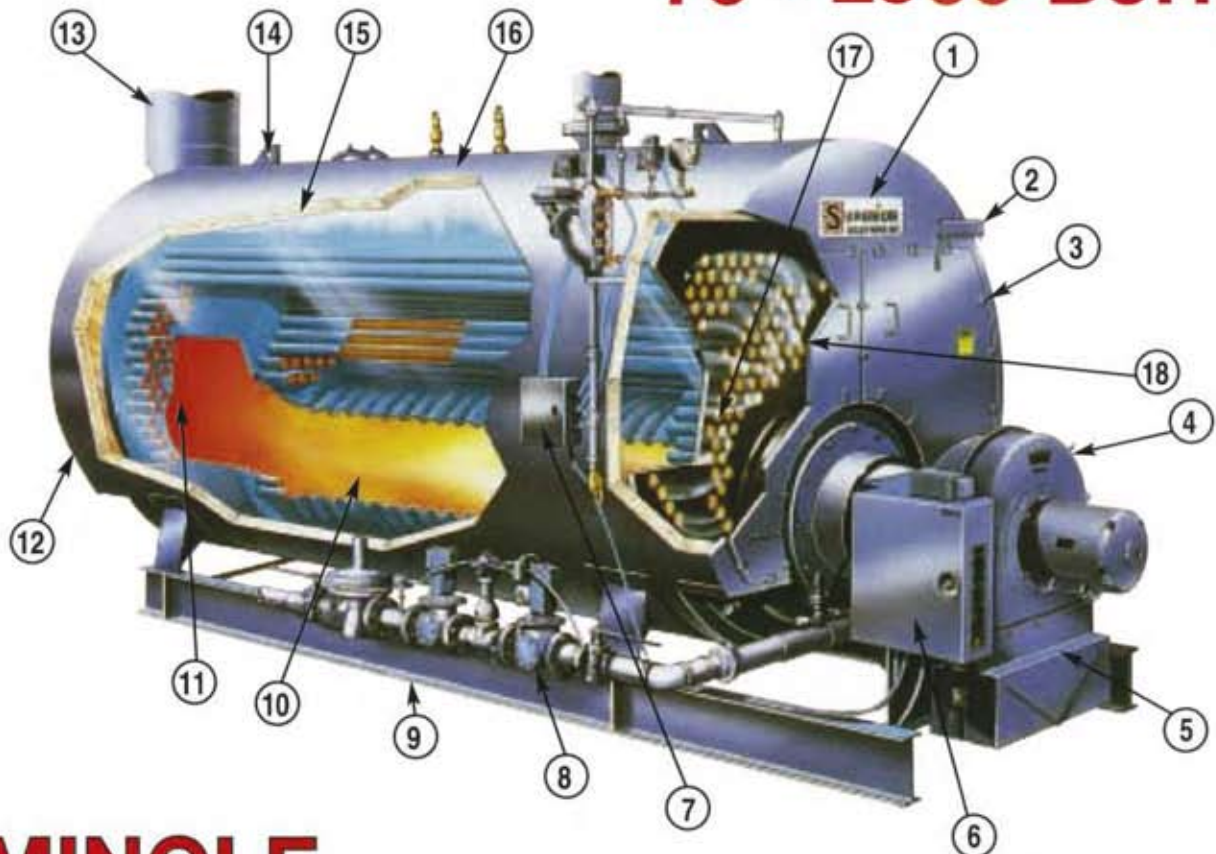
HIGH & LOW PRESSURES STEAM & HOT WATER

GAS / OIL / OR COMBINATION GAS & OIL

AND ALTERNATIVE FUELS

SEMINOLE - 3-PASS WETBACK SCOTCH MARINE PACKAGE BOILERS

70 - 2500 BoHP



SEMINOLE - Engineered / Manufactured for Superior Performance

- ① **Single source responsibility:** Superior Boiler Works, Inc. Super Seminole Boiler/Burner units are covered by Superior's warranty* of 18 months from date of shipment or 1 year from date of startup.
- ② Davited front doors allow for total access to the return tubes without interference of baffles or inner doors.
- ③ Front and rear doors are closed using studs with lugs and brass nuts for ease of opening and closing.
- ④ Customer choice of single source of Superior package or choice of burner manufacturers for efficient operation and ease of maintenance. Burners are specifically matched with the furnace diameter and length for complete/efficient combustion. Burners are available in gas or light or heavy oil and combination with air or pressure atomization of the oil, and Low NOx capabilities.
- ⑤ Air louver, linkage and setting is visible for ease of monitoring, adjustment and cleaning.
- ⑥ Control panel - burner or boiler mounted for ease of operation and maintenance.
- ⑦ Control circuit junction box with terminal strips to permit checking individual control operations.
- ⑧ Factory mounted and wired gas train complete with main gas pressure regulator. Standard gas trains comply with UL requirements. IRI or FM and other code requirements available upon request.
- ⑨ Structural steel skid-type base supports and protects burner.
- ⑩ Large diameter furnace provides for complete combustion and maximum heat transfer. **Furnaces for Section I (high pressure boilers) 24" diameter and larger are of the Morison corrugated design.**
- ⑪ Wetback turnaround eliminates the need for refractory lining, baffles, gaskets and provides additional primary heating surface for increased efficiency. Separate tube sheets allow for differences in expansion due to varying temperatures of the gasses.
- ⑫ Split/hinged rear doors provide access to the rear tubesheet and third pass tube.
- ⑬ Flanged round rear smoke outlet requires only a stub stack for proper draft.
- ⑭ Heavy steel lifting eyes for ease of handling.
- ⑮ Two inch 8-lb. density mineral fiber insulation with an R factor of .27 which reduces heat loss through the jacket and provides jacket support.
- ⑯ A 500 degree Fahrenheit acrylic silicone based paint finish is applied to the 22-gauge phosphate galvanized coated steel jacket.
- ⑰ **3 pass design for optimum efficiency and economical operation.**
- ⑱ Front smokebox and doors lined with space-age ceramic fiber blanket.

*See warranty for complete details.

SEMINOLE - QUALITY IN ENGINEERING



Waterside access is provided by (2) 3" x 4" handholes located in front tubesheet near the bottom of the shell in addition to (2) handholes on the bottom centerline. (1) 3" x 4" handhole or (1) 12" x 16" manway on the top centerline and (1) 3" x 4" handhole in the rear tubesheet.



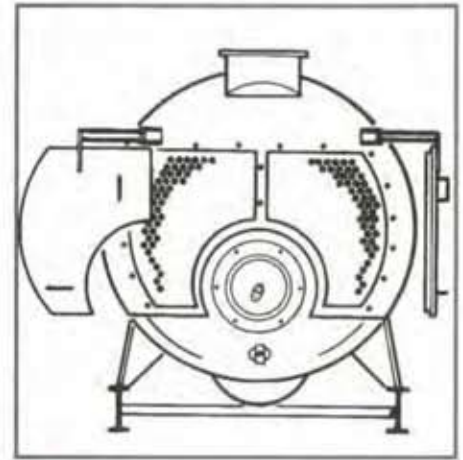
ASME
CONSTRUCTION

**National Board
Registered**

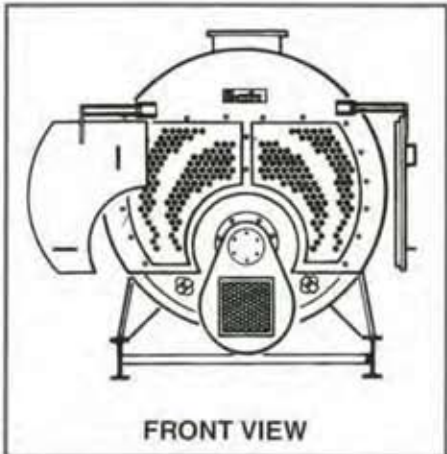


U.L. LABEL "B" LISTED

IRI/FM-APPROVAL



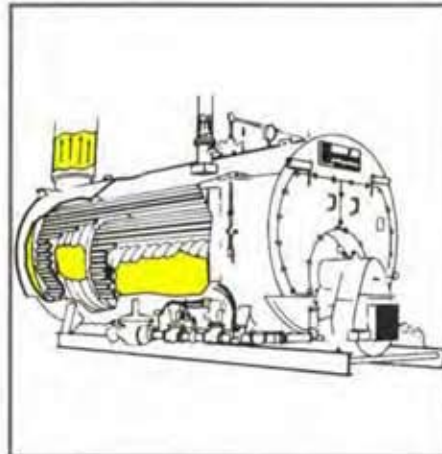
Rear fireside access is available through the 16 1/2" diameter access opening and the split/davited doors. A 3" x 4" handhold allows for waterside inspection and washout.



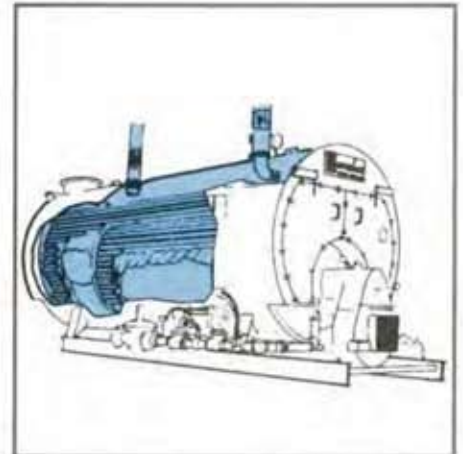
FRONT VIEW



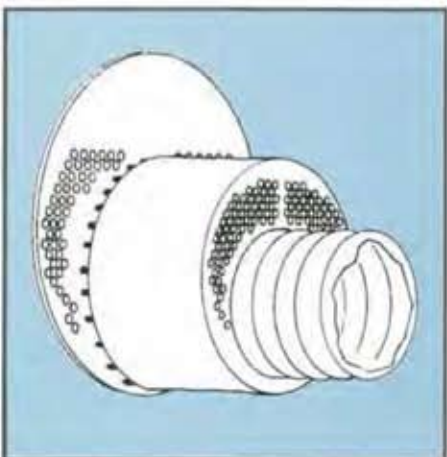
Full Front Tubesheet access is provided by split/davited doors. No electrical or fuel connections or linkage need be disconnected for access to the fireside. Front smokebox and doors are lined with ceramic fiber blanket.



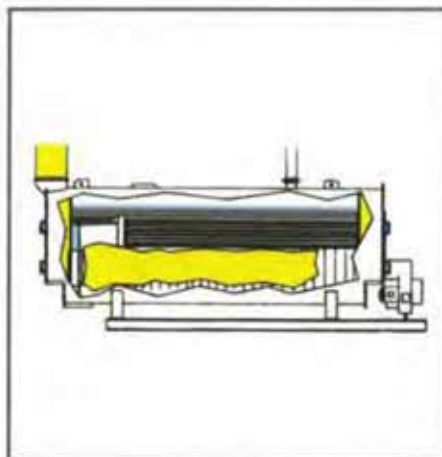
Seminole's 3-pass design maintains gas velocities for effective heat transfer with moderate gas side pressure drops resulting in efficient gas to water heat transfer and reduced blower motor loads.



Hot water boilers reducing return nozzle provides increased return water velocity and aids natural internal water circulation.



Seminole's Wetback turnaround eliminates refractory baffles and gaskets. Separate tube sheets allow for differences in expansion due to varying temperature of the gasses.



Steam boilers - large disengaging area and dry plate (high pressure) or dry pan (low pressure) at the steam outlet assures high quality, dry steam. Design pressures 15 psig, 150 psig, 200 psig, 250 psig.



Seminole Boiler/Burner units are factory firetested to check electrical components for proper operation and adjustment of the fuel/air ratio for smooth ignition and firing.



Superior Boiler Works, Inc. has been manufacturing Scotch Marine Boilers in Hutchinson, Kansas since 1930. The Seminole 3-Pass Wetback design was added to the Superior Boiler Works line of equipment in 1969 in response to a growing market demand for a full Wetback Firetube boiler. Many of the same unique maintenance features available on other Superior Boiler Works, Inc. Scotch Marine Boilers were incorporated into the Seminole design. The rapid acceptance of the Seminole 3-Pass Wetback Boiler confirmed Superior's commitment to manufacturing quality products.



Superior Boiler Works, Inc. has been manufacturing a line of quality firetube boilers in Hutchinson, Kansas since 1930 with over 20,000 boilers of Superior manufacture located throughout the United States and many foreign countries. Superior Boiler Works entered the waste heat recovery market in 1969 with the design and manufacture of a 3,000 square foot waste heat recovery boiler with supplemental firing. Since that time Superior has developed single, two and three pass units, with supplemental firing.



"Demand Superior Performance"

CORPORATE OFFICE • 3524 E. FOURTH ST. • HUTCHINSON, KANSAS 67501
MAILING ADDRESS • P.O. BOX 1527 • HUTCHINSON, KANSAS 67504-1527
TELEPHONE: 620 662-6693 • FAX: 620 662-7586 • www.superiorboiler.com