

EVOLV INDUSTRIAL BOILERS

EMERGING TECHNOLOGIES FOR THE DEMANDS OF TODAY





FROM NECESSITY COMES INNOVATION



Time tested technology now available to the industrial market. Where power, performance and maintainability merge. The evolution continues. **EVOLV INDUSTRIAL** steam / water generators redefine critical use boiler designs. In a class by itself, EVOLV provides for the highest available standard performance. Highest standard efficiencies, lowest standard emissions and a vessel / gas tight engineered enclosure unmatched anywhere. Rapid heat up cycles. High turndown fuel burning equipment utilizing only state of the art solid state fuel / air metering is also standard with EVOLV. Field erectable systems provided with factory on-site assembly crews assuring continuity at the jobsite. Multiple unit systems allow for maximum fuel usage savings at any heating plant.

TECHNOLOGY WE CAN STAND BEHIND







DESIGN | CONSTRUCTION

- Heavy gauge steel with rugged construction
- A 40+ year life boiler
- Innovative tube pattern provides membrane wall designs without any welding of adjacent furnace zone tubes
- Impervious to damage caused by thermal expansion and contraction with standard 25 year P.V. Warranty
- Full fireside access in radiant and convection zones
- Forced gas side flow pattern creates increased gas side velocity, turbulence, contact and residence time
- · Low water content in pressure vessel
- Greatly reduced furnace heat release to water cooled surfaces

PERFORMANCE

- · Highest available operating efficiencies
- · Lowest radiant heat losses
- Rapid allowable heat up time eliminates need for "hot" standby operation of boiler
- · Quick response to load fluctuations
- Heat exchanger design allows for higher temperature differentials resulting in reduced water pumping requirements
- Low furnace heat release greatly reduces potential for metal fatigue

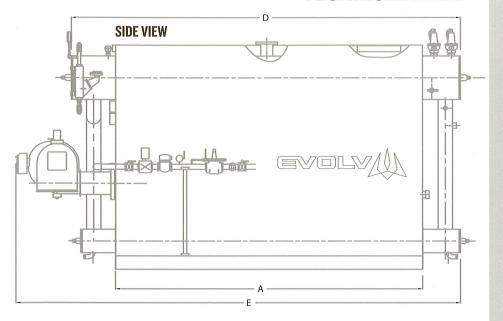
VERSATILITY

- High pressure high temperature hot water to 800 PSIG/500°F
- Steam design available to 800 PSIG design
 Multiple unit systems with high turn down ratio
 burners allow for optimum boiler plant efficiency
 Field erectable in certain design ranges

MAINTENANCE

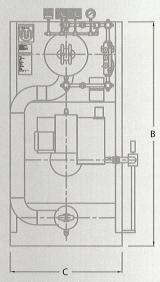
- Casing designed to allow complete fireside access using standard hand tools only
- If tube replacement is ever necessary it may be accomplished with no torch cutting or welding and without the need for entry into pressure vessel drums

TECHNICAL DATA



Note: Efficiencies listed are actual and are not based upon HHV reporting methods. ${}^{\prime}$

FRONT VIEW





HIGH TEMPERATURE HOT WATER

BOILER MODEL	3000	3500	4000	4500	5000	6000
A - LENGTH OF BASE (INCH)	237 1/2	265 1/2	289 7/8	310	326 1/8	326 1/8
B - OVERALL HEIGHT (INCH)	147 1/2	157 1/2	175 1/2	175 1/2	175 1/2	179 1/2
C - WIDTH OF BASE (INCH)	102	102	102	102	102	118
D - OVERALL LENGTH (INCH)	290 5/8	318 3/4	371 1/4	391 3/8	407 1/2	407 1/2
E - LENGTH WITH BURNER (INCH)	338 1/4	371 1/4	395 15/16	416 1/16	448 3/16	448 3/16
INPUT CAPACITY (MBH)	34000	38000	43000	48000	54000	65000
OUTPUT CAPACITY (MBH)	27540	30780	34830	38880	43740	52650
BOILER HORSE POWER (BHP)	823	919	1040	1161	1307	1573
*OPERATING EFFICIENCY (%)	81	81	81	81	81	81

^{*}Based upon 350°F supply water temperature.

STEAM BOILER

BOILER MODEL	3000	3500	4000	4500	5000	6000
A - LENGTH OF BASE (INCH)	237 7/8	266	289-7/8	310	326 1/8	326 1/8
B - OVERALL HEIGHT (INCH)	158 3/8	167 3/8	195	195	195	195
C - WIDTH OF BASE (INCH)	102	102	102	102	102	118
D - OVERALL LENGTH (INCH)	288 3/8	316 1/2	352 1/8	372 5/16	388 7/16	388 7/16
E - LENGTH WITH BURNER (INCH)	323 7/8	357	384 13/16	404 15/16	437 1/16	437 1/16
INPUT CAPACITY (MBH)	34000	38000	43000	48000	54000	65000
OUTPUT CAPACITY (MBH)	27540	30780	34830	38880	43740	52650
BOILER HORSE POWER (BHP)	823	919	1040	1161	1307	1573
*STEAM CAPACITY (LBS/HR)	27195	30395	34395	38395	43195	51990
*OPERATING EFFICIENCY (%)	81	81	81	81	81	81

^{*}Based upon I25 PSIG steam operating pressure.

HOT WATER BOILER

BOILER MODEL	3000	3500	4000	4500	5000	6000
A - LENGTH OF BASE (INCH)	237 1/2	265 1/2	289 7/8	310	326 1/8	326 1/8
B - OVERALL HEIGHT (INCH)	147 1/2	157 1/2	175 1/2	175 1/2	175 1/2	179 1/2
C - WIDTH OF BASE (INCH)	102	102	102	102	102	118
D - OVERALL LENGTH (INCH)	300 1/8	328 1/8	371 1/4	391 3/8	407 1/2	407 1/2
E - LENGTH WITH BURNER (INCH)	338 1/4	371 1/4	395 15/16	416 1/16	448 3/16	448 3/16
INPUT CAPACITY (MBH)	34000	38000	43000	48000	54000	65000
OUTPUT CAPACITY (MBH)	28900	32300	36550	40800	45900	55250
BOILER HORSE POWER (BHP)	863	965	1092	1219	1371	1650
OPERATING EFFICIENCY (%)	85	85	85	85	85	85

^{*}Based upon I80°F supply water temperature.

Order Number Proceedure: EXAMPLE - 4500WGF

Ferrule Tube Connections (F) | Welded Tube Connections (W) Natural Gas (G) | Propane (LPG) | No.2 or Lighter Fuel Oils (O) | Gas/Oil (GO) Water (W) **Boiler Model** 4500 SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. DIMENSIONS MUST BE CONFIRMED FOR CONSTRUCTION. 25 YEAR Thermal Shock Warranty | Gauges

STANDARD EQUIPMENT

All Burner Equipment UL, CSA Approved

LWCO | Relief Valves | Solid State Boiler Controls









 ${\bf EVOLV\ INDUSTRIAL\ BOILERS\ }\ a\ division\ of\ UNILUX\ Advanced\ Manufacturing,\ LLC$

EVOLVindustrial.com

Info@EVOLVindustrial.com EMAIL

518.344.7490 PHONE 518.344.7495 FAX 30 Commerce Park Dr. Niskayuna, NY 12309