

# HTHW

## HIGH TEMPERATURE HOT WATER BOILERS

SMARTER BY DESIGN





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**25 YEAR WARRANTY**



Designed to withstand today's ever increasing demands, the Evolve HTHW boiler achieves unparalleled operating efficiencies. While such performance justifies our claim as being the best, further investigation will reveal that we can justify additional quantifiable claims such as having the lowest emissions, the fastest heat-up, and the easiest operation and maintenance in its class. Visit us online and see all the ways we're dominating this market. One look and you'll know you've arrived at the most intelligent HTHW choice available.

MAXIMUM ENGINEERING | MAXIMUM PERFORMANCE | **MAXIMUM VALUE.**

## 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 volume 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 to 150° resulting in reduced water pumping requirements
- Low furnace heat release greatly reduces potential for metal fatigue

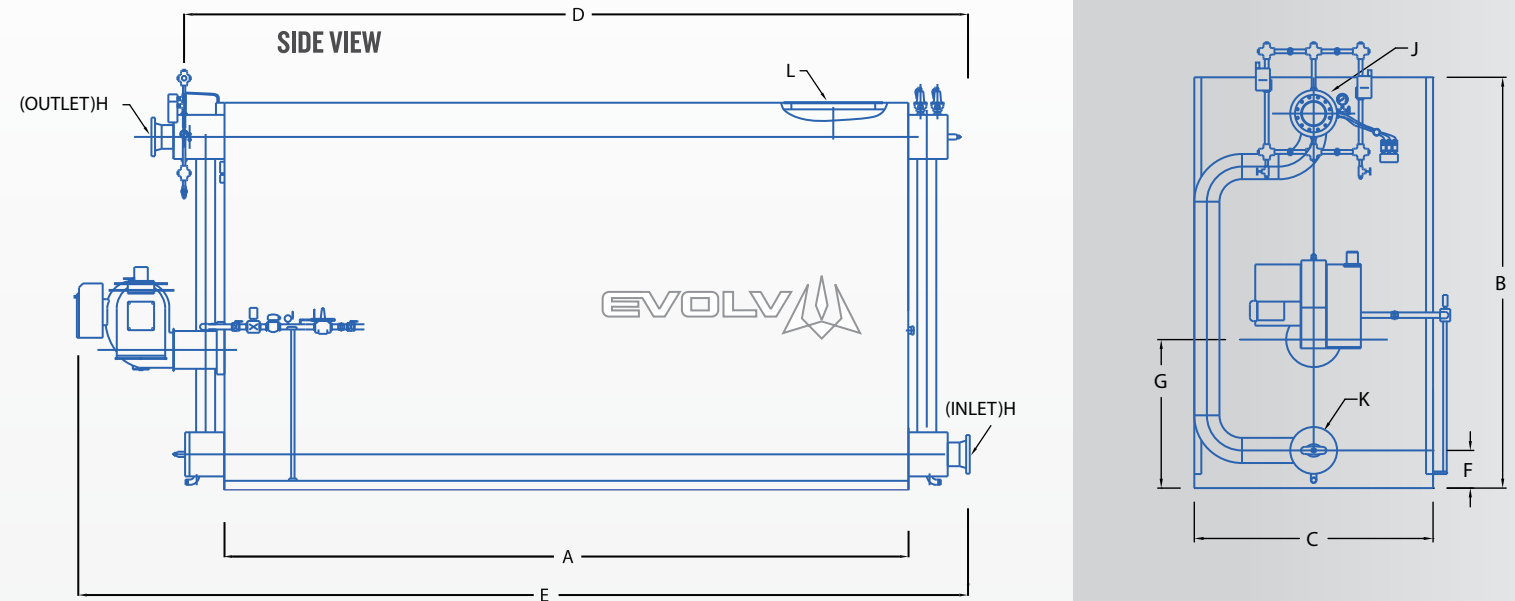
## VERSATILITY

- High pressure high temperature hot water to 800 PSIG/ 500 ° F
- 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. Refer to Website for downloadable submittal drawings.

## HIGH TEMPERATURE HOT WATER

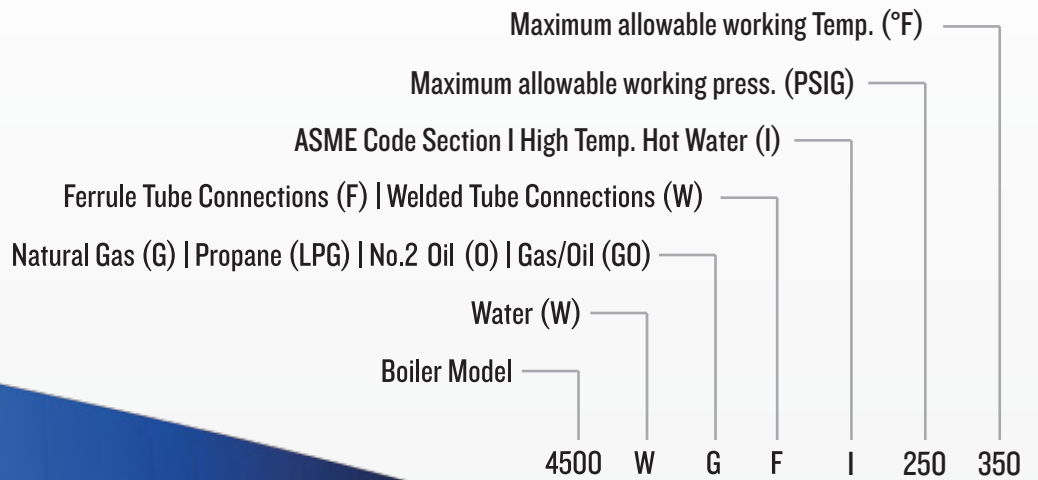
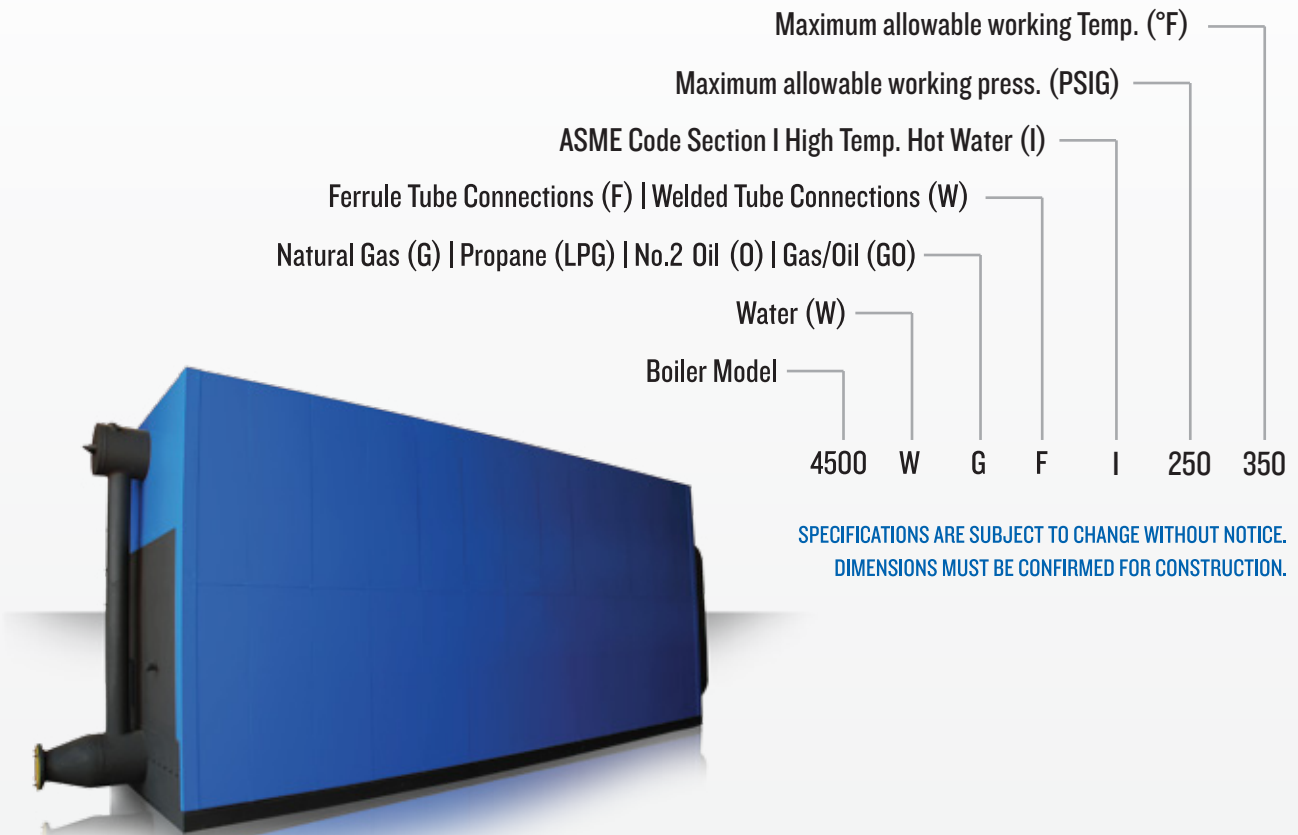
BOILER MODEL	3000	3500	4000	4500	5000	6000
A - LENGTH OF BASE (INCH)	238	266	290	310	326	326
B - OVERALL HEIGHT (INCH)	148	158	176	176	176	180
C - WIDTH OF BASE (INCH)	102	102	102	102	102	118
D - OVERALL LENGTH (INCH)	295	323	351	371	388	388
E - LENGTH WITH BURNER (INCH)	329	362	386	406	438	438
F - CENTER OF LOWER DRUM TO BOTTOM (INCH)	18	18	16	16	16	18
G - CENTER OF BURNER OPENING TO BOTTOM (INCH)	59	61	63	63	63	68
H - INLET / OULET FLANGE (INCH)*	8	8	10	10	10	12
J - UPPER DRUM, OD, NPS (INCH)	16	16	20	20	20	24
K - LOWER DRUM, OD, NPS	16	16	20	20	20	24
L - FLOW GAS OUTLET, ID (INCH)	30	32	38	38	42	42
INPUT CAPACITY (MBH)	34000	38000	43000	48000	54000	65000
OUTPUT CAPACITY (MBH)	27540	30780	34830	38880	43740	52650
BOILER HORSE POWER (BHP)	829	919	1040	1161	1307	1573
SHIPPING WEIGHT (LBS)	44600	50570	60250	64160	67350	82700
OPERATING WEIGHT (LBS)	55434	62702	76154	81115	85140	101406
OPERATING EFFICIENCY (%)**	81	81	81	81	81	81
WATER CONTENT (U.S GAL.)	1299	1455	1907	2033	2133	2243

\*Note: Class 300 Flanges up to 300 PSIG. For designs above 300 PSIG Flanges shall be Class 600.

\*\*Based upon 350 °F supply water temperature.



# ORDER NO. PROCEDURE: 4500WGF - I - 250 /350



SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.  
DIMENSIONS MUST BE CONFIRMED FOR CONSTRUCTION.

STANDARD EQUIPMENT	25 YEAR Thermal Shock Warranty   Gauges/LWCO   Relief Valves   Solid State Controls   Bas Interface
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All Burner Equipment UL, CSA Approved



## CRITICAL USE FACILITY CLIENTS - HTHW BOILERS

- Frankfort Central Utility Plant - Kentucky
- Great Lakes Naval Training Facility - Illinois
- Caesars Palace Hotel and Casino - Las Vegas, NV
- Louisiana State University - Louisiana
- Kettering Medical Center - Ohio

EVOLV INDUSTRIAL BOILERS a division of UNILUX Advanced Manufacturing, LLC



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