



ENDURA+

ULTRA HIGH EFFICIENCY
CONDENSING BOILERS

2.5 – 3.0 MILLION BTU/HR



UNCOMPROMISING PERFORMANCE

A REVOLUTION IN FIRETUBE CONDENSING BOILERS

Fulton's ENDURA+ efficiently captures up to 99% of the fuel's energy while intelligently directing water through engineered flow paths.

- ▶ DESIGNED FOR VARIABLE PRIMARY FLOW
- ▶ UP TO 15:1 TURNDOWN; O₂ COMPENSATION
- ▶ NATURAL GAS PRESSURES DOWN TO 4" WC

EASE OF INSTALLATION, OPERATION & SERVICE

PURE Optimized to fit an ultra-compact footprint, the ENDURA+ surpasses the reliability of existing boiler designs and is easier to install and service.

- ▶ FITS THROUGH A STANDARD DOORWAY
- ▶ ACCESS PANELS DETACH IN SECONDS
- ▶ LIFETIME THERMAL SHOCK WARRANTY



★ ★ ★ ★ ★ ★ ★ ★ ★ ★
20+ PATENTS
PENDING
WORLDWIDE

PURE
TECHNOLOGY

- ▶ **PURE Technology** is the culmination of Fulton's clean-slate design approach. Based on comprehensive system optimization, PURE Technology radically challenges the industry status quo and empowers our engineers to create the best boiler solutions possible, unhindered by previous design roadblocks or trade-offs.

TRULY STRESS-FREE OPERATION

OPTIMIZED HEAT EXCHANGER

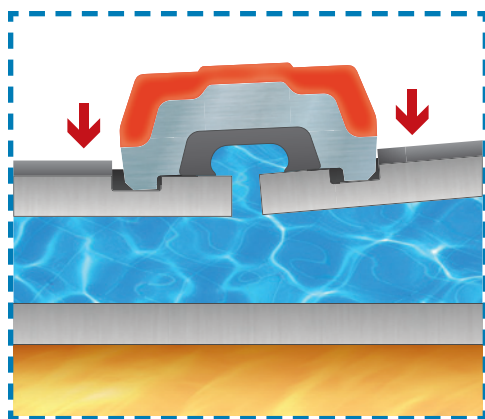
Built with **Duplex stainless steel**, it's the culmination of advances in state-of-the-art condensing boiler technology. The low stress design features higher strength, increased resistance to corrosion, and superior thermal strain management.

- ▼ COMPACT, DURABLE, AND EFFICIENT
- ▼ FAR SUPERIOR TO MATERIALS USED IN COMPETING BOILERS

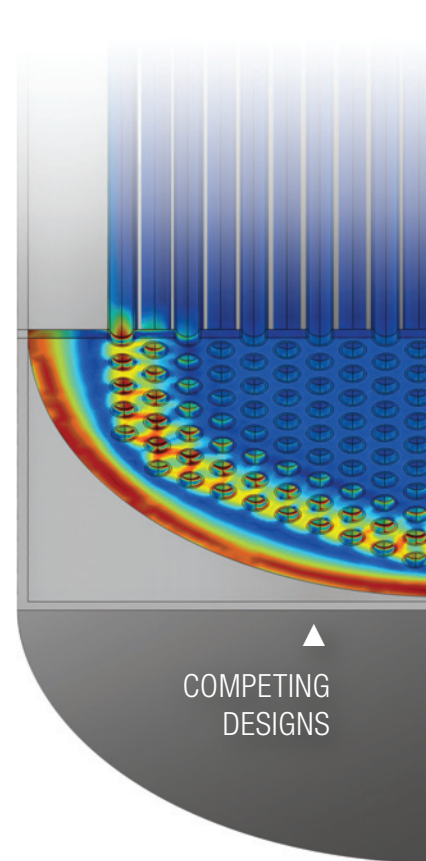
PATENT PENDING STRESS RELIEVER

Conventional designs sacrifice material integrity and durability by transferring the stresses of operation directly onto the most critical components - the tubesheet and heat exchanger tubes. The ENDURA+ **eliminates longitudinal thermal expansion stress** by absorbing thermal growth externally as the heat exchanger freely expands.

- ▼ ELIMINATES LONGITUDINAL THERMAL EXPANSION STRESS
- ▼ GREATLY EXTENDS BOILER LIFE
- ▼ CAPTURES ADDITIONAL HEAT & MAXIMIZES FUEL SAVINGS

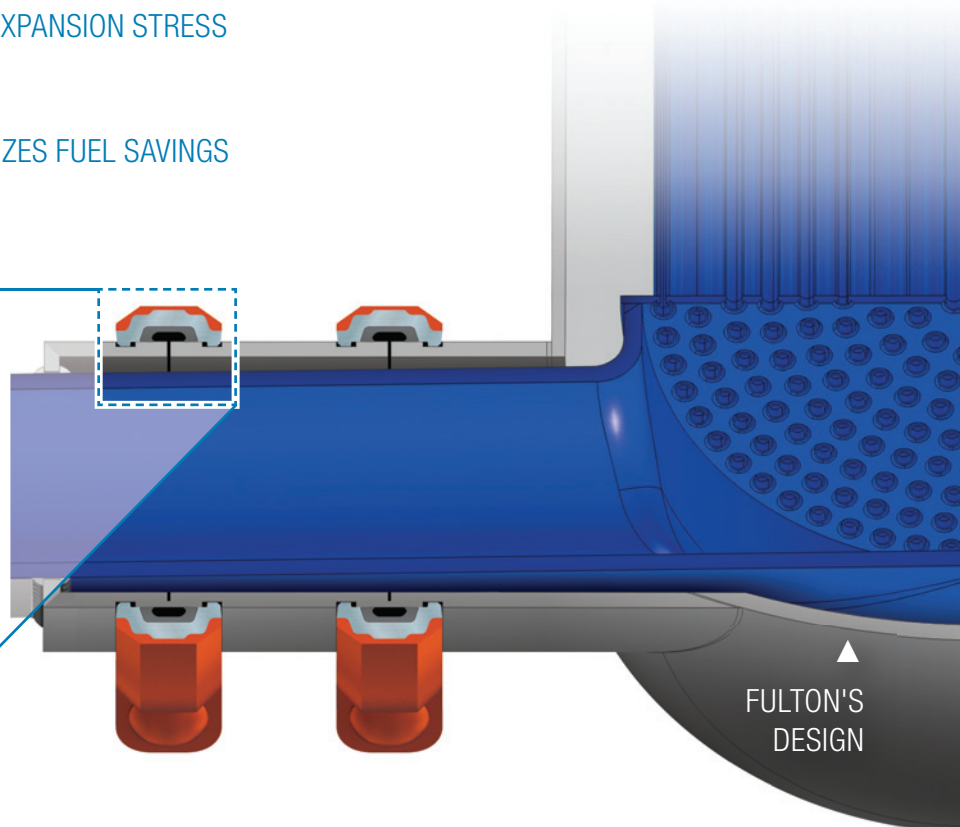


▲ All deflection is absorbed externally as the heat exchanger expands.



COMPETING DESIGNS

Finite Element Analysis (FEA) compares the operating stresses of competing equipment (above) against Fulton's patent-pending design (below).



FULTON'S DESIGN

ADVANCED CONTROL TECHNOLOGY

RELIABLE & EFFICIENT COMBUSTION

Fulton's combustion technology features up to 15:1 turndown with high-precision servo motor control, **outperforming all conventional platforms**. O₂ compensation tunes the fuel/air ratio in real-time, boosting efficiency across all modulation rates and automatically adjusting for seasonality.

- ▶ SMALLER FLUE DIAMETERS; LONGER VENT RUNS
- ▶ NOX EMISSIONS CONFIGURABLE TO <9 PPM



▲ Unprecedented combustion innovation using Computational Fluid Dynamics

POWERFUL & INTUITIVE INTERFACE

Engineered by Fulton for the ENDURA+, the 7-inch touchscreen control maximizes performance and facilitates commissioning. It efficiently sequences up to 10 boilers and eliminates the need for a master boiler or standalone panel. If a boiler is powered off, the cascade seamlessly transitions to the next available stage with zero downtime.

▶ SIMPLIFIED OPERATION

Optimizes modular boiler efficiency with parallel sequencing and outdoor air temperature reset.

▶ HYDRONIC SYSTEM CONTROL

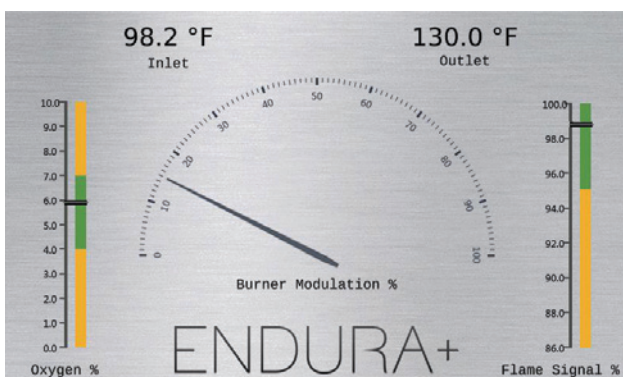
Sequences motorized isolation valves to enhance temperature control; closes valves via delta-T ensuring residual heat is captured.

▶ BUILDING INTEGRATION

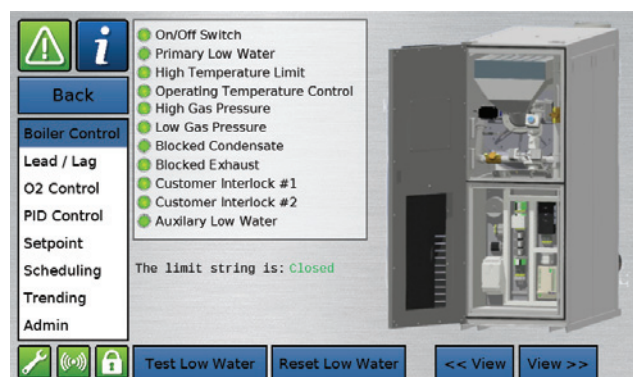
Communicates with the Building Automation System with Modbus; BACnet configurable.

▶ VARIABLE SPEED SYSTEM PUMP CONTROL

Automatically maintains heating water delta-T or delta-P with variable speed pump control and auto-backup rotation.



▲ A convenient interface designed for ease of operation



▲ Quickly access detailed status information



INSTALLATION SIMPLIFIED

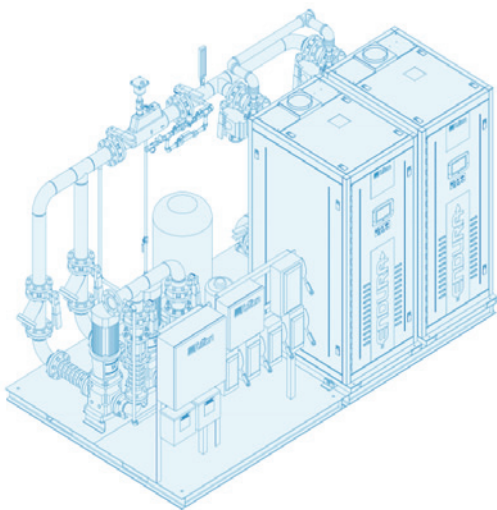
- ▶ VARIABLE PRIMARY FLOW DESIGN
- ▶ NO DEDICATED BOILER PUMPS
- ▶ SMALLEST SERVICE FOOTPRINT
- ▶ REDUCED INSTALLATION COSTS

ENDURA+ boilers are designed for variable primary flow, the simplified piping method wherein the hydronic heating loop flows directly through the boilers. This enhances temperature control, reduces design complexity, and maximizes condensing boiler efficiencies by delivering the lowest temperature water directly to the boiler rather than blending with heated water in a primary-secondary manifold.

TRUST THE INDUSTRY EXPERTS

Fulton has been a pioneer in the hydronic industry since the introduction of an ultra-high efficiency condensing boiler into North America over 25 years ago.

Our vast system and application knowledge simplifies the design, installation and commissioning while providing peak seasonal energy efficiencies and years of worry-free operation.



K-12 EDUCATION



UNIVERSITIES



HEALTHCARE



COMMERCIAL BUILDINGS



MILITARY & GOVERNMENT



INDUSTRIAL PROCESS



GREEN BUILDINGS

CUSTOM HYDRONIC SYSTEM SOLUTIONS

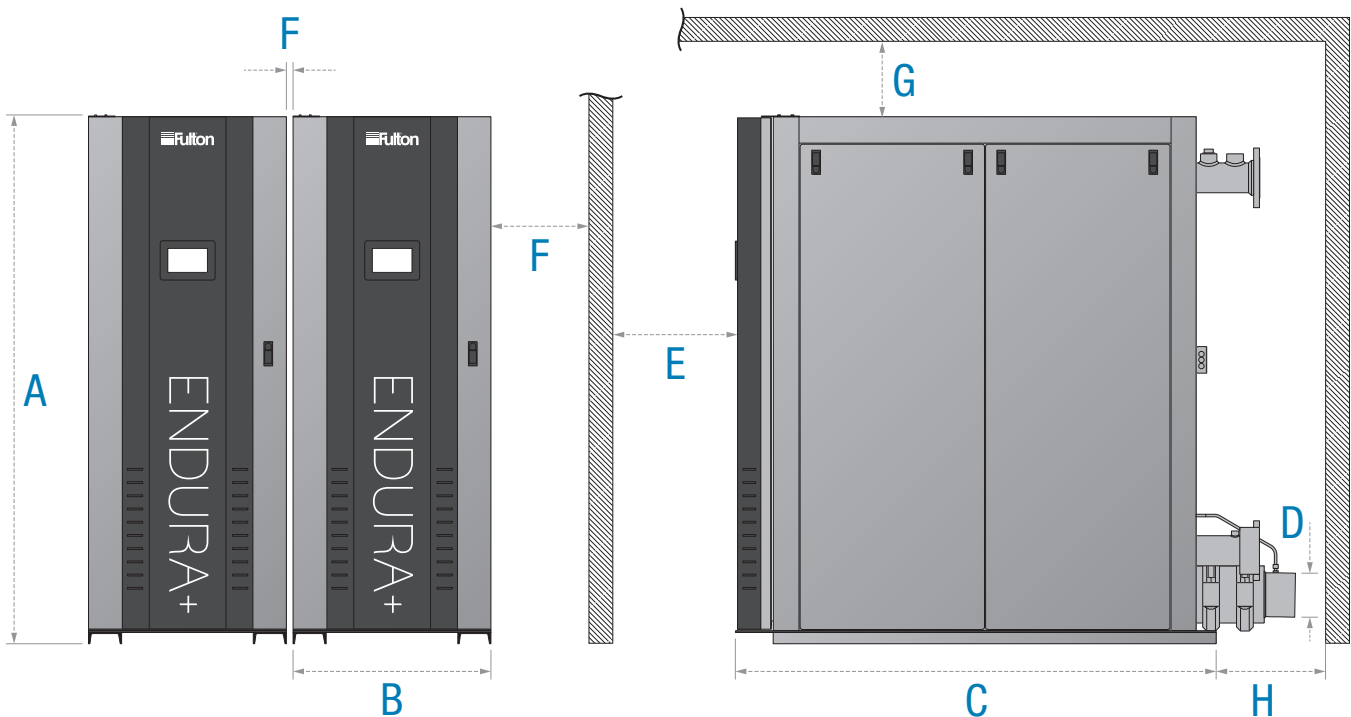
With extensive engineering and manufacturing experience, Fulton's team can design and build a system customized to your specific needs. From concept to delivery, you are part of the process, ensuring timely and accurate completion of your hydronic system.

- ▶ INDUSTRY LEADER IN SYSTEMS ENGINEERING
- ▶ SINGLE-SOURCE TURNKEY SYSTEMS
- ▶ WIDE RANGE OF ANCILLARY EQUIPMENT



MODEL:		EDR+2500	EDR+3000
Specifications			
Maximum Input	BTU/Hr	2,500,000	3,000,000
Dry Weight	LB	2,600	2,600
Operating Weight	LB	3,000	3,000
Water Content	GAL	80	80
Thermal Efficiency (BTS-2000, preliminary)		96.5%	96%
Turndown Ratio		12:1	15:1
Water Flow Requirements	GPM	25-350	25-350
Electrical Requirements at 460/3/60	FLA	15	15
Dimensions			
(A) Boiler Height	IN	80	80
(B) Boiler Width	IN	30	30
(C) Boiler Depth	IN	73	73
(D) Flue Gas Stack Diameter	IN	8	8
Minimum clearances			
(E) Front	IN	36	36
(F) Sides	IN	1/24	1/24
(G) Top	IN	18	18
(H) Rear	IN	24	24

NOTE: Specifications and dimensions are approximate and for reference only. Fulton practices continuous product improvement and reserves the right to change specifications and/or dimensions without notice. Graphics contained in this brochure may not be representative of actual product.



SIMPLIFY YOUR HEATING SYSTEM

Fulton has been a family owned global manufacturer of thermal fluid heaters, steam and hydronic boilers since 1949. ENDURA+ boilers are available through a worldwide network of authorized representatives. Your local representative will assist you in the selection of Fulton equipment to best meet your application needs.



Find your local sales
representative online at:

www.fulton.com/sales



/FULTON-COMPANIES



/FULTONBOILER



@FULTONBOILER



Fulton Heating Solutions, Inc.
6288 Running Ridge Road
Syracuse, NY 13212
(315) 298-5121

Printed in the U.S.A
ENDURA-PLUS_BRO_2016-0919



Learn more about
Fulton products and
services online at:
www.fulton.com