



# High-Performance Packaged Boiler

Australia's largest certified package boiler company.



www.environmental.com.au

The Environmental Group Limited

## Working across the Circular Economy

### Our Purpose

Engineering a sustainable future.

### Our Mission

To enable our clients to contribute to a cleaner environment by safely delivering pivotal solutions while generating value for our shareholders, staff, and partner industries.

### Our Team

Our local experts are dedicated to reducing waste and boosting energy performance. Trusted worldwide to provide the highest standards of service and support.

## Tomlinson Enegery Services

Part of The Environmental Group

Tomlinson Energy Services is Australia's leading provider of packaged boiler solutions, delivering the highest combustion efficiency to keep operating costs low and performance high.

We specialise in custom design, installation, commissioning, and national servicing and repairs, complemented by our 24/7 emergency support.

With offices and a dedicated service team across Australia, Tomlinson Energy Services ensures boilers operate at peak performance for maximum efficiency and reliability.

The Enviornmental Group Limited





## Offering Industry Leading Boilers

**Fulton** radically challenges the industry status quo resulting in game-changing new boiler designs including the VSRT Boiler and the ENDURA+ boiler, culminating in more than 25 new patents worldwide.

Fulton has maintained a reputation for quality and excellence since 1949. From Steam and Hydronic boilers to Thermal Fluid Heaters and Custom Engineered Systems, Fulton has a product for virtually any industrial or commercial heating application.



### **ENDURA + ULTRA-HIGH EFFICIENCY CONDENSING BOILER**

Fulton

2

5

## **ENDURA+**

**Ultra-High Efficiency Condensing Boilers** 

2.5 Million – 12 Million BTU/HR

#### Duplex Stainless Heat Exchanger

- Flame-by-Wire<sup>®</sup> Combustion
- ▶ Real-Time O<sub>2</sub> Compensation<sup>™</sup>



### **UNCOMPROMISING** PERFORMANCE

ENDURA+® condensing boilers provide quiet and reliable operation in a compact firetube design with efficiencies up to 99%. Our design is highly-engineered and built to last with thicker, stronger materials, and a premium fit and finish reflecting Fulton's premier quality.

#### **Reliable Heating** Peace of Mind

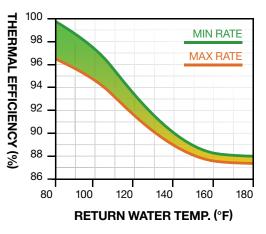
ENDURA+ features a long-lasting firetube heat exchanger that is built for unsurpassed durability in high-demand applications.

#### Lower Cost of Ownership

Cut your energy bills and operating costs with up to 99% efficiency, variable primary flow piping, and simplified maintenance.







#### **Better Controls Reduce Fuel Costs**

Exclusive Flame-by-Wire® combustion controls with O<sub>2</sub> Compensation<sup>™</sup> are more reliable, easier to maintain, and will reduce burner emissions.

▼ Model EDR+6000

### **P<sup>®</sup>RE**<sup>®</sup>CONTROL

#### **Complexity Simplified**

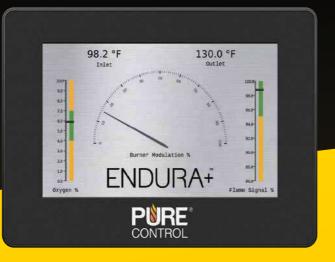
The powerful and intuitive PURE<sup>®</sup> Control maximizes energy savings and simplifies boiler operation. The touchscreen control provides rapid access to operating details and configuration including detailed diagnostics and trending history.

- Outdoor Reset with Setback Mode
- Motorized Isolation Valve Control
- Variable Speed Pump Control
- Reduced Cycling Saves Energy
- Modbus / BACnet Configurable

#### **Seamless Staging**

Sequences up to 10 boilers efficiently and eliminate the need for a master boiler or standalone panel.

When a boiler is powered off, the plant seamlessly transitions to the next available stage for heat you can rely on.



### FL@MEBYWIRE

#### **Reliability & Lower Emissions**

Flame-by-Wire<sup>®</sup> combustion technology replaces the use of conventional "neg-reg" and mechanical linkages with a modern system of independent electronic air and gas valves. It is easier to service and tune by empowering technicians to dial in air-fuel ratios with surgical precision.

- Simple Start-Up & Maintenance
- Maintains Precise Combustion
- Configurable to Sub-7PPM NOx

#### **Real-Time O<sub>2</sub> Compensation<sup>™</sup>**

The air-fuel ratio is continuously tuned in real-time, optimizing the combustion mixture. Automatically adjusting for seasonality virtually eliminates the need for mid-season re-tunes and reduces fuel usage.

- Maintains Ideal Oxygen Levels
- Maximizes Condensing Potential
- Auto-Optimization for Seasonality

### HEAVY-DUTY ENGINEERING

ENDURA+ features a duplex stainless steel heat exchanger for higher strength, increased resistance to corrosion, and superior thermal strain management.

On the right, Finite Element Analysis (FEA) reveals the stark contrast in operating stresses between competing equipment (right side) and Fulton's significantly more durable design (left side).

- Compact, Durable, and Efficient
- 160% Greater Yield Strength\*
- 22% Less Thermal Expansion\*

\* Compared to 316L stainless steel Heat Exchangers, ATI metals

Model EDR+3000

### TRULY STRESS-FREE

Fulton's exclusive **Tube Stress Reliever** eliminates thermal expansion stress by absorbing growth externally and allowing the heat exchanger to freely expand and contract. Conventional boller designs sacrifice material integrity and lifespan by transferring the stresses of operation directly onto the tubesheet and heat exchanger tubes.

- Eliminates Longitudinal Expansion Stress
- Extends Boiler Life Significantly
- Stress Reliever is Maintenance-Free



Ι

### SIMPLIFIED PIPING ARRANGEMENTS

ENDURA+ boilers are designed for variable primary flow, a simplified piping method that enhances temperature control and reduces design complexity. Efficiency is maximized by delivering the lowest temperature water directly to the boiler, rather than blending with heated water in a primary-secondary manifold.

- Reduced Installation Costs
- No Dedicated Boiler Pumps
- Smallest Boiler Plant Footprint

#### EASY INSTALLATION AND OWNERSHIP

An ultra-compact footprint, automatic maintenance reminders, and trending data logs make the ENDURA+ easy to install and operate with design features to simplify service and maintenance.

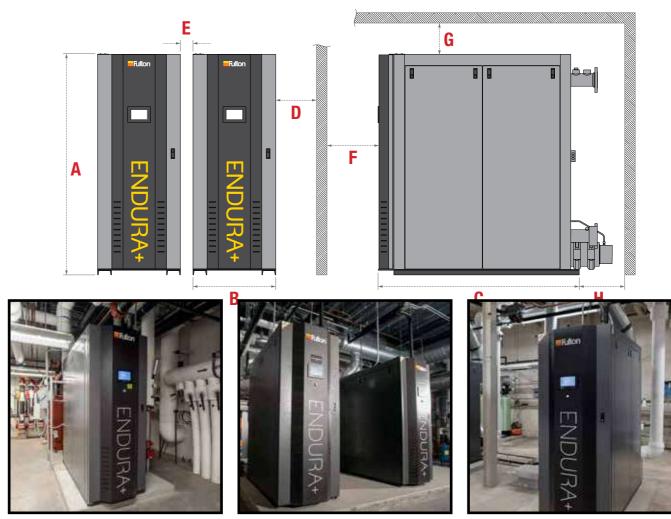
- Access Panels Detach in Seconds
- Knockdown Capable for Retrofits
- Fits Through a Standard Doorway\*

\* Models up to 6 Million BTU/HR

### **SPECIFICATIONS & DIMENSIONS**

|                                  | MODEL | EDR+2500 | EDR+3000 | EDR+4000 | EDR+5000 | EDR+6000 | EDR+8000 | EDR+10000 | EDR+12000 |
|----------------------------------|-------|----------|----------|----------|----------|----------|----------|-----------|-----------|
| SPECIFICATIONS                   |       |          |          |          |          |          | I        | ł         |           |
| Input Capacity                   | MBH   | 2,500    | 3,000    | 4,000    | 5,000    | 6,000    | 8,000    | 10,000    | 12,000    |
| Water Content                    | GAL   | 80       | 80       | 180      | 180      | 180      | 360      | 360       | 360       |
| Pressure Drop at 20°F $\Delta$ T | PSI   | 3.2      | 5.0      | 2.8      | 4.1      | 6.0      | 2.8      | 4.1       | 6.0       |
| Operating Weight                 | LBS   | 3,267    | 3,267    | 6,540    | 6,588    | 6,593    | 14,502   | 14,502    | 14,502    |
| AHRI Thermal Efficiency          | %     | 96.8     | 96.3     | 94.6     | 94.5     | 95.9     | 94.6     | 94.5      | 95.9      |
| Turndown Ratio                   |       | 12.5:1   | 15:1     | 10:1     | 12.5:1   | 15:1     | 20:1     | 25:1      | 30:1      |
| DIMENSIONS                       |       |          |          |          |          |          |          |           |           |
| (A) Height                       | IN    | 80       | 80       | 79       | 79       | 79       | 79       | 79        | 79        |
| (B) Width                        | IN    | 30       | 30       | 34       | 34       | 34       | 66       | 66        | 66        |
| (C) Depth                        | IN    | 73       | 73       | 117      | 117      | 117      | 127      | 127       | 127       |
| CLEARANCES                       |       |          |          |          |          |          |          |           |           |
| (D) Sides                        | IN    | 24       | 24       | 24       | 24       | 24       | 24       | 24        | 24        |
| (E) Between Pair                 | IN    | 1        | 1        | 1        | 1        | 1        | 24       | 24        | 24        |
| (F) Front                        | IN    | 36       | 36       | 36       | 36       | 36       | 36       | 36        | 36        |
| (G) Top                          | IN    | 18       | 18       | 18       | 18       | 18       | 18       | 18        | 18        |
| (H) Rear                         | IN    | 24       | 24       | 36       | 36       | 36       | 36       | 36        | 36        |

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.





#### +61 (0)3 9541 8699

## Contact Us



#### Maximising Energy Efficiencies for a Sustainable Future

admin@egl.com.au

www.environmental.com.au

03 9541 8699

### Office Locations

#### Melbourne

Tomlinson Energy Services Suite 2.01 | Level 2 315 Ferntree Gully Road Mount Waverley VIC 3149 P: 03 8560 0416 E: energyservice.melbourne@tomlinsonenergy.com.au

#### Sydney

Tomlinson Energy Services A2, 26 Power Road Seven Hills NSW 2417 P: 02 9681 4177 E: energyservice.sydney@tomlinsonenergy.com.au

#### Brisbane

Tomlinson Energy Services 1/48 Commerce Circuit Yatala QLD 4207 P: 07 3462 0159 E: energyservice.brisbane@tomlinsonenergy.com.au

#### **South Australia**

Tomlinson Energy Services 26 Phillips Street Thebarton SA 5031 P: 08 8297 9688 E: energyservice.adelaide@tomlinsonenergy.com.au

#### Western Australia

Tomlinson Energy Services 40 Sorbonne Crescent Canning Vale WA 6155 **P:** 08 9455 5511 **E:** energyservice.perth@tomlinsonenergy.com.au



The Environmental Group Limited Engineering a Sustainable Future