

# **Burnham®** High Efficiency Cast Iron Gas Boilers



Proven Reliability,  
American-Made  
Home Heating Comfort.



*Look for this logo  
throughout this literature to  
see the unique features that  
set U.S. Boiler Company  
apart from the competition!*





# The IQ Family...

## ES2™ • Series 3™ • ESC™

- ✓ **The ultimate replacement boilers, saving money through system efficiency**
- ✓ **Can be installed in virtually any home heating system**
- ✓ **Reliable performance, quality construction**
- ✓ **Unique and innovative control system**



### ■ The best boiler for most homes

No matter how efficient a boiler is, if it doesn't operate efficiently in a home's heating system, it's not an efficient installation. IQ gas boilers are designed to handle the high water-volume systems which are present in most homes. They have also been designed to **operate at lower temperatures than conventional cast iron gas boilers**. This means that the boiler doesn't need to fire at a high rate to maintain home heating comfort, which translates into greater system efficiency and lower heating bills.



### ■ Built to save, built to last, made in America

When it comes to home heating, every BTU is precious. U.S. Boiler Company understands, and takes energy efficiency seriously. From thick insulated plates and seamless corners in the burner base to the insulated steel jacket, every IQ boiler is designed from the ground up to keep heat in the heating system.

The cast iron heat exchanger is the heart of these boilers. It is manufactured in Zanesville, Ohio and is designed for years of reliable service. Each heat exchanger is water and pressure tested prior to assembly. The boilers themselves are built in Lancaster, PA. Every component used in the IQ family of boilers is subject to strict standards of quality control and performance verification which are used throughout the manufacturing process.



**ES2**

**85% Efficient**

For homes with a chimney\*

**ESC**

**85% Efficient**

For homes without a chimney\*

**Series 3**

**84% Efficient**

For homes with a chimney\*

\*Homeowners should always discuss chimney requirements with professional heating contractors.

## You're covered...

A limited lifetime heat exchanger warranty, plus a one-year manufacturer's parts warranty are included with IQ-Family boilers. For long-term protection, the U.S. Boiler Extended Warranty Plan is also available. It offers parts and labor protection for either 5 or 10 years from the date of installation.





# The IQ Control System...



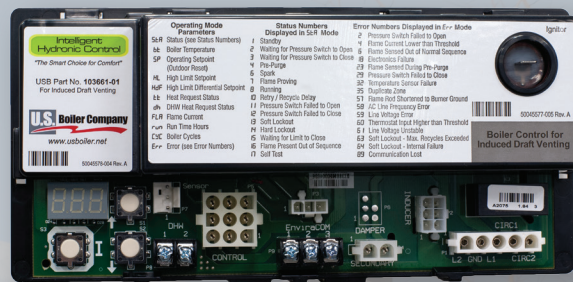
Every IQ Family boiler comes equipped with the IQ Control System. This comprehensive control system ties all of the operational elements of the boiler together, makes sure that it is continually operating as efficiently as possible, and enables the optional features to increase system efficiency and provide additional operational safeguards for the boiler itself.

## ■ Save an additional 15-20% on energy costs!

One of the most unique features of the IQ Control System is that it provides a simple way to add optional features to the boiler. One of these features is a weather-sensitive control, called "outdoor reset". By installing an outdoor reset IQ option card (and the included outdoor sensor), the boiler has the ability to adjust the boiler's operation based upon the actual air temperature outside the home. This is especially useful in the "shoulder seasons" of fall and spring, and can help save an additional 15-20% annually on energy costs.

## ■ What's going on in there?

The boiler control module can relay real-time operational information by way of an optional high resolution backlit touchscreen interface. By navigating through the easy to understand menus, complete information on your boiler's status is literally at your fingertips. In addition, if any trouble is detected in the boiler or the heating system as a whole, the screen will flash red and inform you about the problem. The touchscreen also acts as a diagnostic tool for your professional service technician, which can contribute to lower costs for service calls.



## Control System Excellence



The exclusive IQ Control Systems used in U.S. Boiler Company products were co-developed in partnership with Honeywell, the leader in home comfort controls. The unique functionality and exclusive capabilities of these controls were designed

by engineers at U.S. Boiler Company, the North American leader in boilers for home heating. These custom controls are produced in world-class manufacturing facilities and provide the outstanding quality and reliability synonymous with both industry leaders, U.S. Boiler Company and Honeywell.





# Series 2™

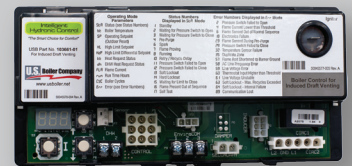
## cast iron water boiler



- ✓ **The top selling gas boiler in America, now updated and improved!**
- ✓ **Made in America**
- ✓ **Reliable performance, quality construction**
- ✓ **NEW comprehensive boiler control system**

### ■ The industry standard...

There are a few reasons why over TWO MILLION Burnham Series 2 boilers have been installed in American homes. Performance, reliability, safety, and overall efficiency have a lot to do with it. The Series 2 is designed to work with an existing chimney, and is available in many sizes to fit the needs of virtually any application. With the Intelligent Hydronic Control, a new full feature control system, and improved operating efficiencies, U.S. Boiler Company is providing even more good reasons why the Series 2 will remain at the top of the list for years to come.



Intelligent  
Hydronic Control

### ■ Made to last, made in America

The cast iron heat exchanger is the heart of these boilers, is manufactured in Zanesville, Ohio and is designed for years of reliable service. It features large inner passages which help to insure that heat is evenly and efficiently transferred to the heating system. Each heat exchanger is water and pressure tested prior to assembly. The boilers themselves are built in Lancaster, PA. Every component used in the IQ family of boilers is subject to strict standards of quality control and performance verification which are used throughout the manufacturing process.

### You're covered...

A limited lifetime heat exchanger warranty, plus a one-year manufacturer's parts warranty are included. For long-term protection, the U.S. Boiler Extended Warranty Plan is also available. It offers parts and labor protection for either 5 or 10 years from the date of installation.





# Independence®

## cast iron steam boiler



- ✓ **The best choice for efficient, quiet, and reliable steam heating**
- ✓ **Models available for homes with and without chimneys**
- ✓ **Made in America**
- ✓ **Quality construction**

### ■ **The right boiler for the job...**

Many American homes have existing steam heating systems which require the use of a devoted steam boiler. The Burnham Independence steam boiler has the same reputation for long lasting quality and efficiency as our other cast iron gas boilers. When a home's heating system requires the use of a steam boiler, the efficient, proven, and reliable Independence is the best choice for the job

### ■ **With or without...**

Independence boilers can be installed in homes with or without chimneys. The standard Independence is used for chimney installations and features a fuel-saving vent damper which automatically closes when the boiler is idle. The Independence PV can be used in homes without a chimney, and is equipped with a draft-inducing fan which pulls hot gases through the heat exchanger at the optimum speed for efficiency.

### ■ **Built to last, made in America**

When it comes to home heating, every BTU is precious. U.S. Boiler Company understands, and takes energy efficiency seriously. From thick insulated plates and seamless corners in the burner base to the insulated steel jacket, the Independence is designed to keep heat where it belongs...in the heating system. The cast iron heat exchanger is the heart of these boilers. It is manufactured in Zanesville, Ohio and is designed for years of reliable service. Each heat exchanger is water and pressure tested prior to assembly. The boilers themselves are built in Lancaster, PA. Every component is subject to strict standards of quality control and performance verification which are used throughout the manufacturing process.

### **You're covered...**

A limited 10-year heat exchanger warranty, plus a one-year manufacturer's parts warranty are included with the Independence and Independence PV boilers. For long-term protection, the U.S. Boiler Extended Warranty Plan is also available. It offers parts and labor protection for either 5 or 10 years from the date of installation.



by CornerStone United



# Alliance SL™



- ✓ Perfect companion for any boiler
- ✓ High recovery rate, provides virtually limitless hot water
- ✓ Highly efficient, very low heat loss
- ✓ Works well in hard water conditions
- ✓ Five sizes available

## ■ The perfect pairing

Reduce home heating bills AND get abundant domestic hot water with an Alliance SL. This indirect water heater uses the heat generated by your boiler to produce hot water. A boiler can generate many more BTUs than a conventional water heater, which means that the tank recovery rate can actually be higher than the rate that hot water is being used – *your supply of hot water is virtually limitless!* The Alliance SL can provide significant savings over conventional direct-fire water heaters, and unlike standalone tankless water heaters, can store hot water for days (in the event of a power interruption).

## ■ Protection from within

Some water conditions can create havoc with a conventional water heater. Thanks to a heavy gauge steel tank and hydrastone inner lining, the Alliance SL is different. The hydrastone lining actually neutralizes corrosive hard water, making the Alliance SL impervious to its harmful effects. The inner tank and hydrastone lining are wrapped with 2-3" of energy saving insulation which enables the tank to only lose between .39 and .97 degrees of water temperature per hour in standby mode. The tank is also equipped with a control sensor which constantly monitors water temperature, ensuring optimum comfort and efficiency.



## 10/2/1 warranty protection

This unique warranty provides a 10-year full tank replacement, two years of labor coverage, and one year on parts.



**5 Sizes Available**



# Cast Iron Radiators



- ✓ **Baseray<sup>®</sup> baseboards**
- ✓ **Slenderized radiators**
- ✓ **Radiant radiators**
- ✓ **Classic<sup>™</sup> radiators**

## ■ Durable, quiet, and comfortable

There's nothing like the soothing comfort of radiant heat and there's nothing like the performance of durable cast iron radiators. Used for generations as a dependable, means to distribute heat to living spaces, the efficiency and quiet performance of cast iron radiators are simply beyond compare. They can also be painted to match virtually any room decor.

## ■ Baseray Baseboards

Designed for efficiency, these baseboards distribute heat both horizontally and vertically, thus they are able to transmit more than five times the amount of heat than other baseboards. Their one-piece cast iron construction virtually eliminates the expansion noises typically found in thin metal fabricated baseboards.

## ■ Classic Radiators

These elegant radiators feature intricate scrollwork and attention to detail that makes them ideal for remodeling projects. Durable cast iron construction ensures a smooth, efficient transfer of heat and many years of quiet, trouble-free service. Brass valves are also available to compliment the elegant look of the Classic Radiator.

## ■ Radiant Radiators

can be used as replacement recessed radiators for cabinets and other interior structures, or as standalone heat distributors. Designed to draw cool air in through the bottom and project warm air out through the top ports, radiant radiators feature durable cast iron construction and sectional design which enables lengths from 9 to 99 inches.

## ■ Slenderized Radiators

Provide radiant heat in a low profile package. Slenderized radiators are lower and slimmer than most conventional radiators. They feature a sectional design, enabling lengths from 7 to 84 inches.



# Models, Sizes, Efficiencies

## Cast Iron, Gas Boilers

For complete technical specifications and dimension information on the products listed here, please visit our website at [www.usboiler.net](http://www.usboiler.net)



ES2 Models		
Boiler Model	Input MBH	AFUE%
ES2-3	70	85.0
ES2-4	105	85.0
ES2-5	140	85.0
ES2-6	175	85.0
ES2-7	210	85.0
ES2-8	245	85.0
ES2-9	280	85.0



ESC Models		
Boiler Model	Input MBH	AFUE%
ESC3	60	85.5
ESC4	91	85.4
ESC5	121	85.3
ESC6	152	85.2
ESC7	182	85.0
ESC8	212	84.5
ESC9	243	84.0



Series 3 Models		
Boiler Model	Input MBH	AFUE%
303	70	84.0
304	105	84.0
305	140	84.0
306	175	84.0
307	210	84.0
308	245	84.0
309	280	84.0



Series 2 Models		
Boiler Model	Input MBH	AFUE%
202	37.5	82.3
202-X	50	83.2
203	62	82.6
204	96	82.3
205	130	82.0
206	164	82.0
207	198	82.0
208	232	82.0
209	266	82.0
210	299	82.0



Independence/Independence PV Models		
Boiler Model	Input MBH	AFUE%
IN3/IN3PV	62	81.9
IN4/IN4PV	105	82.0
IN5/IN5PV	140	82.0
IN6/IN6PV	175	82.1
IN7	210	82.1
IN8	245	82.2
IN9	280	82.2
IN10	315	79.5*
IN11	349	79.5*
IN12	382	79.5*

\*Thermal Efficiency

## Indirect Water Heaters



Alliance SL Models				
Model	Storage Capacity (gal.)	Maximum First Hour Rating at 135°F (gal./hr.)	Continuous Draw Rating at 135°F (gal./hr.)	Standby Heat Loss (°F per hour)
AL27SL	27	192	162	0.97
AL35SL	35	200	162	0.72
AL50SL	50	225	171	0.56
AL70SL	70	294	217	0.45
AL119SL	119	339	235	0.39

## Condensing Boilers



U.S. Boiler Company also offers the Alpine ultra-high efficiency condensing boiler, and the new K2 high efficiency condensing boiler. For information on these products, please see product literature or visit [www.usboiler.net](http://www.usboiler.net)



Before purchasing, read important information about estimated annual energy consumption, yearly operating cost, or energy efficiency rating that is available from your retailer.

USBL13021-10ms



[www.usboiler.net](http://www.usboiler.net)