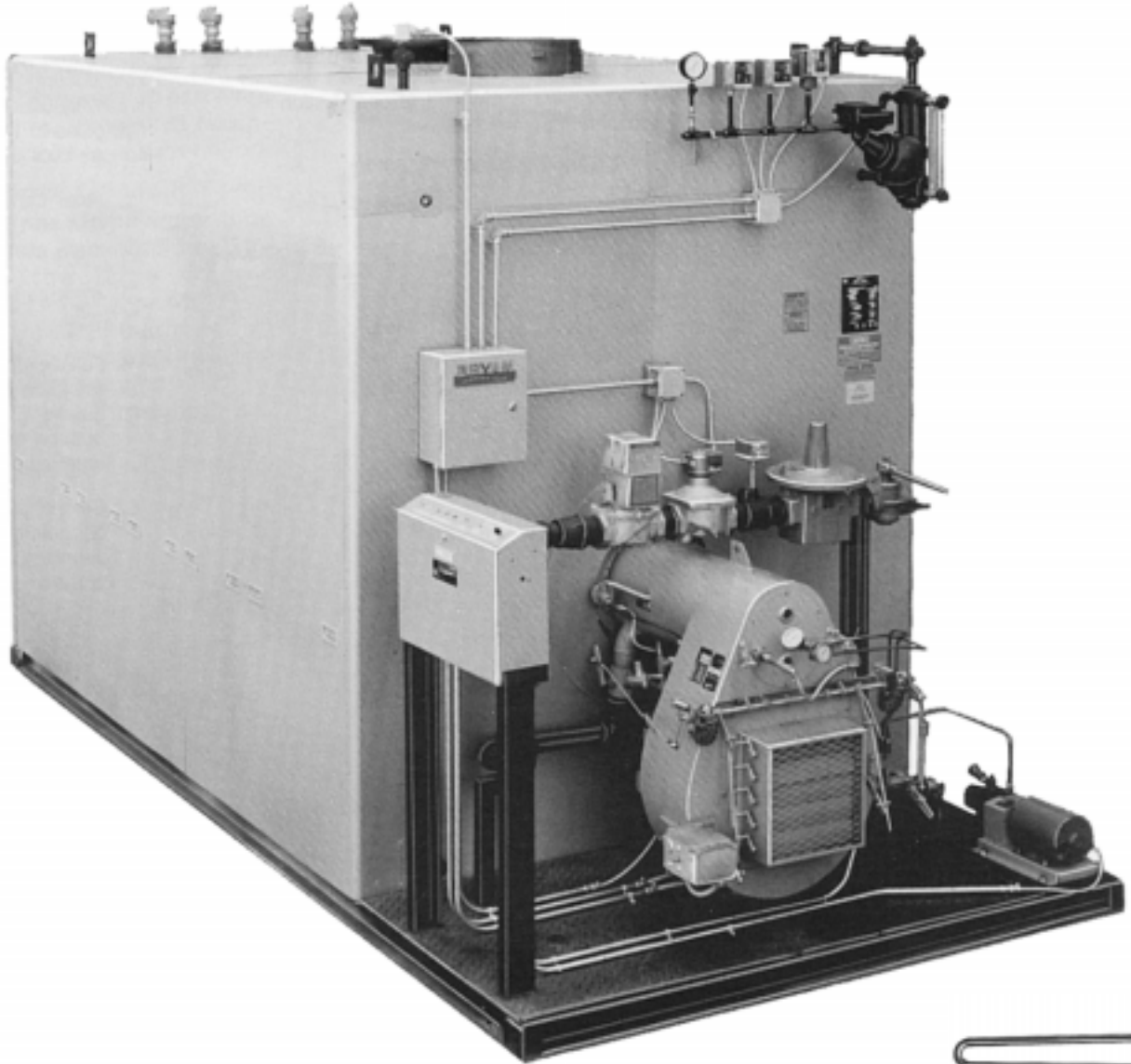


Forced Draft Gas, Oil or Dual Fuel Fired Water Tube Boilers

RW Series—Steam
8,500,000 BTUH (200 HP) to 21,000,000 BTUH (500 HP)



B **BRYAN BOILERS**

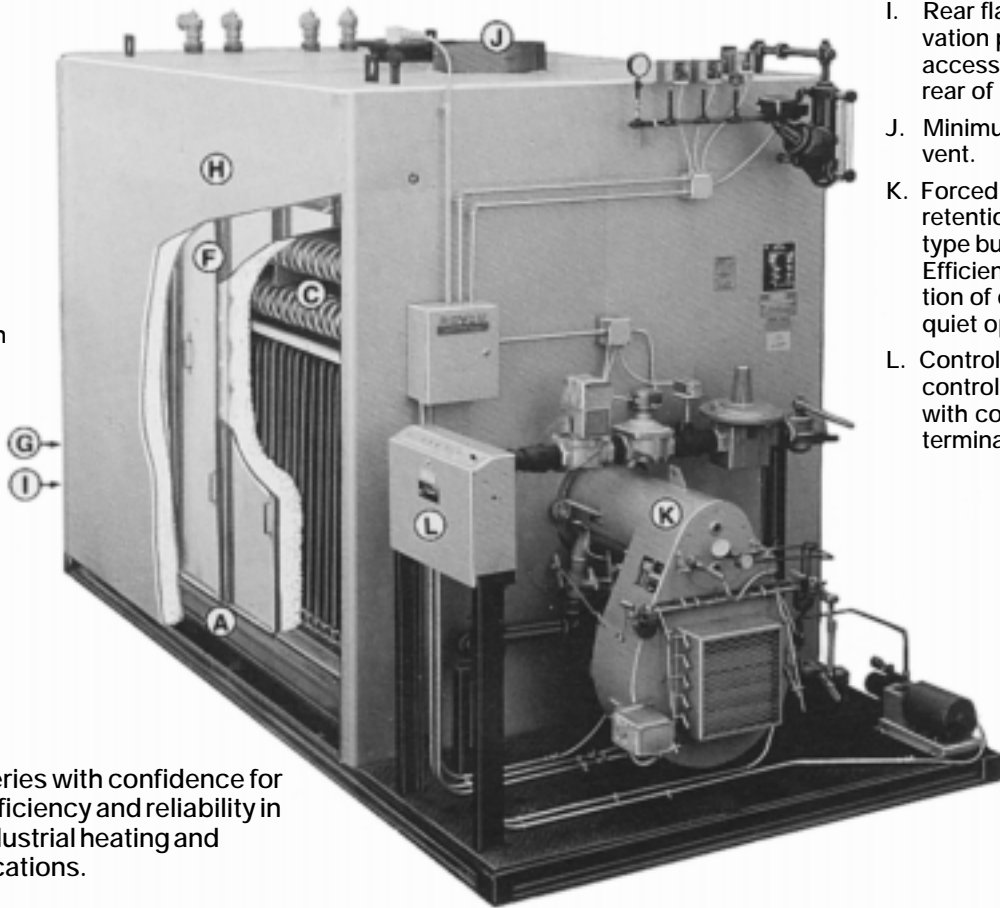
Originators of the "Flexible Water Tube" design



A breakthrough in industrial steam boiler design.

Bryan RW Series Construction Details

- A. Heavy steel boiler frame, built and stamped in accordance with the appropriate ASME Boiler Code.
- B. Large volume water leg downcomers promote rapid internal circulation and temperature equalization (not shown).
- C. Bryan bent water tubes are flexible, individually replaceable without welding or rolling.
- D. Internal water-cooled furnace with low heat release rate (not shown).
- E. Water side interior accessible for cleanout and inspection, front and rear openings, upper and lower drums (not shown).
- F. Boiler tube and furnace area access panels: heavy gauge steel-lined with high temperature ceramic fiber and insulation, bolted and tightly sealed to boiler frame.
- G. Combustion chamber and burner head are completely accessible via manway in end of combustion chamber.
- H. Heavy gauge steel boiler jacket with rust-resistant zinc coating and enamel finish, insulated with fiberglass to insure exceptionally cool outer surface.
- I. Rear flame observation port in access plate at rear of boiler.
- J. Minimum sized flue vent.
- K. Forced draft, flame retention head-type burner. Efficient combustion of oil or gas, quiet operation.
- L. Control panel: all controls installed with connections to terminal strip.



Specify Bryan RW Series with confidence for high performance, efficiency and reliability in large commercial/industrial heating and process steam applications.

Specifications

Boiler Model Number	Input MBH(KW)	Output MBH(KW)	Nominal Boiler Horsepower	Lbs. of Steam per Hour from & at 212°F	Heating Surface Square Feet	Approximate Shipping Weight
RW-850	8,500 (2,491)	6,800 (1,993)	200	7,010	1,136	21,200
RW-1050	10,500 (3,078)	8,400 (2,462)	250	8,660	1,288	23,700
RW-1260	12,600 (3,693)	10,080 (2,955)	300	10,390	1,552	26,100
RW-1500	15,000 (4,397)	12,000 (3,517)	350	12,370	1,818	29,200
RW-1700	17,000 (4,983)	13,600 (3,986)	400	14,020	2,087	32,400
RW-1900	19,000 (5,569)	15,200 (4,455)	450	15,670	2,347	34,300
RW-2100	21,000 (6,155)	16,800 (4,924)	500	17,310	2,612	36,800

Bryan's exclusive "Flexible Tube" provides 5 square feet of heating surface per boiler H.P

The Bryan "Flexible Tube"

The Bryan "Flexible Tube" design promotes high velocity internal circulation for maximum heat transfer and operating efficiency. Bryan tubes are easily removable and replaceable, without welding or rolling, eliminating long, expensive downtime should repairs ever be required.

Positive internal circulation

Each pass of the Bryan water tube slopes upward. This configuration, along with the large volume downcomer water legs, provides extremely rapid natural thermal internal circulation, promoting both high efficiency of heat transfer and uniform temperature throughout the boiler.



Forced draft

The forced draft burner supplies adequate combustion air with a minimum-sized breeching and vent—eliminates need for high chimney.

Compact design—minimum floor space

Requires less floor space than most boilers—minimum boiler room size. Shipped completely assembled and wired with control panel. Tubes are easily removable and replaceable, requiring little service space.

Choice of low or high pressure operation

Bryan steam boilers are available as standard for 15 psi MAWP or 150 psi MAWP.

Standard Equipment Furnished

GAS FIRED—FORCED DRAFT

Combination thermometer and pressure gauge, ASME Code rated pop safety relief valve(s), pressure control, high limit control, low water cut-off/pump control, auxiliary probe type LWCO, electronic combustion safety control, pre-purge and post-purge, automatic operating gas valve, safety gas valve, pilot solenoid valve, pilot ignition assembly, main manual gas shut off valve, pilot cock, pilot and main gas pressure regulators, air safety switch, control panel, all controls installed and wired, standard full modulation with proven low-fire start and characterized fuel metering.

OIL FIRED-FORCED DRAFT

Combination thermometer and pressure gauge, ASME Code rated pop safety relief valve(s), pressure control, high limit control, low water cut-off/pump control, auxiliary probe type LWCO, electronic combustion safety control, pre-purge and post-purge, oil valve, oil ignition transformer, two-stage fuel unit, gas pilot, oil nozzle assembly, control panel, all controls installed and wired, standard full modulation with proven low-fire start and characterized fuel metering.

COMBINATION GAS/OIL—FORCED DRAFT

Combination thermometer and pressure gauge, ASME Code rated pop safety relief valve(s), pressure control, high limit control, low water cut-off/pump control, auxiliary probe type LWCO, automatic motorized gas valve, safety gas valve, pilot solenoid valve, pilot ignition assembly, main manual gas shut-off valve, pilot cock, pilot and main gas pressure regulators, air safety switch, manual fuel selector switch, electronic combustion safety control, pre-purge and post-purge, oil valve, oil ignition transformer, two-stage fuel unit, oil ignition and nozzle assembly, control panel, all controls installed and wired, standard full modulation with proven low-fire start and characterized fuel metering.

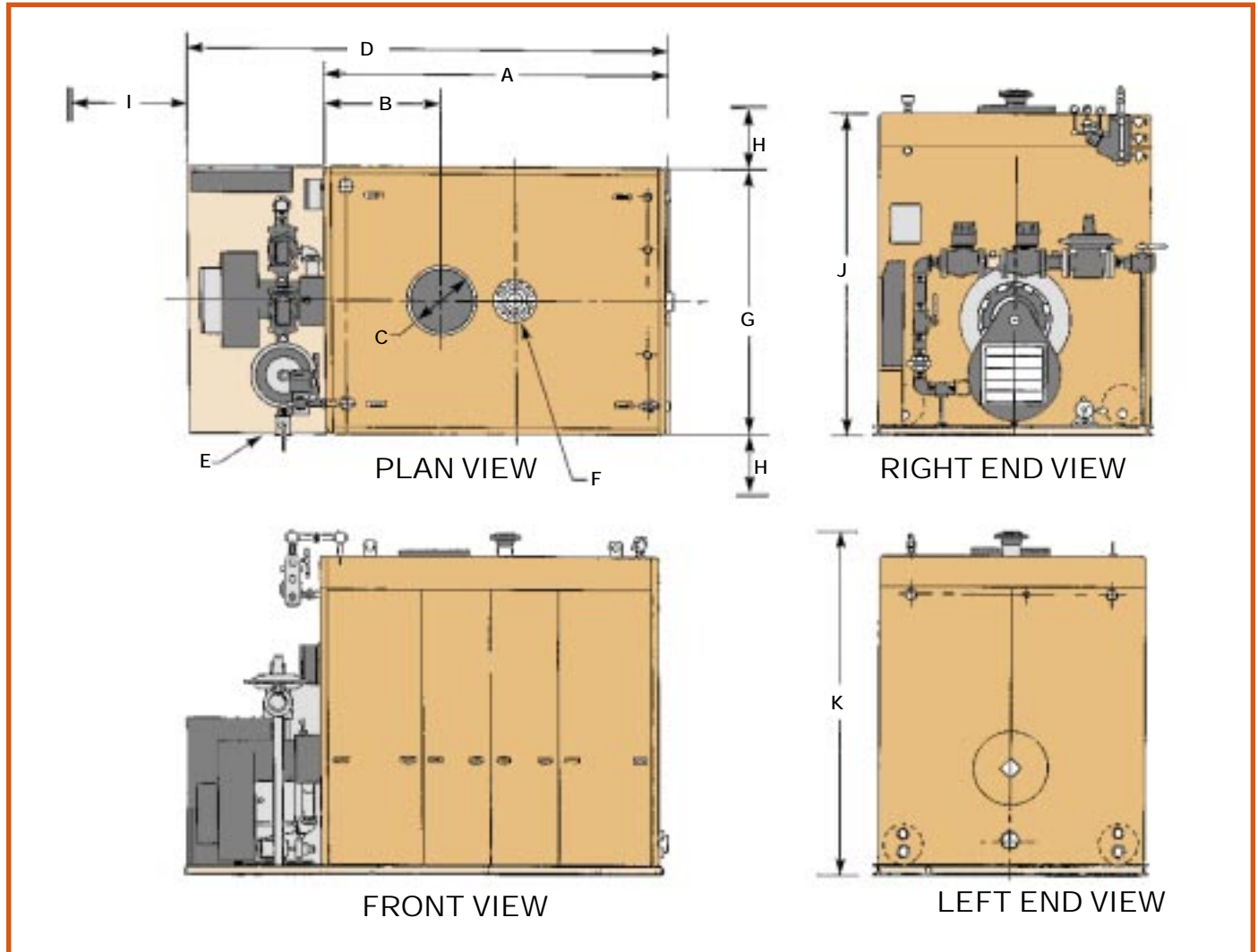
WHEN ORDERING, PLEASE SPECIFY

- (1) Electric power voltage and frequency.
- (2) Boiler relief valve setting.
- (3) Type of gas, BTU content, specific gravity and pressure available.
- (4) Optional extra equipment or construction or special approvals required (FM, IRI, etc.).
- (5) Altitude

Optional Equipment—extra cost

- (1) Manual reset high limit control—installed.
- (2) Manual reset low water cutoff.
- (3) Alarm bells or horns.
- (4) FM, IRI, or other insurance-approved control systems.
- (5) Indicating lights—as desired.
- (6) Air atomizing oil burner.
- (7) Lead-lag systems for two or more boilers with or without outdoor reset control.
- (8) Draft control system.
- (9) Low NO_x package

Bryan RW Series Forced Draft Water Tube Boilers



DIMENSIONS — Inches

Boiler Model Number	A	B	C	D	E	F		G	H	I	J	K
	Length Over Jacket	Flue Location	Flue Size	Overall Length	Gas Train Connection	Supply Nozzle		Return Conn.	Width Outside Jacket	Min. Tube Removal Clearance	Gas Train Connection Location	Height Over Jacket
						15 psi	150 psi					
RW-850	124	36	20	162 $\frac{3}{4}$	2 $\frac{1}{2}$	10	6	90 $\frac{1}{4}$	32	48	107 $\frac{1}{2}$	112
RW-1050	134	36	20	176 $\frac{1}{2}$	3	10	6	90 $\frac{1}{4}$	32	48	107 $\frac{1}{2}$	112
RW-1260	156 $\frac{1}{2}$	37	22	199 $\frac{1}{4}$	3	12	6	90 $\frac{1}{4}$	32	48	107 $\frac{1}{2}$	112
RW-1500	179	37	22	221 $\frac{3}{4}$	3	12	8	90 $\frac{1}{4}$	32	48	107 $\frac{1}{2}$	112
RW-1700	201 $\frac{1}{2}$	38	24	244 $\frac{1}{4}$	3	12	8	90 $\frac{1}{4}$	32	48	107 $\frac{1}{2}$	112
RW-1900	224	39	26	266 $\frac{3}{4}$	4	12	8	90 $\frac{1}{4}$	32	48	107 $\frac{1}{2}$	112
RW-2100	246 $\frac{1}{2}$	40	26	289 $\frac{1}{2}$	4	12	8	90 $\frac{1}{4}$	32	48	107 $\frac{1}{2}$	112

Dimensions and specifications are subject to change without notice. Consult factory for certified dimensions.



Bryan Steam Corporation — Since 1916

P.O. Box 27, Peru, Indiana 46970-0027 U.S.A.

Phone: 765-473-6651 • Internet: www.bryanboilers.com

Fax: 765-473-3074 • E-mail: bryanboilers@iquest.net