

Bryan "Flexible Water Tube" HECL Series Water Boilers

750,000 to 3,000,000 BTUH
Forced draft gas fired



Construction Features

1. Heavy steel boiler frame, built and stamped in accordance with the A.S.M.E. Boiler Code. Constructed as standard for hot water operating pressures to 60 psi.
2. Water leg downcomers to insure rapid internal circulation and temperature equalization.
3. Bryan flexible water tubes, easily replaceable, requiring no welding or rolling.
4. Access panels, interior of boiler easily accessible for service and inspection.
5. Boiler tube access panel bolted tightly and sealed to boiler frame. Constructed of high temperature insulation in steel framework. Tubes installed from one side.
6. Boiler frame insulated with 1½" thick insulating refractory.
7. Boiler jacket, heavy gauge, zinc-coated, rust resistant primer and attractive enamel.
8. Flange mounted, flame retention, forced draft type burner.
9. Lightweight, high temperature insulating fire brick combustion chamber.
10. All controls installed and wired.

Guaranteed 85% efficiency

- With HECL Series Boilers, you get a guaranteed 85% combustion efficiency resulting from a uniquely designed integrated extended surface heat extractor.
- What's more, HECL Boilers offer high operating efficiency—at all normal operation temperatures—without the complications of condensation concerns.

Specifications

BOILER MODEL NUMBER	Firing Rate	Gross Output		Net Load Recommendation (EDR)		Approx. Shipping Weight
	BTU's Per Hour	BTU's Per Hour	Boiler Horse Power	BTU's Per Hour	Hot Water Radiation Sq. Ft	
HECL-75	750,000	637,500	19	554,000	3,690	1,875
HECL-90	900,000	765,000	23	665,000	4,430	2,140
HECL-120	1,200,000	1,020,000	30	887,000	5,910	2,410
HECL-150	1,500,000	1,275,000	38	1,109,000	7,390	2,865
HECL-180	1,800,000	1,530,000	46	1,330,000	8,870	3,185
HECL-210	2,100,000	1,785,000	53	1,552,000	10,350	3,720
HECL-240	2,400,000	2,040,000	61	1,774,000	11,830	4,175
HECL-270	2,700,000	2,295,000	69	1,996,000	13,310	4,695
HECL-300	3,000,000	2,550,000	76	2,217,000	14,780	5,125

Bryan HECL Series Gas Flexible Tube Boilers

Efficient Water Tube Design

The Bryan Flexible Water Tube provides for extremely fast internal circulation for maximum heat transfer and operating efficiency.

No "Thermal Shock"

The flexibility of the bent water tube design eliminates all possible damage from "Thermal Shock" and from stresses caused by poor or unequal internal circulation. This is particularly important with forced hot water heating systems designed for higher temperatures and greater temperature drops.

Natural Internal Circulation

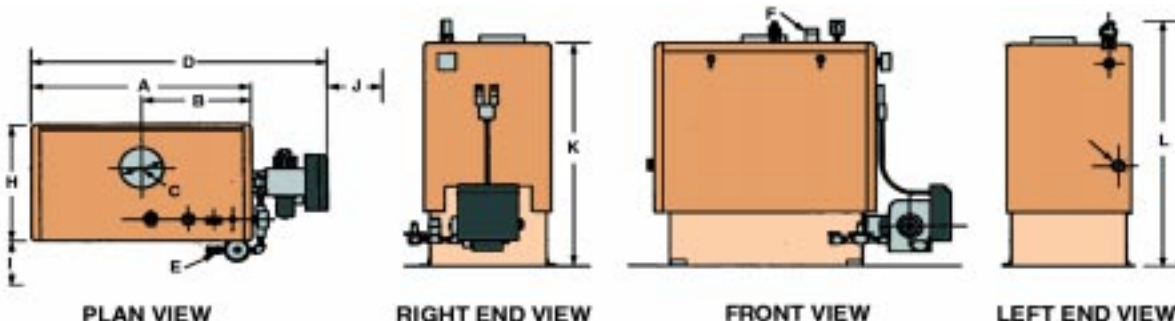
The water tube design and the large water leg downcomers provide adequate internal circulation without concern over exterior pumping conditions. Low pressure drop through boiler.

Compact—Minimum Floor Space

Requires less floor space than most boilers—minimum boiler room size.

Shipped completely assembled and wired.

Tubes are easily removable and replaceable, requiring little service space.



DIMENSIONS—inches (cm)

BOILER MODEL	A Length Over Jacket	B Flue Location	C Flue Size	D Overall Length	E Gas Train Connection	F Supply Nozzle	G Return Nozzle	H Width Outside Jacket	I Min. Tube Removal Clearance	J Clearance for Servicing Burner	K Height Over Jacket	L Floor to Flow Nozzle
HECL-75-W	36 ¹ / ₄ (92.08)	18 ¹ / ₈ (46.04)	8 (20.32)	60 ¹ / ₄ (153.04)	1 (2.54)	3" NPT (7.62)	3" NPT (7.62)	34 ¹ / ₂ (87.63)	24 (60.96)	36 (91.44)	66 ¹ / ₂ (168.91)	70 ³ / ₄ (179.71)
HECL-90-W	41 ¹ / ₂ (105.41)	20 ³ / ₄ (52.71)	10 (25.40)	65 ¹ / ₂ (166.37)	1 (2.54)	3" NPT (7.62)	3" NPT (7.62)	34 ¹ / ₂ (87.63)	24 (60.96)	36 (91.44)	66 ¹ / ₂ (168.91)	70 ³ / ₄ (179.71)
HECL-120-W	50 ³ / ₄ (128.91)	25 ³ / ₈ (64.45)	10 (25.40)	74 ³ / ₄ (189.87)	1 ¹ / ₄ (3.18)	3" NPT (7.62)	3" NPT (7.62)	34 ¹ / ₂ (87.63)	24 (60.96)	36 (91.44)	66 ¹ / ₂ (168.91)	70 ³ / ₄ (179.71)
HECL-150-W	59 ³ / ₄ (151.77)	29 ¹ / ₈ (75.88)	12 (30.48)	83 ³ / ₄ (212.73)	1 ¹ / ₂ (3.81)	3" NPT (7.62)	3" NPT (7.62)	34 ¹ / ₂ (87.63)	24 (60.96)	36 (91.44)	66 ¹ / ₂ (168.91)	70 ³ / ₄ (179.71)
HECL-180-W	69 (175.26)	34 ¹ / ₂ (87.63)	14 (35.56)	93 (236.22)	1 ¹ / ₂ (3.81)	3" NPT (7.62)	3" NPT (7.62)	34 ¹ / ₂ (87.63)	24 (60.96)	36 (91.44)	66 ¹ / ₂ (168.91)	70 ³ / ₄ (179.71)
HECL-210-W	78 ¹ / ₄ (198.76)	39 ¹ / ₈ (99.38)	14 (35.56)	102 ¹ / ₄ (259.72)	2 (5.08)	3" NPT (7.62)	3" NPT (7.62)	34 ¹ / ₂ (87.63)	24 (60.96)	36 (91.44)	66 ¹ / ₂ (168.91)	70 ³ / ₄ (179.71)
HECL-240-W	87 ¹ / ₂ (222.25)	43 ³ / ₄ (111.13)	16 (40.64)	111 ¹ / ₂ (283.21)	2 (5.08)	3" NPT (7.62)	3" NPT (7.62)	34 ¹ / ₂ (87.63)	24 (60.96)	36 (91.44)	66 ¹ / ₂ (168.91)	70 ³ / ₄ (179.71)
HECL-270-W	96 ³ / ₄ (245.75)	48 ³ / ₈ (122.87)	16 (40.64)	120 ³ / ₄ (306.71)	2 (5.08)	3" NPT (7.62)	3" NPT (7.62)	34 ¹ / ₂ (87.63)	24 (60.96)	36 (91.44)	66 ¹ / ₂ (168.91)	70 ³ / ₄ (179.71)
HECL-300-W	106 (269.24)	53 (134.62)	16 (40.64)	130 (330.20)	2 ¹ / ₂ (6.35)	3" NPT (7.62)	3" NPT (7.62)	34 ¹ / ₂ (87.63)	24 (60.96)	36 (91.44)	66 ¹ / ₂ (168.91)	70 ³ / ₄ (179.71)

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

Standard Equipment

Forced draft construction, combination thermometer and altitude gauge, A.S.M.E. rated relief valve, combustion safety control, high limit control, low water cut-off, built-in combustion chamber, flange-mounted burner, electronic combustion safety control, water temperature control (240° max. std.), heavy gauge jacket with 1¹/₂" insulation. All controls mounted and wired.

Optional Equipment

1. Combination water feeder and low water cut-off.
2. Higher pressures through 150 psi available.

When ordering, please specify

- (1) Electric power voltage and frequency.
- (2) Relief valve setting.
- (3) Gas pressure available.
- (4) Optional equipment or special features.



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