



Bryan D-Series Forced Draft Firing Hot Water Heating Water Tube Boilers

Inputs from 350,000 to 650,000 BTU'S

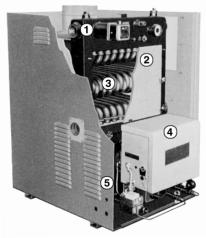
D-Series Boilers incorporate the time-proven Bryan Flexible Water Tube design that results in:



- Extremely fast natural internal circulation for maximum heat transfer and operating efficiency without depending on external pumps.
- Elimination of "thermal shock" problems experienced by conventionally designed boilers—particularly important in forced hot water heating systems designed for higher temperatures and greater temperature drops.
- Compact units requiring less floor space—save on new construction costs and minimize handling and fitting problems on renovation projects.
- Quick, fast, easy maintenance—designed with the operator in min. Jackets and insulating panels quickly disassembled to provide access to boiler internals when and if required.

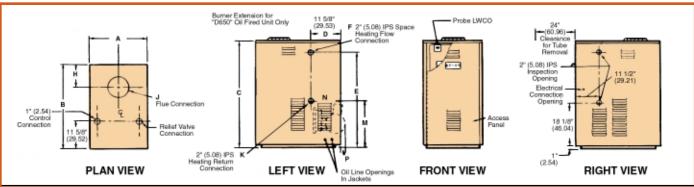
Unique Bryan Flexible Tubes do not require welding or rolling to attach to boiler frame. Tubes are easily removable and replaceable using simple tube puller and driver tools. Results in considerably less valuable floor space required to provide servicing area.

Bryan Steam Corporation guarantees the boiler pressure vessel for twenty years after date of installation against thermal shock. D-Series forced draft firing hot water boilers are built nad stamped in accordance with the requirements of the A.S.M.E. boiler code. Constructed as standard for hot water operating pressures to 60 psi. Also available for higher operating pressures.



Bryan D-Series Forced Draft Hot Water **Boilers Construction Features**

- 1. Heavy steel pressure vessel boiler frame with adequately sized water leg downcomers built and stamped in accordance with A.S.M.E. boiler code.
- 2. Sealed, insulated boiler tube front access panel. Tubes installed from one
- 3. Bryan bent flexible tubes, No welding or rolling required to attach tubes to boiler frame.
- 4. Flange-mounted gun type burner with flame retention head. Forced draft-oil, gas or dual fuel (gas/oil).
- 5. Heavy-gauge louvered boiler jacketing; zinc coated rust resistant primer with attractive enamel finish.



DIMENSIONS—Inches (cm)			
Model	D-350	D-450	D-650
A-length over jacket	24 (60.96)	28 (71.12)	36 (91.44)
B-width over jacket	35 (88.90)	35 (88.90)	35 (88.90)
C-height over jacket	43½ (110.49)	43½ (110.49)	43½ (110.49)
D-location of flow nozzle or tapping	115/8 (29.53)	115/8 (29.53)	11 ⁵ / ₈ (29.53)
E-location of flow nozzle or tapping	38¾ (98.43)	38¾ (98.43)	38¾ (98.43)
F-flow nozzle or tapping NPT	2 (5.08)	2 (5.08)	2 (5.08)
H-location of flue connection	9½ (24.13)	9½ (24.13)	9½ (24.13)
J-flue diameter	6 (15.24)	8 (20.32)	8 (20.32)
K-return tapping NPT	2 (5.08)	2 (5.08)	2 (5.08)
M-location of return tapping	18¾ (47.63)	18¾ (47.63)	18¾ (47.63)
N-location of return tapping	11 ⁵ / ₈	11 ⁵ / ₈	11 ⁵ / ₈
P-burner extension (oil fired only)	No extension	5 (12.70)	55 (12.70)
P-burner extension gas/oil, gas	*	30 (76.20)	30 (76.20)
Specifications			
Input BTU/hr (kw)	350,000 (102.55)	450,000 (131.85)	650,000 (190.45)
Output BTU/hr (kw)	280,000 (82.04)	360,000 (105.48)	520,000 (152.36)
Horsepower	8	11	15
Net load recommendations (EDR)			
BTU/hr (kw)	243,000 (71.20)	313,000 (91.71)	452,000 (132.44)
Hot water radiation, sq ft	1,624	2,090	3,020
Approximate shipping weight lb (kg)	650 (293)	725 (326)	850 (383)

^{*} Not available for gas/oil combination NOTE: Dimensions and specifications are subject to change without notice. Consult factory for certified dimensions.

Boilers Furnished as Standard With...burner, forced draft construction with built-in combustion chamber, 60 psi A.S.M.E. construction, A.S.M.E. rated relief valve, combination temperature/ pressure gauge, combustion safety control, water temperature control aquastat (240° F max. std.) high limit aquastat, and low water cut off. All controls mounted and wired.

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

Bryan Steam Corporation — Since 1916 Phone: 765-473-6651 • Internet: www.bryanboilers.com Fax: 765-473-3074 • E-mail: bryanboilers@iquest.net

Optional Equipment Available...IRI (FIA), FM or other special controls; combination water feeder and 1ow water cut-off; boiler construction and controls for pressures exceeding 60 psi; heat exchanger coils for domestic water or other purposes—either storage tank or tankless application; hot water circulating equipment with load relay installed and wired; other equipment as required.

When ordering please specify

- 1. Electric power voltage and frequency (115/60 is standard).
- 2. Relief valve setting.
- 3. Optional equipment or special features.
- 4. Operating altitude and gas pressures available.