

Bryan "Flexible Water Tube" Indirect Water Heaters

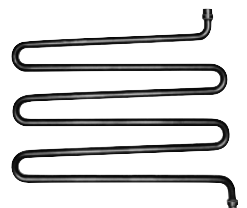
350,000 to 8,000,000 BTUH
Atmospheric gas fired and Forced Draft gas, oil or dual fuel fired



Forced Draft
Gas Fired
RV Series

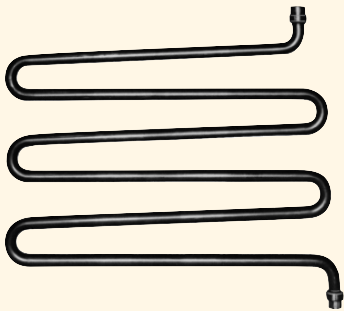
B BRYAN BOILERS

Originators of the "Flexible Water Tube" design





Bryan Indirect Water Heaters give you years of economical, trouble-free service



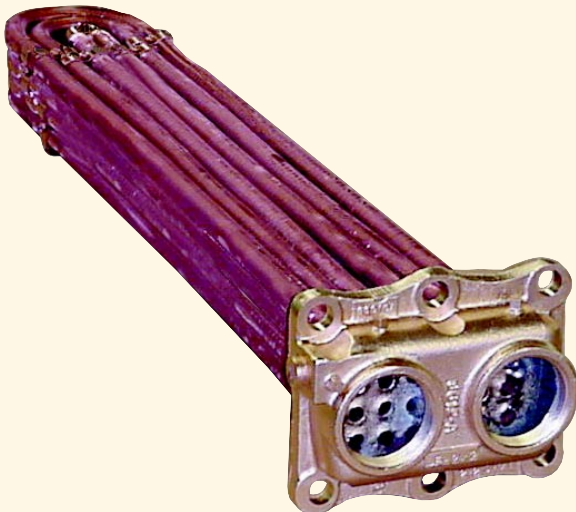
**Featuring
Bryan's
exclusive
"Flexible
Water Tube"
design**

Bryan Heat Exchanger

The heat exchanger is the key to the Bryan Indirect Water Heater. It leads to all the advantages listed on this page, making the Bryan Indirect Water Heater a perfect choice in dozens of applications.

The heat exchanger is constructed of heavy copper tubing which transfers heat from the primary water to the water flowing through the exchanger. The heat exchanger is designed for two, four, six or eight-pass flow with low pressure drop. It can easily handle the entire BTU output (or any desired portion) of the heater.

The head of the heat exchanger bolts to the outer shell of the heater. The design of the heat exchanger can be adapted to either storage tank or tankless operations.



The indirect heating system is a proven method of providing large volumes of hot water for a variety of applications. Our years of experience in this field have perfected the Bryan Indirect Water Heater. You'll find application information, specifications and general information in this brochure. For additional assistance in planning your installation, contact your Bryan Steam representative.

Simplicity of indirect heating

The indirect heat exchanger method of heating water is extremely simple. The primary water in the heater is maintained at a constant temperature and recirculated only within the heating vessel. The heat exchanger, placed in the primary water, absorbs heat and transfers it to the water flowing through its copper tubes.

Efficiency in a compact unit

The result of the simple design is an efficient heating method that requires very little floor space. Bryan Indirect Water Heaters require less floor space than most other types of heaters or boilers. They are shipped completely assembled and wired.

Efficient "Flexible Water Tube" design

Bryan Indirect Water Heaters incorporate the Bryan bent water tube that provides rapid internal water circulation. The result is maximum heat transfer, and the flexible tubes eliminate the chance of thermal shock. All tubes are easily removable and replaceable without welding or rolling.

Economical operation

Since service or process water does not come into contact with high temperature heating surfaces, there is little danger of scale or corrosion. Maintenance and replacement costs are greatly reduced, and the unit provides a long, efficient service life.

Engineered for automatic operation

The primary water in the heating vessel is continuously, automatically recirculated. And it rarely requires changing.

Choice of systems to meet specific needs

Storage tank system. When large volumes, but intermittent draws, are required, a storage tank is used. Circulation between the tank and heat exchanger maintains the required temperature in the tank.

Tankless system. When the hot water draw is relatively constant over long periods, the tank may be eliminated. This system should be considered whenever possible.

Tank-Tankless system. When two temperatures of water are required, a tank type system may be used to supply water at one temperature while water from the tank is recirculated through the heat exchanger to provide the second, higher temperature water.

Large volumes of hot water for dozens of applications

The maintenance-free design of the Bryan Indirect Water Heater can mean years of trouble-free service in dozens of applications.

Here are just a few applications where the value of indirect heating has been proven over and over again:

- Schools
- Industry
- Laundries
- Restaurants
- Packing plants
- Swimming pools
- Apartments
- Hotels and motels
- Institutions
- Hospitals
- Outdoor storage tanks

Bryan Indirect Water Heaters are particularly suited for multi-purpose heating in these applications. A single unit, for example can be used for:

- domestic or commercial hot water and space heating
- domestic hot water, space heating and pool heating
- domestic hot water, space heating and snow melting
- two or three temperature water for restaurants.

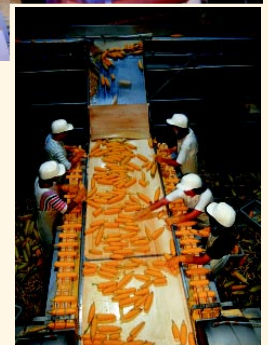
Forced Draft
Gas Fired
CL Series



Atmospheric
Gas Fired
K Series



Atmospheric
Gas Fired
F Series



Bryan Indirect Water Heaters

Heater Series	Model Number	Heater Capacity					Input Firing Rates			Approximate Shipping Weights (lbs)
		Output BTU/HR	Gallons Per Hour*				BTU's	Ft³ Nat Gas	Gallons Oil	
			80°-140°	60°-140°	40°-140°	40°-160°				
							Per Hour			
D SERIES (OIL FIRED) & F SERIES (GAS FIRED)	D/F-350-WT	280,000	559	420	336	-	350,000	350	2.5	650
	D/F-450-WT	360,000	720	540	432	-	450,000	450	3.2	750
	D/F-650-WT	520,000	1,039	780	624	-	650,000	650	4.6	950
	F-850-WT	680,000	1,359	1,020	816	-	850,000	850	NA	NA
CL SERIES	CL-75-WT	600,000	1,200	900	720	600	750,000	NA	5.4	1,950
	CL-90-WT	720,000	1,440	1,080	864	720	900,000	900	6.4	2,350
	CL-120-WT	960,000	1,920	1,440	1,152	960	1,200,000	1,200	8.6	2,600
	CL-150-WT	1,200,000	2,400	1,800	1,440	1,200	1,500,000	1,500	10.7	2,950
	CL-180-WT	1,440,000	2,880	2,160	1,728	1,440	1,800,000	1,800	12.9	3,400
	CL-210-WT	1,680,000	3,360	2,520	2,016	1,680	2,100,000	2,100	15.0	3,950
K SERIES	K-250-WT	2,000,000	4,000	3,000	2,400	1,999	2,500,000	2,500	NA	3,860
	K-300-WT	2,400,000	4,800	3,600	2,880	2,400	3,000,000	3,000	NA	4,270
	K-350-WT	2,800,000	5,600	4,200	3,360	2,799	3,500,000	3,500	NA	4,820
	K-400-WT	3,200,000	6,400	4,800	3,840	3,199	4,000,000	4,000	NA	5,220
RV SERIES	RV-250-WT	2,000,000	4,000	3,000	2,400	1,999	2,500,000	2,500	17.9	5,790
	RV-300-WT	2,400,000	4,800	3,600	2,880	2,400	3,000,000	3,000	21.4	6,690
	RV-350-WT	2,800,000	5,600	4,200	3,360	2,799	3,500,000	3,500	25.0	7,375
	RV-400-WT	3,200,000	6,400	4,800	3,840	3,199	4,000,000	4,000	28.6	8,100
	RV-450-WT	3,600,000	7,200	5,400	4,320	3,600	4,500,000	4,500	32.1	8,320
	RV-500-WT†	4,000,000	8,000	6,000	4,800	4,000	5,000,000	5,000	35.7	9,080
	RV-550-WT†	4,400,000	8,800	6,600	5,280	4,400	5,500,000	5,500	39.3	9,820
	RV-600-WT†	4,800,000	9,600	7,200	5,760	4,800	6,000,000	6,000	42.9	10,530
	RV-700-WT†	5,600,000	11,200	8,400	6,720	5,600	7,000,000	7,000	50.0	11,960
	RV-800-WT†	6,400,000	12,800	9,600	7,680	6,400	8,000,000	8,000	57.1	13,450

* Maximum outlet temperature for D and F series is 150°F; for CL, RV and K series, 160°. For outlet temperatures greater than those shown, consult factory.

† These units are equipped with two heat exchangers as standard and require a copper header to be field supplied.

Ordering Information

When ordering, please specify type of system (tank, tankless) initial and final water temperature, electrical requirements, altitude above sea level, optional equipment and special requirements.

If specifying a gas fired heater, also specify type of gas, BTU content, specific gravity and pressure available.

For multi-purpose systems (where unit is to be adapted to a number of water and space heating jobs), provide a complete description of requirements.

Standard equipment

Atmospheric gas fired models:

Indirect heat exchanger, temperature/pressure gauge, temperature control, high limit control, low water cutoff, primary gas valve, auxiliary gas valve, electric ignition, pilot safety control, gas pressure regulator, gas shutoff cock, boiler relief valve, heat exchanger relief valve, fill valve, drain cock, expansion tank and draft diverter or barometric damper. All equipment installed and wired.*

Forced draft gas, oil or dual fired models:

Indirect heat exchanger, temperature/pressure gauge, temperature control high limit control, low water cutoff, fill valve, heat exchanger relief valve, boiler relief valve, drain cock, expansion tank and complete burner assembly for specified fuel. All equipment installed and wired.*

* Except expansion tank and heat exchanger relief valve on certain models.

Optional equipment

Indirect heat exchanger sized for less than full heater output (allowing capacity for space heating or other split system applications), tempering valves, bronze circulating pumps and storage tanks.



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