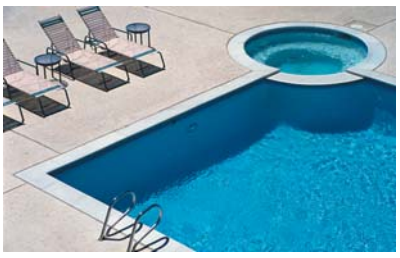
Form No. 640
(Rev.4/04)

Bryan "Flexible Water Tube"

Indirect Pool Heaters

350,000 to 8,000,000 BTUH
Atmospheric Gas Fired and Forced Draft Gas, Oil or Dual Fuel Fired

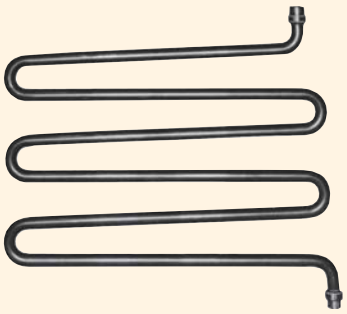
Atmospheric
Gas Fired
K Series



BRYAN BOILERS

Originators of the "Flexible Water Tube" design

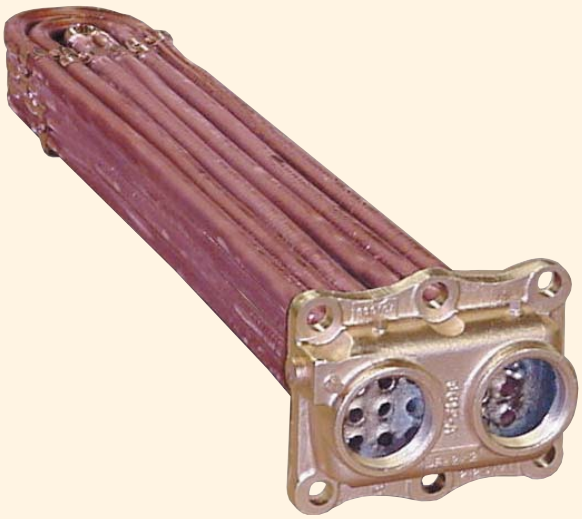
Bryan Indirect heating principal eliminates pool maintenance problems



Featuring Bryan's exclusive "Flexible Water Tube" design

Bryan Indirect Heat Exchanger

Robust heart of the Bryan Commercial Pool heater is the all-copper Heat Exchanger, which transfers heat from the hot primary water to the pool water as it flows through the exchanger. Since the exchanger coils are not subjected directly to the intense heat of the fire, but only to the hot water within the heater, there is no scale or corrosion problem.



Bryan Indirect Commercial Pool Heaters assure additional years of maintenance-free operation...even in areas where hard water creates real problems. This superior performance is made possible by an exclusive Bryan Indirect Heat Exchanger that confines primary water to a small circulating system embracing only the water tubes and the vessel proper. The water in this system never leaves the heater. Any natural minerals or scale it may contain are deposited early in the life of the heater — never enough to impair top efficiency of the heater. Following this initial deposit, it's like the heater was circulating distilled water—no further buildups. Pool water is circulated through the heat exchanger tubes where it is warmed indirectly by water maintained at constant temperature by the heater. Deposits seldom occur in this low temperature method of Bryan heating.

Same unit heats pool, domestic water and building — If you desire a domestic hot water supply, a second heat exchanger will be built into your Bryan Heater where thermostatic controls accurately govern the temperature of the water you draw. For space heating, water is circulated directly from the heater through your building's heating system.

Your pool temperature is always "just right" — The temperature you desire for your pool water is accurately regulated by a thermostatic control at the heater. It permits circulation at the temperature called for, regardless of external weather conditions.

Bryan commercial pool heater features

Scale-free — The Bryan Indirect Heat Exchanger eliminates costly periodic de-scaling. No buildup of scale means no buildup of fuel costs.

Condensation-free — Bryan Indirect Heaters operate at desirable water temperatures, completely independent of pool water temperatures or circulation rates, thus eliminating damaging condensation.

Corrosion-free — Pool water touches only the all-copper Heat Exchanger, and at low temperatures, thus eliminating build-up of solids.

Open circulation — No thermostatic tempering valves or restricting bypass valves to lower filtration rate.

Economical — Time-proven for low maintenance, trouble-free, continuous service, high efficiency.

Fully approved — Bryan Indirect Heaters are designed and built to the requirements of the ASME Code.

Economical, maintenance-free, continuous service, high efficiency and trouble-free

The maintenance-free design of the Bryan Indirect Pool 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:

- School Pools
- Municipal Pools
- Motel Pools
- YMCA Pools
- Private Residence Pools
- Camp Pools
- Apartment Pools
- Hotel Pools
- Swim Club Pools
- Military Pools
- Country Club Pools

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

- pool heating and space heating
- pool heating domestic hot water and space heating
- pool heating, space heating and snow melting

Forced Draft
Gas Fired
CLM Series

Forced Draft
Gas Fired
RV Series

Atmospheric
Gas Fired
F Series

Bryan Indirect Pool Heaters

Heater Series	Model Number	Heater Output MBH	Pool Heater Sizing				Input Firing Rates			Approximate Shipping Weights (lbs)
			Surface Area Method			Time Rise Method	BTU's	Ft³ Nat Gas	Gallons Oil	
			Pool Surface Area Sq. Ft.	Pool Size W x L ft.	Water vs Air Temp.	Pool Gallonage (Approx.)	Per Hour			
F SERIES (Atmospheric)	F350-WP	280	576	16 x 36	40°F	23,000	350,000	350	NA	620
	F450-WP	360	720	18 x 40	40°F	30,000	450,000	450	NA	765
	F650-WP	520	1,000	20 x 50	40°F	40,000	650,000	650	NA	890
	F850-WP	680	1,500	25 x 60	40°F	60,000	850,000	850	NA	1,155
DR SERIES (Forced Draft)	DR350-WP	280	576	16 x 36	40°F	23,000	350,000	350	2.5	1,150
	DR450-WP	360	720	18 x 40	40°F	30,000	450,000	450	3.2	1,250
	DR650-WP	520	1,000	20 x 50	40°F	40,000	650,000	650	4.6	1,750
	DR850-WP	680	1,500	25 x 60	40°F	60,000	850,000	850	6.1	1,850
CLM SERIES (Atmospheric or Forced Draft)	CLM120-WP	960	1,800	30 x 60	40°F	84,000	1,200,000	1,200	8.6	3,200
	CLM150-WP	1,200	2,250	30 x 75	40°F	92,000	1,500,000	1,500	10.7	3,600
	CLM180-WP	1,440	3,000	40 x 75	40°F	123,000	1,800,000	1,800	12.9	4,050
	CLM210-WP	1,680	3,465	42 x 80	40°F	137,000	2,100,000	2,100	15.0	4,475
	CLM240-WP	1,920	4,050	45 x 90	40°F	143,000	2,400,000	2,400	17.1	4,900
	CLM270-WP	2,160	5,000	50 x 100	40°F	160,000	2,700,000	2,700	19.3	5,525
	CLM300-WP	2,400	6,000	60 x 100	40°F	184,000	3,000,000	3,000	21.4	5,930
K SERIES (Atmospheric)	K350-WP	2,800	6,600	60 x 110	40°F	217,000	3,500,000	3,500	NA	4,770
	K400-WP	3,200	7,560	63 x 120	40°F	250,000	4,000,000	4,000	NA	5,180
	K450-WP	3,600	8,400	70 x 120	40°F	275,000	4,500,000	4,500	NA	5,910
	K500-WP†	4,000	9,750	75 x 130	40°F	320,000	5,000,000	5,000	NA	6,310
	K550-WP†	4,400	12,000	75 x 160	40°F	400,000	5,500,000	5,500	NA	6,800
	K600-WP†	4,800	13,200	80 x 165	40°F	445,000	6,000,000	6,000	NA	7,170
	K650-WP†	5,200	14,000	80 x 175	40°F	490,000	6,500,000	6,500	NA	7,670
RV SERIES (Forced Draft)	RV350-WP	2,800	6,600	60 x 110	40°F	217,000	3,500,000	3,500	25.0	7,375
	RV400-WP	3,200	7,500	63 x 120	40°F	250,000	4,000,000	4,000	28.6	8,100
	RV450-WP	3,600	8,400	70 x 120	40°F	275,000	4,500,000	4,500	32.1	8,320
	RV500-WP†	4,000	9,750	75 x 130	40°F	320,000	5,000,000	5,000	35.7	9,080
	RV550-WP†	4,400	12,000	75 x 160	40°F	400,000	5,500,000	5,500	39.3	9,820
	RV600-WP†	4,800	13,600	80 x 165	40°F	490,000	6,000,000	6,000	42.9	10,530
	RV700-WP†	5,600	14,800	80 x 185	40°F	575,000	7,000,000	7,000	50.0	11,960
	RV800-WP†	6,400	15,000	100 x 150	40°F	600,000	8,000,000	8,000	57.1	13,450

** Maximum outlet temperature for F series is 150°F; for DR, CLM, K and RV 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.

Bryan Indirect Pool Heaters Standard and Optional Equipment

STANDARD EQUIPMENT:

Indirect heat exchanger, combination thermometer and pressure gauge, ASME-rated boiler relief valve, water temperature control (240°F max. std.), high limit control, probe LWCO, pool water temperature controller, expansion tank, fill and stop valve.

Atmospheric equipment

Electronic combustion safety control, automatic operating gas valve, safety gas valve, pilot solenoid valve, electric ignition assembly, main manual gas shut-off valve, pilot shut-off valve, pilot and main gas pressure regulators, draft controller, all controls installed and wired standard voltage 120/1/60.

Forced Draft Equipment

Straight oil fired unit Electronic combustion safety control, oil valve, oil ignition transformer, two-stage fuel unit, direct spark ignition, oil nozzle assembly, control panel, all controls installed and wired.

Combination gas-oil unit Electronic combustion safety control, 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, manual fuel selector switch, oil valve, gas pilot for both fuels, two-stage fuel unit, oil nozzle assembly, control panel, all controls installed and wired.

Straight gas fired unit Electronic combustion safety control, 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.

OPTIONAL EQUIPMENT:

1. Manual reset high limit control
2. Manual reset low water cutoff
3. Auxiliary low water cutoff
4. Combination low water cutoff and feeder
5. Alarm bells or horns
6. CSD-1, FM, IRI or other insurance approved control systems
7. Indicating lights, as desired
8. Lead-lag systems for two or more boilers with or without outdoor reset control
9. Draft control system

When ordering, please specify:

1. Boiler size
2. Supply and return temperatures required
3. Boiler relief valve setting
4. Type of fuel: natural, LP, or other gas and/or No. 2 oil
5. If gas, type, BTU content, specific gravity and pressure available
6. Electric power voltage, phase and frequency
7. Optional extra equipment or construction
8. Special approvals required (UL, CSD-1, FM, or IRI)
9. Altitude

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