



LOW NO_x PREMIX TECHNOLOGY

Industrial Packaged Bent Water Tube Steam Boilers
with Heavy Duty Metal Fiber Burners
Gas Fired 70-150 HP - Models 70L-150L

ADVANTAGES

The purchase of a Parker Boiler assures not only the ultimate in quality and safety but also a complete ready to install packaged unit, including trim with boiler controls, electrically wired, ready to connect to the utilities. Every boiler is thoroughly factory fired tested.

1. Safety

Our ASME tube bundle is extremely flexible and offers a long life with a 25 year warranty against thermal shock. No Parker Boiler has ever been known to experience an internal explosion.

2. Low NO_x System

Parker was the first manufacturer to achieve SCAQMD Rule 1146.2 NO_x Certification. Initial installations began in 1991 and to date thousands of Low NO_x boilers are on-line providing reliable operation for our customers.

3. Durable Low NO_x Burners

Parker heavy duty premix metal fiber burners not only provide the lowest emissions possible but also provide long durable service life.

4. VFD/Premix System

Parker's fully modulating variable speed low NO_x burner systems offer digital electronic set point control, VFD blower for reduced electrical energy usage, precise fuel/air ratio control with no linkages, cams or FGR valves.

PARKER BOILER CO.

5930 Bandini Boulevard
Los Angeles, CA 90040
Tel (323) 727-9800
Fax (323) 722-2848
www.parkerboiler.com

BROCHURE 105L 0E7

Parker 150 HP Steam Boiler with Low NO_x Burner System



5. Low Emission

Extremely LOW NO_x & CO levels are attained by our Premix Burner System. NO_x levels below 20 PPM at 3% O₂ and CO levels below 100 PPM are easily obtained, assured & repeated in numerous applications. Many 12 PPM units are on line with special burners.

6. Low-Cost Operation

The staggered tubing design provides a multi-baffled heating surface to increase efficiency.

7. Fast Heat-Up

The boiler requires less than ten minutes to heat up to 100 PSI from a cold start which saves a considerable amount of time and fuel.

8. Large Heating Surface

A large amount of heating surface provides increased efficiency & minimizes chances of scaling. Compare ours to the competition.

9. Internal Accessibility and Inspection

Full length cabinet doors can be easily removed in a matter of minutes, making the internal boiler, drum, tubes, and burners readily accessible. Easy-to-remove gasketed inspection plugs are provided at both ends of every tube. Boiler inspections can be accomplished quickly and at low costs.

10. Ease of Inspection and Repair

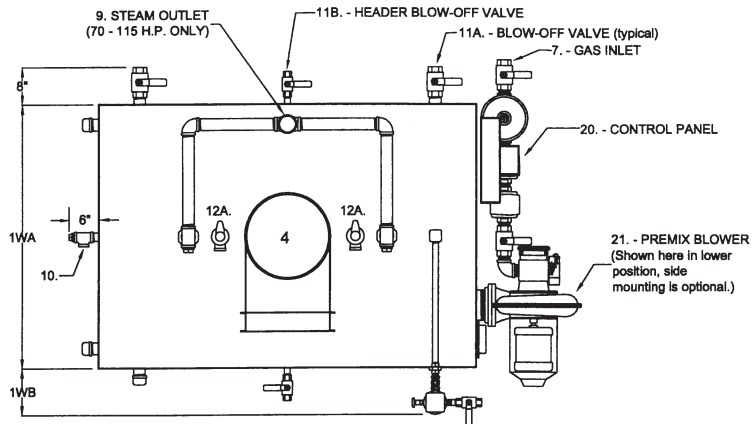
Any boiler may eventually require retubing depending on care and operating conditions. The Parker is designed with sectional tubes attached by unions so that sections can be easily and inexpensively replaced through the cabinet doors with minimum downtime. Retubing does not require special tools, skills or welding as is necessary on most boilers designed with rolled tubes.



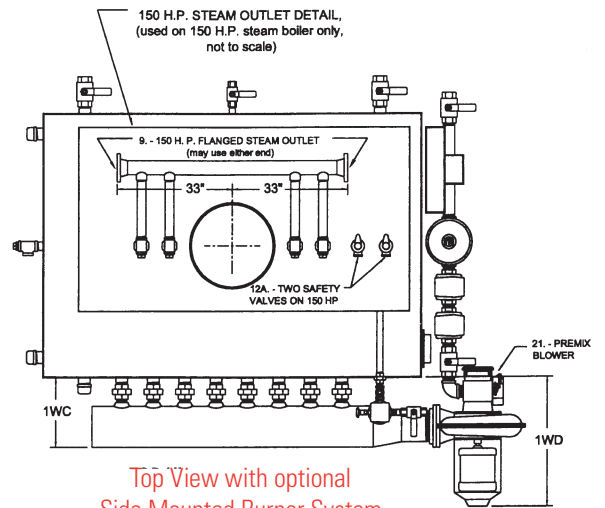
"Never a Compromise for Quality or Safety"



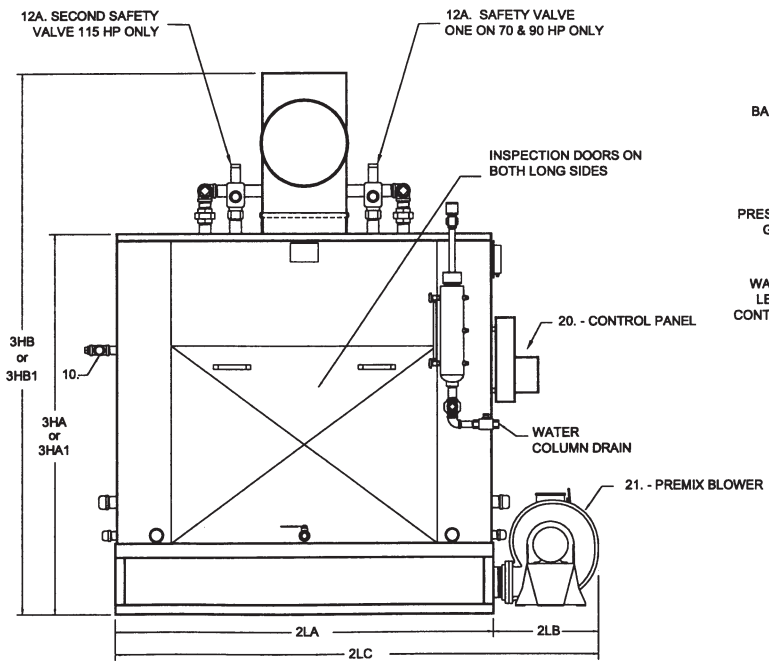
PARKER 70-150 HP LOW NOX STEAM BOILERS - MODELS 70L-150L



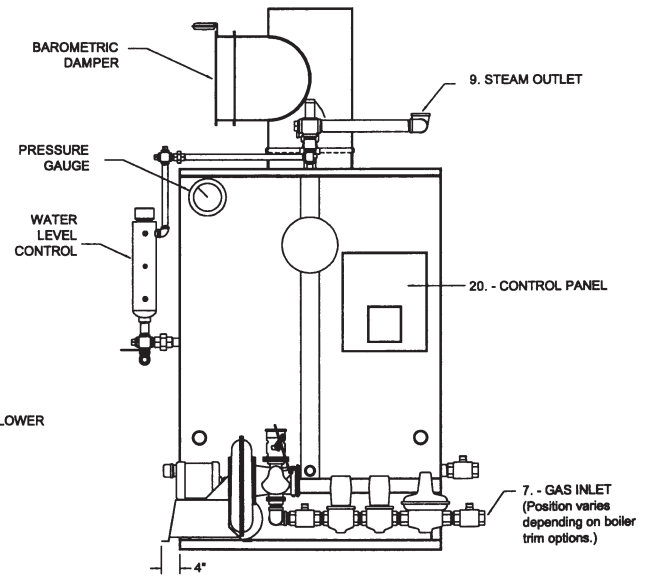
Top View



Top View with optional Side Mounted Burner System

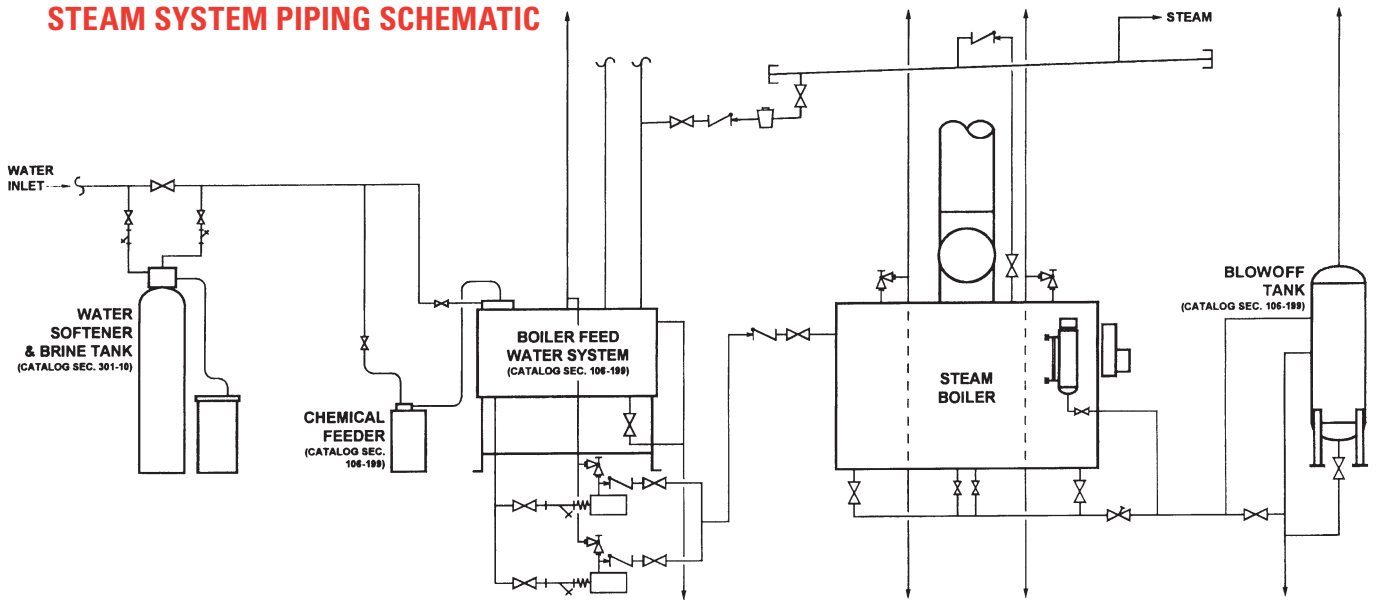


Side View



End View

STEAM SYSTEM PIPING SCHEMATIC



PARKER STEAM BOILERS WITH PREMIX METAL FIBER BURNER SPECIFICATION SHEET
PARKER LOW NO_x STEAM BOILERS Gas Fired 70-150 HP – Models 70L-150L

NO	ITEM	Model No.	70L	90L	115L	150L
C	EQUIVALENT BOILER HORSEPOWER*	Horsepower	70	90	115	150
A	BTU INPUT - IN 1,000 BTU	1000s BTU/HR	2940	3780	4830	6300
B	BTU OUTPUT - IN 1,000 BTU*	1000s BTU/HR	2345	3015	3853	5025
D	RATED STEAM CAPACITY FROM AND AT 212°F	LB/HR	2415	3105	3968	5175
E	HEATING SURFACE	SQ/FT	349	456	593	793
Note: High Efficiency (84%) Models designated "LR" are available: Entails addition of Heat Reclaimer (see Bulletin 122-HR)						
1WA	WIDTH OF CABINET	IN.	55			
1WB	WIDTH OF WATER COLUMN (BEYOND CABINET)	IN.	10.5			
1WC	WIDTH OF PREMIX MANIFOLD (SIDE MANIFOLD, BEYOND CABINET)	IN.	19	22		
1WD	WIDTH OF PREMIX BLOWER (SIDE MANIFOLD, BEYOND CABINET)	IN.	28	31		
2LA	LENGTH OF CABINET	IN.	79	97	115	155
2LB	LENGTH OF BLOWER BEYOND CABINET	IN.	24			30
2LC	OVERALL LENGTH	IN.	103	121	139	185
3HA	HEIGHT OF CABINET (BOTTOM MANIFOLD)	IN.	82.25			
3HB	HEIGHT OVERALL (BOTTOM MANIFOLD)**	IN.	117.25	123.25		
3HA1	HEIGHT OF CABINET (SIDE MOUNTED BURNER SYSTEM)	IN.	72.25			
3HB1	HEIGHT OVERALL (SIDE MOUNTED BURNER SYSTEM)**	IN.	107	113		
4	VENT STACK DIAMETER (BAROMETRIC DAMPER)	IN.	18	20	22	26
7A	STD NAT. GAS INLET SIZE (Inlet Press.: 7" W.C., Min. 14" W.C. Max.)	IN.	2	2-1/2	NA	NA
	LPG GAS INLET SIZE (Inlet Press.: 11" W.C., Min. 14" W.C. Max.)	IN.	2	NA	NA	NA
7B	STD HIGH PRESS. NAT. GAS OR HIGH PRESS. LPG GAS INLET SIZE/SUPPLY PRESS. 1-5 PSI	IN.	1-1/2	1-1/2	2	2
9HP	STEAM OUTLET SIZE HI PRESS. 60-250 PSI	IN.	2-1/2		3	3 FLG
9LP	STEAM OUTLET SIZE LOW PRESS. 15 PSI OR LESS. – SPECIAL ORDER	IN.	5 FLG		6 FLG	
10	WATER INLET SIZE	IN.	1-1/2			
11A	BLOWOFF VALVE SIZE ***	IN.	(2) 2			
11B	HEADER BLOW-OFF VALVE SIZES ***	IN.	(2) 1			
12A HP	SAFETY VALVE DRAIN SIZE - HIGH PRESS - 100 PSI - STANDARD	OUTLET IN.	(1)2	(1)2	(2)2	(2)2
12A LF	SAFETY VALVE DRAIN SIZE - HIGH PRESS - 15 PSI ("H" STAMP) SPECIAL ORDER	OUTLET IN.	(1)2-1/2	(1)2	(2)2	(2)2
18	WATER COLUMN DRAIN SIZE	IN.	1"			
F	NET WEIGHT BOILER (APPROX)	LBS.	5800	7000	8500	11000
G	DOMESTIC CRATED SHIPPING WEIGHT (APPROX)	LBS.	6200	7600	9300	12300
H	WATER CONTENT	GALLONS	105	125	149	250
20A	POWER SPECIFICATIONS (3 SEPARATE SERVICES REQUIRED FOR BLOWER & PUMPS), STARTERS PROVIDED ON PANEL FOR BLOWER & PUMPS					
20B	BOILER FEED PUMPS (2 STANDARD), HP, VOLTAGE & PHASE DEPENDS ON BOILER PRESSURE (See Parker Spec. Sheet D-106-C)					
20C	CONTROLS 115V - 1PH - 60 HERTZ (TRANSFORMER PROVIDED)	AMPS	5			
21	PREMIX BLOWER HORSEPOWER (3 PHASE)	HORSEPOWER	2	3	5	5

MINIMUM LISTED CLEARANCES TO COMBUSTIBLE CONSTRUCTION	12" cabinet sides and rear	48" cabinet top	12" Baro Damper Chimney Connector
Recommended Clearances for Access: Inspection doors 18" (One inspection door must be 38" for tube removal); Controls 24"; Electrical Panel 30"; Additional space may be required by Local Codes.			

Note: All of the above dimensions are for a standard trim model. Due to continuous improvements, specifications are subject to change without notice.

* All ratings based on feed water at 212°F and steam at 0 PSIG

** Barometric Damper "Tee on Run" option is available to lower overall height.

*** Pre-Piped to slow open blowoff valve connection if MAWP is over 100 PSI

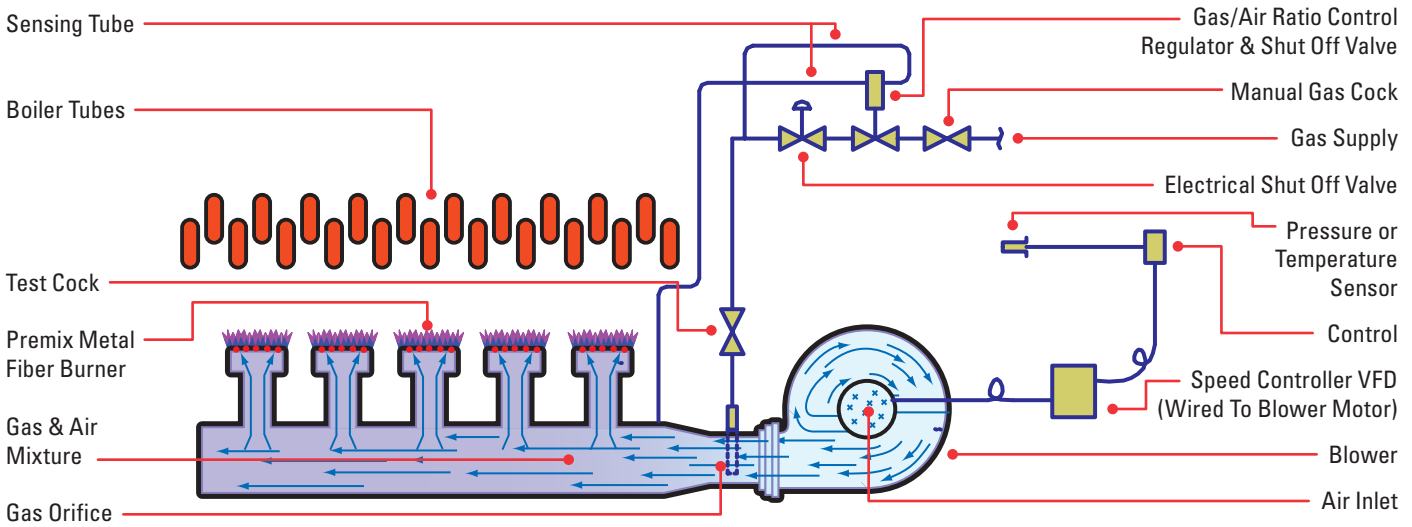
LOW NO_x PREMIX TECHNOLOGY

Industrial Packaged Bent Water Tube Steam Boilers
with Heavy Duty Metal Fiber Burners

Gas Fired 70-150 HP - Models 70L-150L



Parker's Premix Combustion System



ADVANTAGES

The Parker System consists of a burner bed of Heavy Duty Metal Fiber Burners (MFB). Through a gas/air premix manifold, the burners are linked to a fully modulating blower mixer which offers precise control of combustion through the full range of modulation.

11. Heavy Duty Tubes

Parker tubes are 1-5/16" O.D. 1/8" thick steel, which is heavier than standard gauge boiler tubing. Each tube is double-welded to assure a rugged connection.

12. Dry Steam

Our large horizontal steam drum provides ample steam release area to assure dry steam delivery. No steam separators are required.

13. Codes

All Boilers are built in accordance with the ASME Power & Heating Boiler Codes, Sections I & IV. Boilers above 15 PSI are furnished with the "S" Stamp and Trim. Boilers for 15 PSI are normally furnished with the "H" Stamp and Trim. All Boilers are inspected and registered with the National Board of Boiler and Pressure Vessel Inspectors.

All individual gas and electrical controls are CSA Certified or UL Listed.

All Low NO_x gas fired models are ETL Listed as "Industrial and Commercial Gas Fired Packaged Boilers" and certified to UL795. All units are provided with trim and controls to meet ASME CSD-1 standards for "Controls & Safety Devices for Automatically Fired Boilers". In addition, all units also meet the standards of the International Conference of Building

Officials, the International Association of Mechanical & Plumbing Officials and the Uniform Mechanical Code.

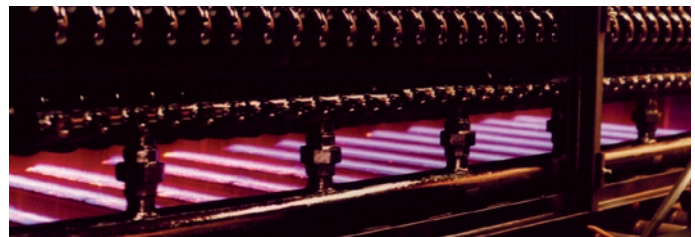
14. Even Heat Distribution

Unlike Conventional Power Burner Technology, the burner bed provides a uniform heat distribution on all boiler tubes for improved heat transfer and boiler efficiency. Uniform heat over the entire

heating surface at high, low and modulating firing rates provides longer tube life by eliminating concentrated firing on limited tube surface.

15. Low Maintenance, Simple Adjustment

The simplicity of the System with no FGR fan or valve, allows normal boiler operators to adjust and service the System.



Pictured above is a view through one of the large inspection doors of our 150L model. You can see the Low NO_x Metal fiber burners firing under our sectional tubes providing even heat distribution to the entire heating surface.



"Never a Compromise for Quality or Safety"

PARKER BOILER CO.
5930 Bandini Boulevard
Los Angeles, CA 90040
Tel (323) 727-9800
Fax (323) 722-2848
www.parkerboiler.com

BROCHURE 105L 0E7