



150 PSI High Pressure Steam Boilers Atmospheric / Natural Gas Fired

PRODUCT DESCRIPTION

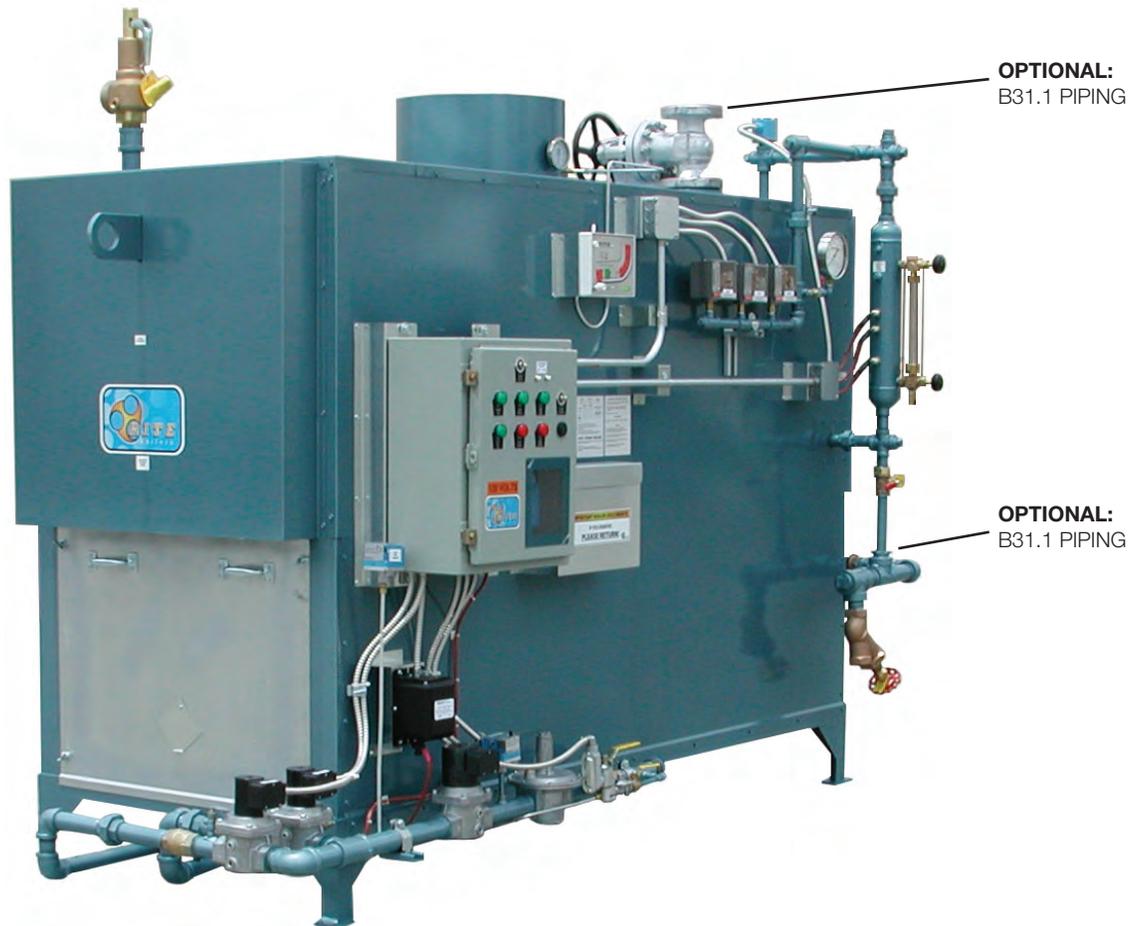
Rite Atmospheric Natural Gas Fired High Pressure Steam Boilers have been providing our valued customers with high quality steam safely and reliably for over forty years. From autoclaves to medical centers, food processing to industrial process manufacturing – these heavy-duty watertube steamers are available in 16 different models, ranging from 398 – 10,456 MBH input (9.5 – 250 Boiler Horsepower) for the widest selection possible.

So simple to maintain and operate, Rite Steam Boilers feature **complete waterside access** so that virtually all scale and mud deposits can be seen and mechanically cleaned during a single scheduled maintenance shutdown. The result – **Better fuel-to-steam efficiency and lower operating cost over the life of your boiler investment.** Consider a few of our other standard features: Rite's floating heads that eliminate pressure vessel cracks and broken welds caused by thermal stress cycling (backed by our **25 Year Thermal Shock Warranty**), Rite's "superheated" drying tubes that regularly boost steam quality at the nozzle into the 99%+ range, Rite's cast iron burners for whisper quiet operation and you have a better boiler by design.

RITE ATMOSPHERIC BURNER FEATURES

Rite Atmospheric Boilers are an excellent choice when: Low NOx emissions are not required, natural gas will be the only fuel used, the installation is indoors (See our line of weatherproof models for outdoor applications), and when lower combustion efficiencies at less than full firing rate are acceptable.

Atmospheric burners are far less expensive than power burners, so when the above criteria is met, then Atmospherics are a strong economical alternative to Rite's outstanding line of power burner fired steam boilers. Other factors favoring Atmospherics are: Extremely low electrical power consumption (no energy hogging fan motors), Rapid start-up on demand (No pre or post purge fan cycles), Lighter weight, Lower height.





High Pressure Steam Boilers / Atmospheric 150 PSI Models & Ratings / Natural Gas Fired

STACK / DRAFT REQUIREMENTS

- UL listed for use with Type B Vent.
- Minimum stack height including Draft Control is 10 feet.
- The stack should be supported independently of the boiler and an adjustable length section of stack should be installed after the draft control to allow for future separation. All Rite Boilers have internal stack supports to handle the weight of the stack during installation.
- Boilers with barometric damper draft control should draft between $-.05''$ to $-.09''$ W.C. when firing. Boilers with draft diverters will draft between $-.02''$ to $-.04''$ W.C.
- A draft gauge is installed on all boilers equipped with barometric dampers to help set and maintain the draft.

AIR REQUIREMENTS

Adequate Combustion/Ventilation Air is vital for safe, efficient operation. Refer to the latest edition of the Uniform Mechanical Code or consult your local Building and Safety Department for specific requirements.

Warning: Do not install in a room that will develop negative pressure without utilizing a properly sized induced draft fan.

ELECTRICAL REQUIREMENTS

- A 120/60/1 15 amp supply is required to boiler-burner circuit.
- Separate electrical supply may be required to operate boiler feed pump.

NATURAL GAS SUPPLY REQUIREMENTS

(STATIC AND AT FLOW)

- Models P9.5 - P15 6" w.c. min. to 14" w.c. max.
- Models P20 - P75 7" w.c. min. to 28" w.c. max.
- Model P100 8" w.c. min. to 28" w.c. max.
- Models P125 - P175 15" w.c. min. to 28" w.c. max.
- Models P200 - P250 20" w.c. min. to 28" w.c. max.
- For other gas pressures, consult factory or your Rite Representative.
*Propane Supply Requirements: 11" w.c. min. to 14" w.c.

ELEVATION DERATION

Ratings given below are for elevations up to 2000 feet. Above 2000 feet, ratings should be reduced at the rate of 4% for every 1000 feet above sea level.

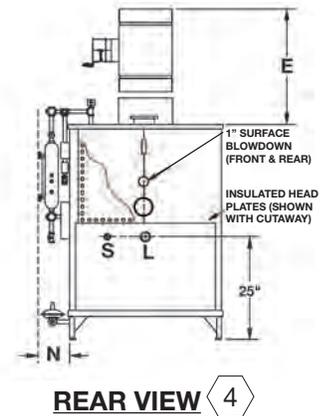
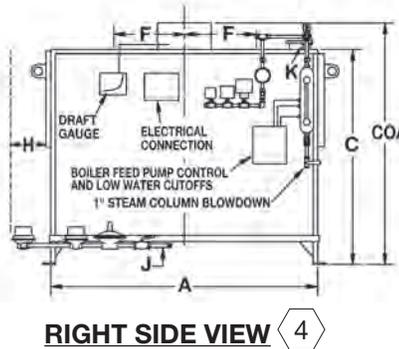
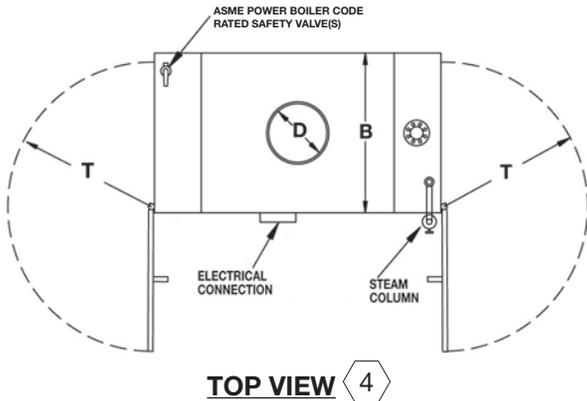
FEEDWATER SYSTEMS & BLOWDOWN TANKS

Rite manufactures a complete line of Condensate Return Feedwater Tanks and Blowdown Tanks for our Steam Boilers shown below.

BOILER MODEL	Input MBH	Nominal Output		E.D.R.	Heating Surface Sq. Ft.	Flooded Water Content Gallons	Normal Water Level Content Gallons	Pounds of Steam per Hour @ 212 F	Nominal Shipping Weight (lbs)
		MBH	Boiler Horsepower						
P9.5	398	318	9.5	1325	65	35	27	328	2230
P10	419	335	10	1745	65	35	27	345	2230
P15	628	502	15	2616	85	40	31	518	2460
P20	838	670	20	3491	105	45	35	690	2690
P25	1046	837	25	4358	115	65	53	863	3540
P35	1465	1172	35	6104	156	85	62	1208	4020
P48	1950	1560	48	8125	214	100	73	1656	4630
P50	2093	1674	50	8720	214	100	73	1725	4630
P75	3139	2511	75	13079	349	15	120	2588	8500
P100	4185	3348	100	17437	460	175	140	3450	9700
P125	5230	4184	125	21791	571	195	160	4313	11300
P150	6276	5021	150	26150	733	280	220	5175	16200
P175	7323	5858	175	30512	851	320	250	6038	17800
P200	8369	6695	200	34870	969	360	280	6900	19200
P225	9425	7540	225	39270	1020	390	300	7763	20300
P250	10456	8365	250	43566	1125	420	320	8625	21500



High Pressure Steam Boilers / Atmospheric 150 PSI Models & Dimensions / Natural Gas Fired



- DIMENSIONS ARE IN INCHES - SUBJECT TO PRODUCTION TOLERANCES AND CHANGE WITHOUT NOTICE. CERTIFIED DIMENSIONS AVAILABLE UPON REQUEST.
- BOILERS APPROVED FOR INSTALLATION ON NON-COMBUSTIBLE FLOORS ONLY.

- ① Draft Diverters are supplied standard on Models P9.5 - P25 only. Barometric Dampers will be shipped one size smaller than **D** dimension for stacks up to 25 feet of vertical height (as shown below in column **E**), full size (same as **D** dimension) for stacks 25 to 50 feet tall and one size larger for stacks over 50 feet tall. Barometric Damper Tee by others.
- ② May vary - sizes shown are for UL gas trains at standard supply pressures. Gas connections are male NPT pipe thread. All other threaded connections are female NPT.
- ③ 1-1/2" and 2-1/2" connections are Female NPT. 4" and 6" flanges are ANSI 300 lb. SA-105 raised face. Flanged outlets may be reduced upon special request and/or supplied ANSI 150 lb SA-105 raised face.
- ④ Standard right hand construction shown illustrated above. Left hand construction available at no extra charge.
- ⑤ "T" dimension required only when hinged headplates are optionally supplied.

BOILER MODEL	A	B	C	COA	D	E ①	F	H	J ②	K ③	L	N	S	T ⑤
	Length Jacket	Width Jacket	Height Flush	Height Overall	Stack Dia.	Draft Control (Space Req'd.)	Twin Stacks	Tube Maint.	Gas Conn.	Steam Supply	Feed Water	Side Space	Blow Down	Head Swing
P9.5	44	31	65	74	9	9 D.D. (33)	-	37	3/4	1 1/2	1	10	1	24
P10	44	31	65	74	9	9 D.D. (33)	-	37	3/4	1 1/2	1	10	1	24
P15	54	31	65	74	10	10 D.D. (34)	-	47	1	1 1/2	1	12	1	24
P20	64	31	65	74	12	12 D.D. (36)	-	57	1	1 1/2	1	12	1	24
P25	56	39	66	75	14	14 D.D. (38)	-	46	1	2 1/2	1	12	1 1/2	32
P35	70	39	66	75	16	14 BARO	-	60	1 1/4	2 1/2	1	12	1 1/2	32
P48	90	39	66	75	18	16 BARO	-	80	1 1/2	2 1/2	1	14	1 1/2	32
P50	90	39	66	75	18	16 BARO	-	80	1 1/2	2 1/2	1	14	1 1/2	32
P75	89	53	71	80	20	18 BARO	-	75	2	4 FL	1 1/2	14	1 1/2	CONSULT FACTORY
P100	111	53	71	80	22	20 BARO	-	97	2	4 FL	1 1/2	14	1 1/2	
P125	133	53	71	80	24	20 BARO	-	119	2 1/2	4 FL	1 1/2	16	1 1/2	
P150	124	75	75	84	28	24 BARO	-	109	2 1/2	6 FL	1 1/2	16	2	
P175	139	75	75	84	30	28 BARO	-	124	2 1/2	6 FL	1 1/2	16	2	
P200	154	75	75	84	2-24	(2) 20 BARO	30	139	2 1/2	6 FL	1 1/2	18	2	
P225	165	75	75	84	2-24	(2) 20 BARO	32	150	2 1/2	6 FL	1 1/2	18	2	
P250	176	75	75	84	2-26	(2) 24 BARO	35	161	2 1/2	6 FL	1 1/2	18	2	