

88™ Series 2 Commercial Boiler
Weil-McLain®



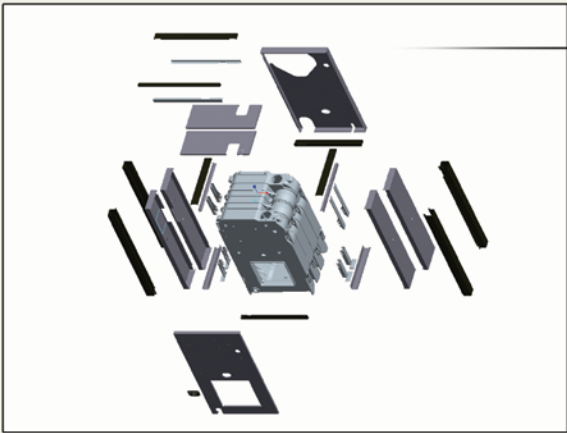
Gas, Oil & Gas/Oil
Water or Steam
MBH: 996-5,845
Combustion Eff.: Up to 87.5%

- **Up to 85.7% Thermal Efficiency**
- **Water or Steam**
- **Gas, Oil or Gas/Oil**
- **Complies to LEED**
- **Packaged or Knock-down**



WEIL-McLAIN®
www.weil-mclain.com





NEW Jacket design:

- Modular jacketing and toolless jacket panels for easy access
- 3 inches of insulation to minimize jacket losses, maximizing thermal efficiencies
- Modular side panels for ease of assembly
- High temperature site glass grommets
- Part number labels on all components for easy assembly

NEW Efficiencies!

- 85.7% Thermal Efficiencies (see ratings)
- HXT-bars optimize heat transfer



NEW clean-out plates:

- ¼ inch thick solid steel plates
- Coated Woven Fiberglass reusable gasket
- Reusable - cleaning after cleaning

Backwards Compatible:

- Can use up to 50% Series 2 iron on a Series 1 block without consulting Weil-McLain® – no need to stock both!

Standard Equipment

All Boilers:

- ASME 80 PSI rated cast iron sections
- Insulated steel jacket
- Power burner for light oil, gas or gas/light oil (except H-XX88)
- Burner mounting plate with refractory (except H-XX88)
- Cast iron flue collar with built-in breaching damper
- Observation ports on front and back sections
- Cleanout plates with reusable gaskets
- Flue brush
- HXT-bars
- 3 inches of insulation (except front panel)

Water Boilers

- 30 PSI ASME relief valve
- Combination high limit and low limit with manual reset control
- Combination pressure/temperature gauge
- Nipple and 5" x 6" reducing coupling (1288 – 1888 boilers only)
- Built-in air eliminator

Steam Boilers

- 15 PSI ASME safety valve side outlet
- Low limit and high limit pressure controls
- Steam pressure gauge siphon
- Gauge cocks, glass and guards

Optional Equipment

- Factory assembled sections
- Burner mounting plate with refractory for "H" units
- Intermediates with tankless heater opening
- Tankless heaters for domestic hot water (water or steam boilers)
- Tankless heater opening cover plates
- Low water cutoffs
- Barometric dampers
- Side inspection tappings with plugs – 2 per section
- Dual-range manometer
- Optional burners and burner controls

Ratings

Model	I=B=R			I=B=R Net Rating				Flue Outlet (Dia)	Combustion Efficiency		Thermal Efficiency	
	Oil Input GPH	Gas Input MBH	Gross Output MBH	Steam MBH	Steam Sq. Ft.	Water MBH	Boiler H.P.		OIL	GAS	OIL	GAS
488R®	6.9	996	827	620	2,583	719	24.7	10 in.	87.5	84.8	85.6	83.1
488®	7.0	1,010	839	629	2,621	730	25.1	10 in.	87.5	84.8	85.6	83.1
588®	9.4	1,356	1,126	845	3,521	979	33.6	10 in.	87.0	84.4	85.6	83.1
688®	11.8	1,701	1,413	1,072	4,469	1,229	42.2	10 in.	86.7	84.1	85.6	83.1
788®	14.2	2,046	1,700	1,311	5,463	1,478	50.8	12 in.	86.5	83.9	85.6	83.1
888®	16.6	2,382	1,987	1,543	6,427	1,728	59.4	12 in.	86.3	83.7	85.6	83.1
988R®	17.2	2,482	2,062	1,601	6,671	1,793	61.6	14 in.	86.2	83.7	85.6	83.1
988®	18.8	2,737	2,274	1,766	7,358	1,977	67.9	14 in.	86.2	83.7	85.6	83.1
1088R®	20.0	2,887	2,399	1,863	7,763	2,086	71.7	14 in.	86.2	83.6	85.6	83.1
1088®	21.5	3,082	2,561	1,988	8,283	2,227	76.5	14 in.	86.2	83.6	85.6	83.1
1188®	23.5	3,428	2,848	2,211	9,213	2,477	85.1	14 in.	86.1	83.5	85.7	83.1
1288®	26.0	3,773	3,135	2,434	10,147	2,726	93.7	14 in.	86.0	83.5	85.7	83.1
1388®	28.5	4,119	3,422	2,657	11,071	2,976	102.2	14 in.	86.0	84.4	85.7	83.1
1488®	31.0	4,464	3,709	2,880	12,000	3,225	110.8	16 in.	86.0	83.4	85.7	83.1
1588	33.0	4,809	3,996	3,102	12,925	3,475	119.4	16 in.	85.9	83.3	85.7	83.1
1688R	34.5	4,979	4,137	3,212	13,383	3,597	123.6	16 in.	85.9	83.3	85.7	83.1
1688®	35.5	5,155	4,283	3,325	13,854	3,724	127.9	16 in.	85.9	83.3	85.7	83.1
1788®	38.0	5,494	4,570	3,548	14,783	3,974	136.5	18 in.*	85.9	83.3	85.7	83.1
1888®	40.5	5,845	4,857	3,771	15,713	4,123	145.1	18 in.*	85.9	83.3	85.7	83.1

- Burner input based on maximum of 2,000 ft. altitude - for higher altitudes consult Weil-McLain® representative.
- No.2 Fuel oil - Commercial Standard Spec. CS75-56. Heat value of oil - 140,000 BTU/G.
- Stack gas volume at outlet temperature
- With 0.10" WC positive pressure at flue collar.
- Consult Burner Specification Sheets for gas pressure required.
- Gross I=B=R ratings have been determined under the I=B=R provision governing forced draft boiler-burner units
- Net I=B-Ratings are based on net installed radiation of sufficient quantity for the requirements of the building and nothing need be added for normal piping and pick-up. Water ratings are based on a piping and pick-up allowance of 115. Steam ratings are based on the following allowances: 488 and 588 - 1333; 688 - 1323; 788 - 1300; 888 - 1289; and 988 through 1888 - 1288. An additional allowance should be made for gravity hot water systems or for unusual piping and pick-up loads. Consult Weil-McLain® representative.
- Flue collar connection is oval, 16 1/8" x 19 7/8"



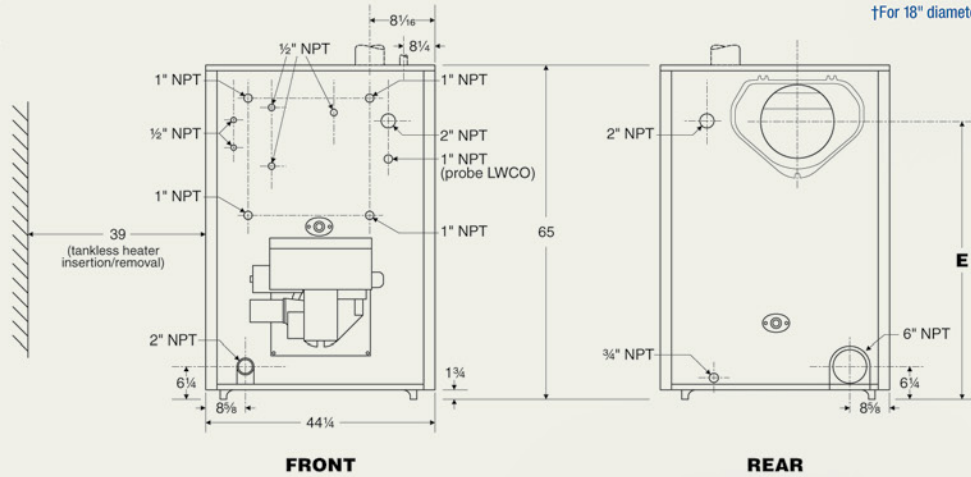
Dimensions (inches)								
Model	A	B	C	D	E	L	W	H
488®	23	—	—	10	54 ¾	34 ¾	30	23 ¾
588®	31	—	—	10	54 ¾	42 ¾	38	31 ¾
688®	39	—	—	10	54 ¾	50 ¾	46	39 ¾
788®	47	—	—	12	53 ¾	58 ¾	54	47 ¾
888®	55	—	—	12	53 ¾	66 ¾	62	55 ¾
988®	63	—	—	14	52 ¾	74 ¾	70	63 ¾
1088®	71	—	—	14	52 ¾	82 ¾	78	71 ¾
1188®	79	—	—	14	52 ¾	90 ¾	86	79 ¾
1288®	87	39 ½	—	14	52 ¾	98 ¾	94	87 ¾
1388®	95	47 ½	—	14	52 ¾	106 ¾	102	95 ¾
1488®	103	55 ½	—	16	51 ¾	114 ¾	110	103 ¾
1588®	111	63 ½	—	16	51 ¾	122 ¾	118	111 ¾
1688®	119	47 ½	—	16	51 ¾	130 ¾	126	119 ¾
1788®	127	31 ½	79 ½	18†	51 ¾	138 ¾	134	127 ¾
1888®	135	39 ½	87 ½	18†	51 ¾	146 ¾	142	135 ¾

†For 18" diameter breaching, flue collar is oval (19 1/8 x 16 1/16")

Model	Supply & return tapplings				Dimension F
	Supply tapplings (No. & size)*		Return tapplings (No. & size)*		
	Steam	Water	Steam	Water	
488R®	2-5"	2-5"	1-6"	1-6"	
488®	2-5"	2-5"	1-6"	1-6"	
588®	2-5"	2-5"	1-6"	1-6"	
688®	2-5"	2-5"	1-6"	1-6"	
788®	2-5"	2-5"	1-6"	1-6"	
888®	2-5"	2-5"	1-6"	1-6"	
988R®	2-5"	2-5"	1-6"	1-6"	
988®	2-5"	2-5"	1-6"	1-6"	
1088R®	2-5"	2-5"	1-6"	1-6"	
1088®	2-5"	2-5"	1-6"	1-6"	
1188®	2-5"	2-5"	1-6"	1-6"	
1288®	3-5"	2-5"	1-6"	1-6"	
1388®	3-5"	2-5"	1-6"	1-6"	
1488®	3-5"	2-5"	1-6"	1-6"	
1588®	3-5"	2-5"	1-6"	1-6"	
1688R®	3-5"	2-5"	1-6"	1-6"	
1688®	3-5"	2-5"	1-6"	1-6"	
1788®	4-5"	2-5"	1-6"	1-6"	
1888®	4-5"	2-5"	1-6"	1-6"	

*Use recommended piping connections.
†For 18" diameter breaching, flue collar is oval (19 1/8 x 16 1/16")

See Burner Specification & Data Sheets



Model	I=B=R Vent or Liner Dia (in)		Boiler Flue Collar Dimensions (in)
	Forced Draft	Balanced Draft	
488®	10	12	10 round
588®	10	15	10 round
688®	12	15	10 round
788®	12	18	12 round
888®	14	18	12 round
988®	14	18	14 round
1088®	14	21	14 round
1188®	16	21	14 round
1288®	16	21	14 round
1388®	16	24	14 round
1488®	18	24	16 round
1588®	18	24	16 round
1688®	18	24	16 round
1788®	18	24	16 1/8 x 19 7/8 oval
1888®	20	27	16 1/8 x 19 7/8 oval

