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Industrial/Commercial Division  
Fulton Boiler Works, Inc.

## Fulton FB-A、FB-B Fuel-Fired Vertical Steam Boilers

FB-A ...4-130 HP

FB-B ...4-130 HP

Built/Certified in Accordance  
to ASME Boiler and Pressure  
Vessel Code



For over 50 years the Fulton vertical tubeless boilers have remained a compact trouble-free boiler supplying steam and hot water to virtually every type of industry imaginable.

**The Classic efficient FB-A,FB-B Fulton boilers are available in 13**

**sizes ranging from 4 to 130 BHP.**

**Simplicity and reliability offer years of trouble-free operation.** With no tubes or coils to scale up, rust or burn out, a Fulton Boiler reduces plant operating costs by eliminating down time and expensive repairs.

**All Fulton Boilers feature the Fulton designed top mounted down-fired**

**Standard Power Burner or the New Optional Low Emissions Burner**

The velocity of the premixed air and gas reduces the residence time in the low emissions burner. Due to this high velocity gas/air mixture, Fulton's burners are capable of maintaining NOx concentrations below 20 PPM and 60 PPM CO corrected to 3% O<sub>2</sub>. The Fulton Low Emissions Burner is also under 20 ng NOx/joule output.



FB-A-050 Natural gas-fired steam boiler, FB-A-030 oil-fired steam boiler  
FB-A-100 Oil fired steam boiler (from left to right)



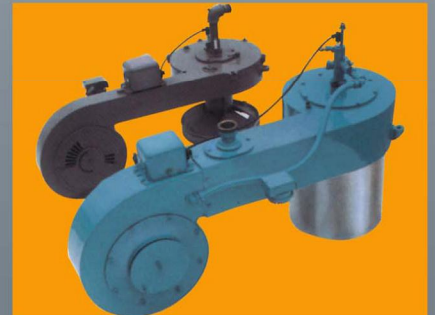
### Fulton Engineers/Manufactures Total Systems for Industrial Process Applications

Fulton,involved in engineering total systems to meet the needs of a specific application has been manufacturing steam boilers for over 50 years.Fulton's engineering , drafting, and manufacturing

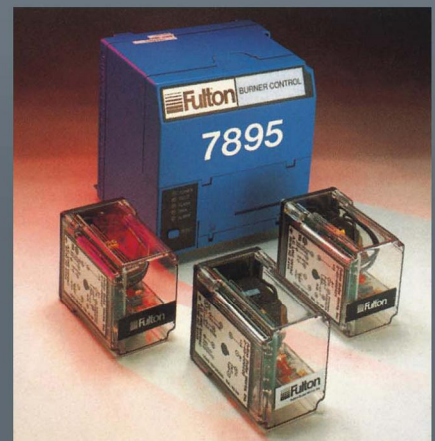
capabilities can build just about anything around a customer's needs. Fulton's custom built, factory skid mounted and prepiped equipment save a tremendous amount of time and work on the job site.



For added safety all Fulton boilers are equipped with gauge glass protectors.



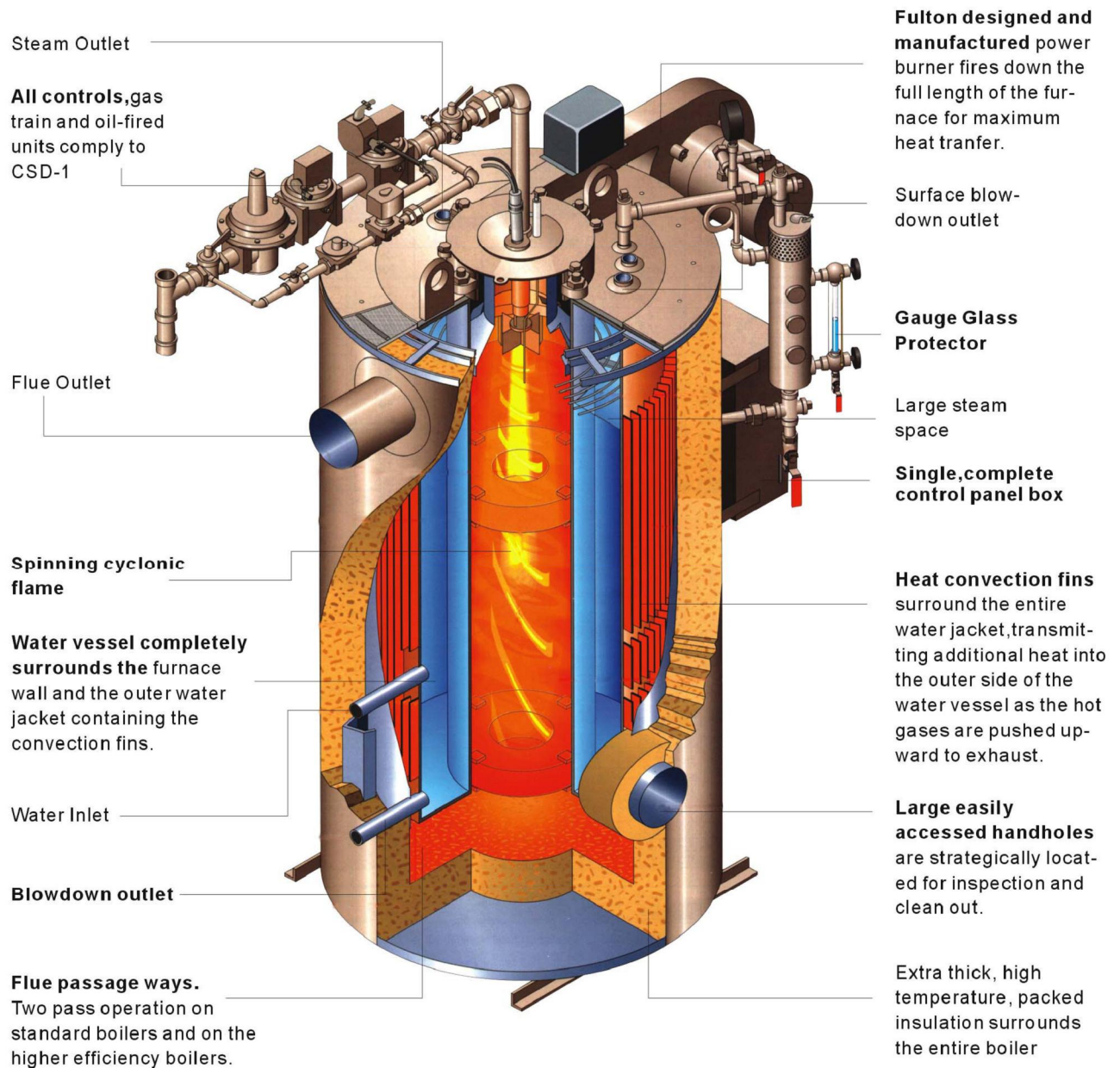
The Fulton Classic FB-A,FB-B boilers can be ordered with combination oil and gas capabilities or be converted at any time simply and economically.



Main electrical components in the control panel

# Component View / features of the vertical tubeless boiler

## A relatively simple, rugged boiler designed for decades of service in the process industries in 4-60HP.



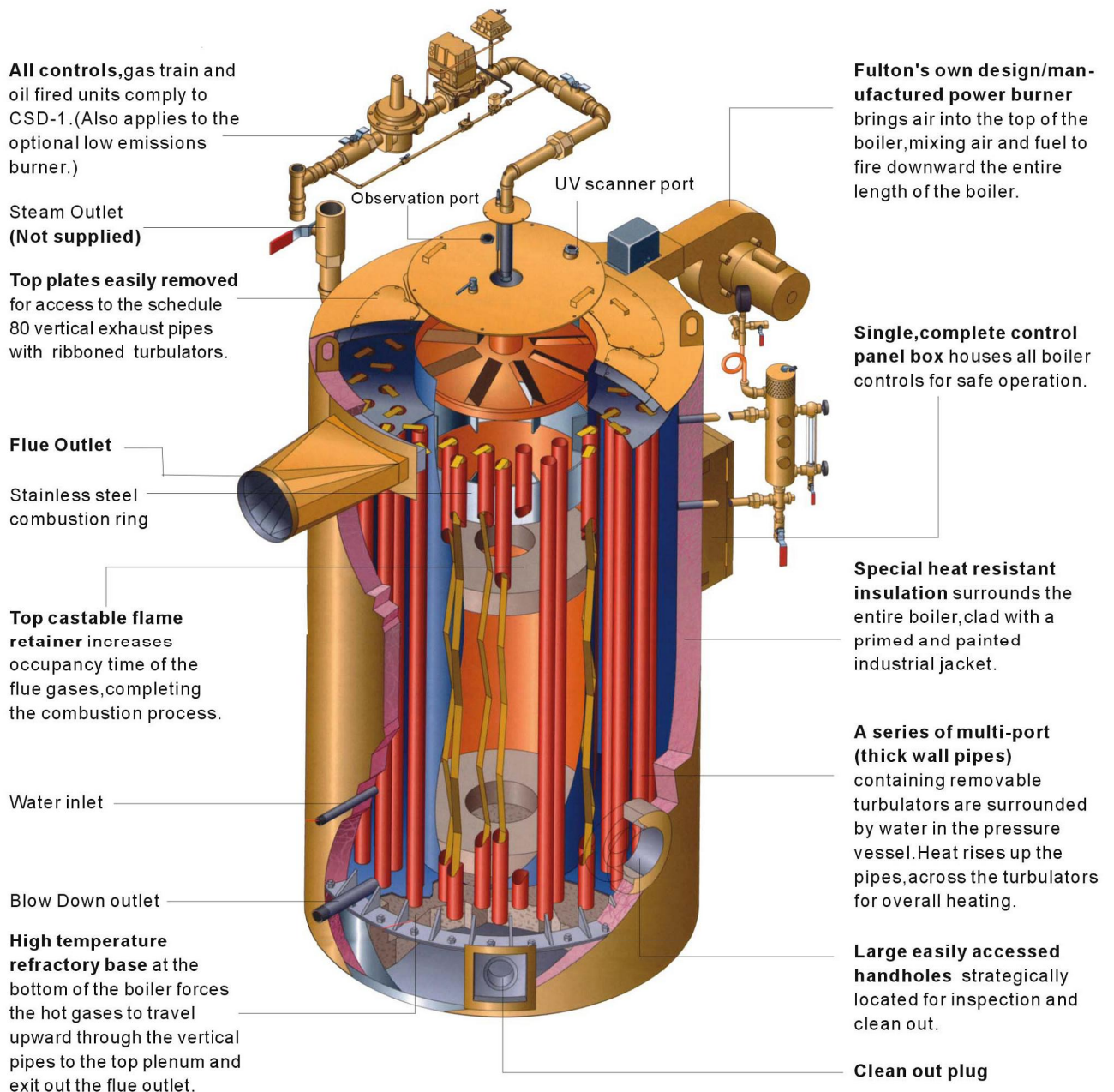
### Design Features

#### Pipe Within a Pipe

The furnace (Pressure vessel) is, simply stated, a "pipe within a pipe." The top mounted burner sends a spinning, cyclonic flame down the center furnace chamber. The hot gases return upward in the secondary flue passage, traveling over the heat convection fins. These fins transmit the remaining heat onto the outer side of the water vessel. This result in the most uniform overall heating of the boiler, maximizing the pressure vessel's longevity.



## Component View / Features of the VMP2000 Oil or Gas Fired Vertical Design in 80 -130 HP



### Design Features

#### Pipe vs. Tube

Fifty years after creating the vertical tubeless category of boilers, Fulton has introduced another innovation—the Pipetype Boiler. Constructed of Schedule 80, heavy wall pipes replacement is a thing of the past. This simple design is proven by decades of experience, and is backed by our unmatched warranty. See the difference there or call us for a physical sample of our “Pipe vs. Tube”.



## Specifications/Steam boiler

Model FB-A	4	6	10	15	20	30	40	50	60	80	100	130	
Ratings (Sea level to 3000ft.)													
Steam Out put	LB/HR	138	207	345	518	690	1035	1380	1725	2070	2760	3450	4484
	KG/HR	63	94	157	235	312	470	627	783	939	1252	1565	2034
<b>Approximate Fuel Consumption at Rated Capacity</b>													
Light oil	KG/HR	3.77	5.65	9.42	14.71	18.91	29.07	38.41	48.80	58.14	76.10	91.31	121.75
Propane Gas	M <sup>3</sup> /HR	1.88	2.81	4.69	7.32	9.41	14.47	19.12	24.29	28.94	37.88	45.45	60.61
Natural Gas	M <sup>3</sup> /HR	4.74	7.11	11.85	18.51	23.79	36.58	48.34	61.41	73.16	95.76	114.91	153.22
Town Gas	M <sup>3</sup> /HR	12.06	18.09	30.14	47.06	60.50	93.02	122.92	156.15	186.05	243.51	292.21	358.61
Natural Gas Boiler	IN	1	1	1	1	1.25	1.5	1.5	1.5**	2	2.5	3	3
Connection Size	MM	25	25	25	25	32	38	38	38	50	64	76	76
Burner	3450 RPM/60CY					GAS OIL	GAS OIL	GAS OIL	GAS OIL	GAS OIL	GAS OIL	GAS OIL	GAS OIL
Motor HP	2850 RPM/50CY	1/3	1/3	1/3	1/3	1/3 3/4	1/3 3/4	1 1/2 2	1 1/2 2	1 1/2 2	2 3	3 3	4 4
<b>Electric Power Requirements (in Amps)</b>													
220V/50HZ,1 phase		3.5	3.5	3.5	3.4	5.3	5.3	-	-	-	-	-	-
380V/50HZ,3 phase								3.7	3.7	3.7	4.6	4.6	6.2
Control voltage	220V/50HZ/1 Phase	2	2	2	2	2	2	2	2	2	2	2	2

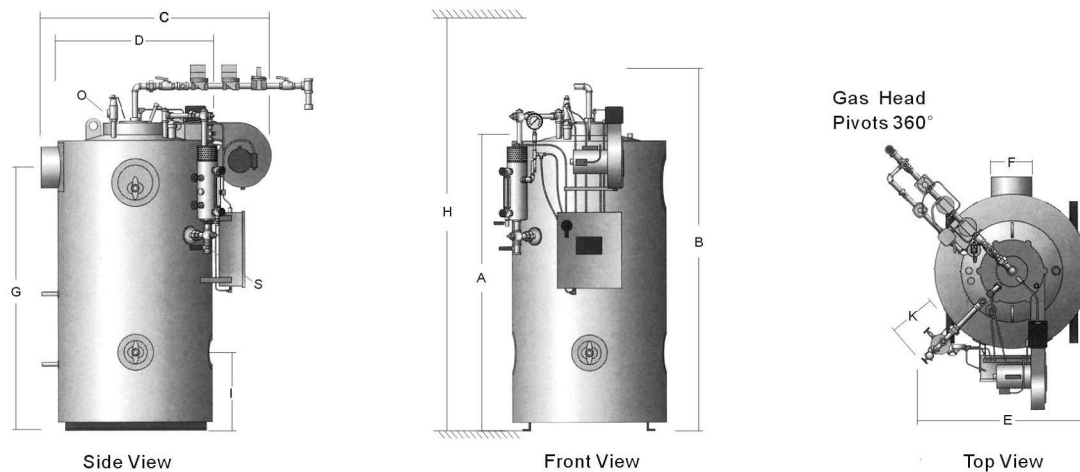
Note:High pressure boilers ordered with an extra pressure control for night heating have less than rated output while operating at low pressure.

## Specifications / Hot water boiler

Model FB-B	4	6	10	15	20	30	40	50	60	80	100	130	
Ratings (Sea level to 3000 ft)													
Output	1000 Btu/Hr.	158	236	399	593	793	1191	1586	1983	2382	3174	3569	4760
	1000 Kcal/Hr.	40	60	100	150	200	300	400	500	600	800	900	1200
Hot water OUTPUT (30°C difference)	KG/HR	1333	2000	3333	5000	6666	10000	13333	16666	20000	25000	30000	40000
<b>Approximate Fuel Consumption at Rated Capacity</b>													
Light oil	KG/HR	4.30	6.45	10.76	15.22	20.29	30.44	40.58	50.73	60.88	74.40	89.29	119.05
Propane Gas	M <sup>3</sup> /HR	2.14	3.21	5.35	7.58	10.10	15.15	20.20	25.25	30.30	37.04	44.44	59.26
Natural Gas	M <sup>3</sup> /HR	5.41	8.12	13.54	19.15	25.54	38.30	51.07	63.84	76.61	93.63	112.36	149.81
Town Gas	M <sup>3</sup> /HR	13.77	20.65	34.42	48.70	64.94	97.40	129.87	162.34	194.81	238.10	285.71	380.95
Natural Gas Boiler	IN	1	1	1	1	1.25	1.5	1.5	1.5**	2	2.5	3	3
Connection Size	MM	25	25	25	25	32	38	38	38	50	64	76	76
Burner	3450 RPM/60CY					GAS OIL	GAS OIL	GAS OIL	GAS OIL	GAS OIL	GAS OIL	GAS OIL	GAS OIL
Motor HP	2850 RPM/50CY	1/3	1/3	1/3	1/3	1/3 3/4	1/3 3/4	1 1/2 2	1 1/2 2	1 1/2 2	2 3	2 3	4 5
<b>Electric Power Requirements (in Amps)</b>													
220V/50HZ,1 phase		3.5	3.5	3.5	3.4	5.3	5.3	-	-	-	-	-	-
380V/50HZ,3 phase								3.7	3.7	3.7	4.6	4.6	6.2 6.6
Control voltage	220V/50HZ/1 Phase	2	2	2	2	2	2	2	2	2	2	2	2

Note:Fuel consumption based on:light oil 11200 kcal/kg,Natural gas 8900kcal/m<sup>3</sup> ,Propane gas 22500kcal/m<sup>3</sup> ,Town gas 3500kcal/m<sup>3</sup>.

Specifications are approximate.We reserve the right to change specifications.

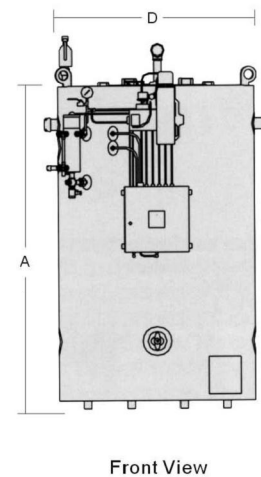
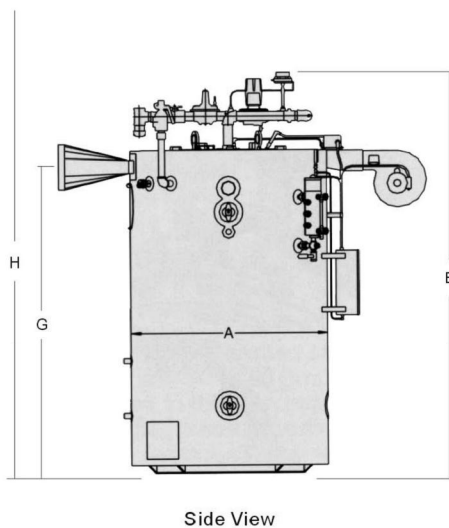
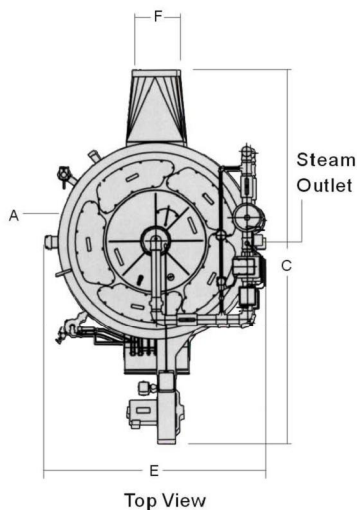


FB-A, FB-B (4-60BHP)

## Dimensions and Weights FB-A, FB-B are approximately the same.

Model FB-A, FB-B		4	6	10	15	20	30	40	50	60	80	100	130
<b>Heights and Widths</b>													
A Boiler Height	IN	47	57	63	69	72	82	73.5	87	93	93	99	117
	MM	1194	1448	1600	1753	1829	2083	1867	2210	2362	2362	2515	2889
B Boiler Height With Trim* & Fuel Train Assembly	IN	65	75	80.5	86.5	92.5	102	94	106.5	120	122	125	135
	MM	1651	1905	2045	2197	2350	2591	2388	2705	3048	3099	3175	3430
C Overall Depth Stack to Burner Fan Housing	IN	44	44	46	47	60	67	73	78	78	90	120	134
	MM	1118	1118	1168	1194	1524	1702	1854	1981	1981	2280	3043	3395
D Boiler Diameter	IN	26	26	28	30	39	46	55	55	55	63	68	76
	MM	660	660	710	760	990	1170	1400	1400	1400	1588	1740	1936
E Overall Width With Water Column	IN	33	33	33.5	35.5	43	49	57	57	57	67	75	83
	MM	838	838	851	902	1091	1244	1448	1448	1448	1702	1905	2108
F Flue Outlet Diameter	IN	6	6	6	8	10	12	12	12	12	14	14	16
	MM	152	152	152	203	254	305	305	305	305	356	356	400
G To Center of Flue Outlet	IN	42	52	58	63	66	73.5	65	79	85	95	95	107
	MM	1070	1320	1473	1600	1675	1867	1651	2007	2159	2423	2423	2723
<b>Minimum Clearances</b>													
H Clearance Required for Burner Removed from Ceiling to Ground	IN	72	82	86	92	96	106	104	114	124	126	129	151
	MM	1828	2083	2184	2337	2438	2692	2692	2896	2896	3200	3277	3835
Boiler Front	IN	41	41	41	41	41	41	41	41	41	41	41	41
	MM	1041	1041	1041	1041	1041	1041	1041	1041	1041	1041	1041	1041
Boiler Back / Side	IN	36	36	36	36	36	36	36	36	36	36	36	36
	MM	915	915	915	915	915	915	915	915	915	915	915	915
<b>Water Content</b>													
	US.GAL	14	16	24	39	77	170	220	245	270	375	580	876
	LITERS	53	61	91	148	292	643	835	927	1022	1419	2195	3317
<b>Weight</b>													
Gross Shipping Weight	LB	1400	1700	2000	2280	3400	4780	6400	6526	7280	10506	11608	14918
	KG	640	770	910	1035	1545	2170	2905	2963	3305	4770	5270	6773

Note: Specifications are approximate. We reserve the right to change specifications.



FB-A, FB-B (80-130HP)

**Fulton**  
**LoNOx™**  
 Doing our share for a Cleaner Environment for 50 years with low NOx Stack Emissions Heat Transfer Equipment. LoNOx is a trademark of Fulton Companies standing for low Nitrogen Oxides Emissions



**Polished stainless jacket**  
 A relatively inexpensive option for the customer who requires a smart look. No matter if it's a stainless jacket or a complete skid-mounted unit(s) with boiler, return system, blowdown, and any other special equipment, Fulton can build to any industrial process application.

**Fulton Warranty No.1 in the industry!**

**All Fulton Boilers are completely trimmed packaged boilers.**  
 No additional fuel train items or electrical wiring is needed. Boiler is Supplied with installation manual, ready for quick installation by the Fulton representative.



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Fulton China LLC is part of The Fulton Companies, manufactures of high grade industrial/commercial heat transfer products