

ERIE CITY WELDED STEEL HEATING BOILERS



Specification and Dimension Sheet

200 Series • Straight updraft type for Anthracite
or Bituminous coal

300 Series • Smokeless type for Bituminous coal

400 Series • Arranged for oil or gas firing

500 Series • High fire-box type for stoker firing

Effective January 1, 1936

Re-issued October 1945

ERIE CITY IRON WORKS
ERIE, PENNSYLVANIA, U. S. A.

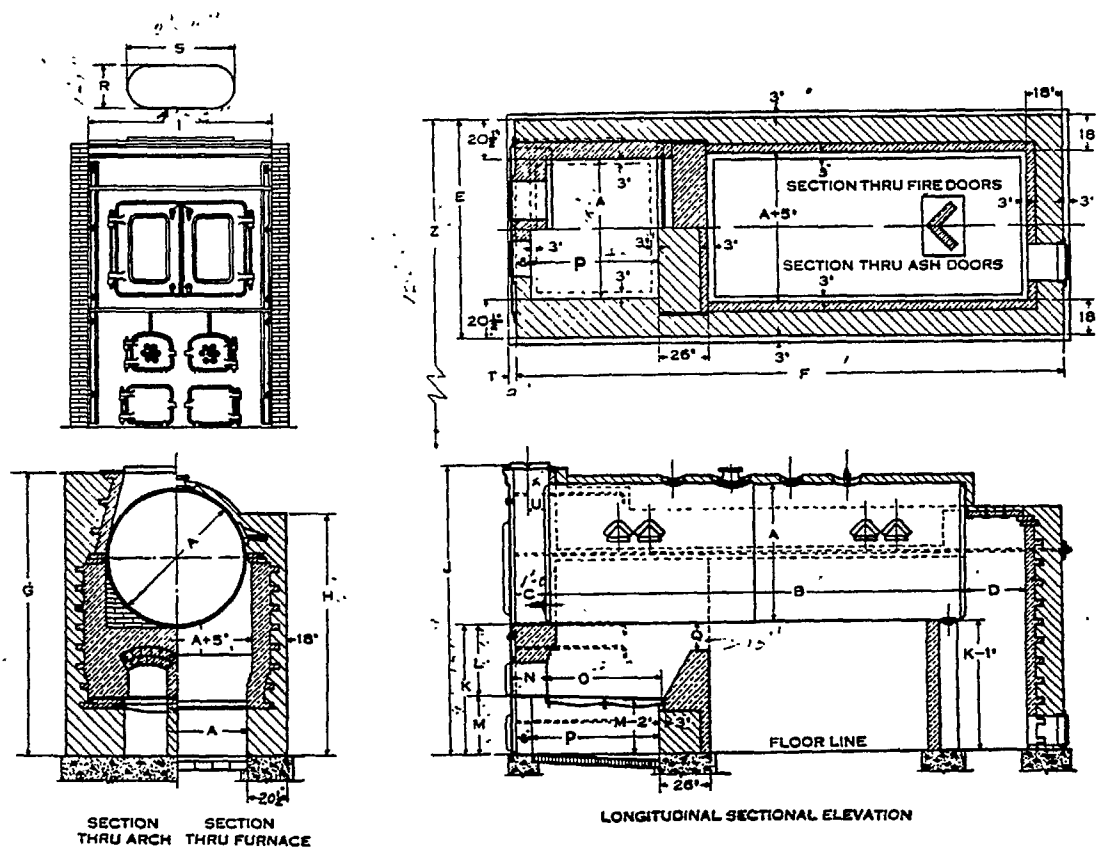
ERIE CITY HORIZONTAL RETURN TUBULAR BOILER

MEASUREMENTS FOR SETTING FULL FRONT STATIONARY BOILERS WITH BRACKETS

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	Z*	Size of Fire Door Opening	Size of Ash Door Opening
	Inches	Feet	Inches	Inches	Feet	Feet	Feet	Feet	Feet	Feet	Feet	Inches	Inches	Inches	Inches	Feet	Inches	Inches	Inches	Inches	Inches	Feet	Inches	Inches
36	12	12	20	6-5	16-2	8-6	7-6	4-3	9-0	4-10	30	28	13 1/4	48	4-2	10	13	26	9	5	12-1	12 1/2 x 12 1/2	9 1/2 x 12 1/2	x
44	14	14	24	7-1	18-8	9-7	8-3 1/2	4-11	10-1	5-3	34	29	13 1/2	54	4-8	12	13 1/2	31	9	5	13-5	14 x 15 1/4	11 x 15	
48	14	16	24	7-5	18-10	9-10	8-6	5-7	10-4	5-2	34	28	13 1/2	54	4-8	12	14	35 1/4	9	7	14-1	14 x 15 1/4	11 x 15	
48	16	16	24	7-5	20-10	9-10	8-6	5-7	10-4	5-2	34	28	13 1/2	54	4-8	12	14	35 1/4	9	7	14-1	14 x 15 1/4	11 x 15	
54	14	16	24	7-11	18-10	10-8	9-1 1/2	6-1	10-10	5-6	36	30	14	54	4-8	14	15 1/2	36 1/2	4	7 1/2	15-1	17 x 20	18 x 18	
60	16	18	26	8-5	21-2	11-2	9-4	6-11	11-4	5-6	36	30	14	54	4-8	14	15 1/2	39 1/2	4	8 1/2	16-1	17 x 20	18 x 18	
66	16	18	28	8-11	21-4	11-8	9-8 1/2	7-5	11-10	5-6	36	30	14	54	4-8	14	16	48 1/2	4	8 1/2	17-1	17 x 20	18 x 22	
72	16	18	30	9-5	21-6	12-2	9-11	7-11	12-4	5-6	36	30	18	54	5-0	16	21 1/4	52 1/4	4	7 1/2	18-1	17 x 20	18 x 22	
72	18	18	30	9-5	23-6	12-2	9-11	7-11	12-4	5-6	36	30	18	60	5-6	16	21 1/4	52 1/4	4	7 1/2	18-1	17 x 20	18 x 22	

*Two Boilers in Battery.

Above dimensions are approximate; follow working drawings



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ERIE CITY HORIZONTAL RETURN TUBULAR BOILER

SPECIFICATIONS

HORIZONTAL RETURN TUBULAR STATIONARY BOILERS

Build on a Factor of Safety of Five

SHELL IN TWO COURSES

A. S. M. E. CODE

BOILERS FOR 100 POUNDS WORKING PRESSURE, LONGITUDINAL SEAM BUTT-JOINT, INSIDE AND OUTSIDE STRAP, DOUBLE RIVETED.

Size Number.....	22	25	27	28	30	32	34	35	37	38	39	40	42
Horse Power as rated.....	25	40	50	60	80	100	125	150	180	200	225	250	300
*Diameter of Boiler in inches, by length of Tubes used in feet	36x12	44x14	48x16	54x14	60x16	66x16	72x16	72x18	78x18	78x20	84x18	84x20	90x20
Number of Tubes.....	28	36	28	36	44	54	70	70	88	88	108	108	140
Diameter of Tubes.....inches	3	3	4	4	4	4	4	4	4	4	4	4	4
Square feet of heating surface.....about	310	462	554	612	839	1013	1280	1436	1771	1964	2143	2376	3020
Length of Grates.....inches	48	54	54	54	54	54	54	60	72	78	78	84	90
Thickness of Shell.....	1/4	3/16	1/4	3/16	3/16	3/16	13/16	13/16	1/2	1/2	1/2	1/2	1/2
Thickness of Heads.....	3/8	7/16	7/16	7/16	7/16	7/16	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Diameter of Smoke Stack.....	16	22	24	26	28	30	34	34	38	38	42	42	48
Length of Smoke Stack.....in feet	40	50	60	50	60	60	60	60	60	70	80	80	80
Guys on all Stacks cover one set only.													
SHIPPING WEIGHTS (Approximate)													
Weight of Bare Boiler.....pounds	3400	5400	7300	7800	11100	12700	15500	17200	21600	23600	24800	27200	31800
Front as specified.....	1200	1800	1850	2600	2800	3050	3450	3450	4150	4150	4350	4350	4350
Grates.....	600	750	800	900	1000	1100	1200	1300	1800	1900	2100	2200	2700
other Castings.....	400	500	500	600	600	700	800	800	900	900	900	900	1000
Trimming.....	100	150	150	150	200	250	300	300	300	300	400	400	450
Stacks and Guys.....	500	900	1200	1100	1400	1900	2100	2100	3200	3700	5300	5300	6900
Total Weight complete.....pounds	6200	9500	11800	13150	17100	19700	23350	25150	31950	35440	37850	40350	47200

BOILERS FOR 125 POUNDS WORKING PRESSURE, LONGITUDINAL SEAM BUTT-JOINT, INSIDE AND OUTSIDE STRAP, 48-INCH BOILER, DOUBLE RIVETED; 54-, 60-, 66- AND 72-INCH BOILERS, TRIPLE RIVETED; 78- AND 84- INCH BOILERS, QUADRUPLE RIVETED.

Size Number.....	46	47	48	50	52	54	55	57	58	59	60	62
Horse Power as rated.....	45	50	60	80	100	125	150	180	200	225	250	300
*Diameter of Boiler in inches, by length of Tubes used in feet	48x14	48x16	54x14	60x16	66x16	72x16	72x18	78x18	78x20	84x18	84x20	90x20
Number of Tubes, 4 inches in diameter.....	28	28	36	44	54	70	70	88	88	108	108	140
Length of Grates.....inches	54	54	54	54	54	54	60	72	78	78	84	90
Thickness of Shell.....	1/4	3/16	1/4	3/16	3/16	3/16	13/16	13/16	1/2	1/2	1/2	1/2
Thickness of Heads.....	3/8	7/16	7/16	7/16	7/16	7/16	1/2	1/2	1/2	1/2	1/2	1/2
Diameter of Smoke Stack.....	24	24	26	28	30	34	34	38	38	42	42	48
Length of Smoke Stack.....in feet	50	60	50	60	60	60	60	60	70	80	80	80
Guys on all Stacks cover one set only.												
SHIPPING WEIGHTS (Approximate)												
Weight of Bare Boiler.....pounds	7100	8000	8700	11900	13900	17300	19200	22400	24500	26500	28700	33800
Front as specified.....	1850	1850	2600	2800	3050	3450	3450	4150	4150	4350	4350	4350
Grates.....	800	800	900	1000	1100	1200	1300	1800	1900	2100	2200	2700
other Castings.....	500	500	600	600	700	800	800	900	900	900	900	1000
Trimming.....	150	150	150	200	250	300	300	350	350	400	400	450
Stacks and Guys.....	1000	1200	1100	1400	1900	2100	2100	3200	3700	5300	5300	6900
Total Weight complete.....pounds	11400	12500	14050	17900	20900	25150	27150	32800	35500	39550	41850	49200

BOILERS FOR 150 POUNDS WORKING PRESSURE, LONGITUDINAL SEAM BUTT-JOINT, QUADRUPLE RIVETED, EXCEPT 48- AND 54-INCH BOILERS, TRIPLE RIVETED

Size Number.....	66	67	68	70	72	74	75	77	78	79	80	82
Horse Power as rated.....	45	50	60	80	100	125	150	180	200	225	250	300
*Diameter of Boiler in inches, by length of Tubes used in feet	48x14	48x16	54x14	60x16	66x16	72x16	72x18	78x18	78x20	84x18	84x20	90x20
Number of Tubes, 4 inches in diameter.....	28	28	36	44	54	70	70	88	88	108	108	140
Length of Grates.....inches	54	54	54	54	54	54	60	72	78	78	84	90
Thickness of Shell.....	1/4	3/16	1/4	3/16	3/16	3/16	13/16	13/16	1/2	1/2	1/2	1/2
Thickness of Heads.....	3/8	7/16	7/16	7/16	7/16	7/16	1/2	1/2	1/2	1/2	1/2	1/2
Diameter of Smoke Stack.....	24	24	26	28	30	34	34	38	38	42	42	48
Length of Smoke Stack.....in feet	50	60	50	60	60	60	60	60	70	80	80	80
Guys on all Stacks cover one set only.												
SHIPPING WEIGHTS (Approximate)												
Weight of Bare Boiler.....pounds	7400	8300	9200	12600	15200	18400	20300	24600	26800	28700	31400	35600
Front as specified.....	1850	1850	2600	2800	3050	3450	3450	4150	4150	4350	4350	4350
Grates.....	800	800	900	1000	1100	1200	1300	1800	1900	2100	2200	2700
other Castings.....	500	500	600	600	700	800	800	900	900	900	900	1000
Trimming.....	150	150	150	200	250	300	300	350	350	400	400	450
Stack and Guys.....	1000	1200	1100	1400	1900	2100	2100	3200	3700	5300	5300	6900
Total Weight complete.....pounds	11700	12800	14550	18600	22200	26250	28250	35000	37800	41750	44550	51000

*Boilers over 72 inches in diameter are required by code to have overhead suspension.

OTHER SIZES AND PRESSURES CAN BE BUILT ON SPECIAL ORDER

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