

Monitor Boiler Company

Affiliated with UNITED DRY DOCKS, INC., NEW YORK

1505 Race Street

Philadelphia, Pa.

MONCO FIRE TUBE STEEL HEATING BOILERS, COIL STEEL HEATING BOILERS AND WATER HEATERS FOR COAL AND OIL BURNING

Monco Fire Tube Steel Heating Boilers are electrically welded and are designed according to the Code of the A. S. M. E. covering welded boilers and are constructed for a maximum working pressure of 15 lb. steam and 30 lb. water. All Boilers are constructed under the direct supervision of a Certified Insurance Inspector and are tested and stamped by this inspector before shipment.

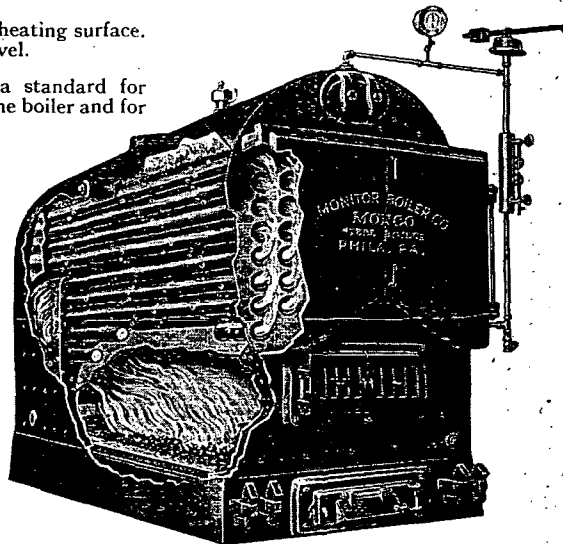
The following are some of the outstanding features:

- Arched self-cleaning crown sheet.
- Large combustion chamber.
- Unrestricted circulation of water.
- Low water line.
- Large amount of direct heating surface.
- Long three-pass fire travel.

Ratings are based on a standard for steam of 2 lb. pressure at the boiler and for

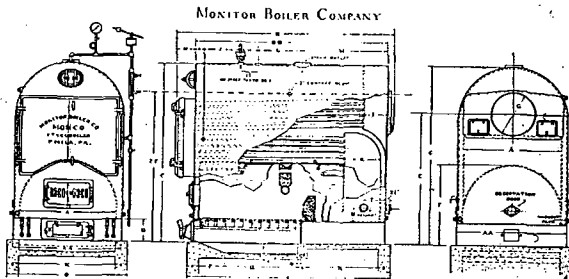
water on a mean temperature of 180 deg. as the water leaves the boiler. Any **Monco** Fire Tube Steel Heating Boiler will carry its full-rated load in direct radiation or equivalent, if sufficient radiation is installed to heat the building to 70 deg. fahr.

The standard equipment for coal burning boilers includes all castings as shown on boiler, heavy steel base and shaking grates. Standard steam trimmings include damper regulator, steam gauge with syphon, water column with gauge cocks and water glass, safety valve, tube, brush and firing tools. No trimmings furnished with hot water boilers.



Monco Fire Tube Steel Heating Boiler for Coal and Oil Burning

For Dimensions and Specifications see following page



Coal and Oil Burning Boilers

Monco Fire Tube

Steam Specifications

Catalog Number		S. H. B. I. Steam Ratings		Shipping Weight Approx.		Grate Area, Sq. Ft.	Heating Surface	One Boiler Coal or Oil				Two Boilers Coal or Oil				Coal or Oil				
Coal	Oil	Coal	Oil	Coal	Oil			Diarn. Smoke Stack	Breach g	Diarn. Smoke Stack	Breach g	Min. Ht. Stack Feet	Diarn. Smoke Stack	Breach g	Diarn. Smoke Stack	Breach g	Min. Ht. Stack Feet	Size Steam Outlet	Size Return	Safety Valve No. Size
301-5	301-6	1360	1650	3250	2700	6.9	97	16	16	45	24	22	50	5	2-2 1/2	1-1 1/2	46	56		
302-5	302-6	1720	2090	3650	3000	8.0	123	16	16	50	24	22	55	5	2-2 1/2	1-1 1/2	66	78		
303-5	303-6	2070	2520	4050	3300	9.0	148	16	16	55	24	22	60	6	2-2 1/2	1-1 1/2	67	76		
401-5	401-6	2240	2720	4400	3550	10.7	160	18	18	50	26	24	55	6	2-3	1-2	90	94		
402-5	402-6	2700	3280	4950	4000	12.1	193	18	18	55	26	24	60	6	2-3	1-2	107	120		
403-5	403-6	3150	3830	5500	4550	12.1	225	18	18	60	26	24	65	6	2-3	1-2	136	166		
404-5	404-6	3700	4490	6000	4900	13.5	264	20	20	55	28	26	60	6	2-3	1-2	159	190		
405-5	405-6	4340	5270	6800	5700	13.5	310	20	20	60	28	26	65	6	2-3	1-2	174	210		
406-5	406-6	4980	6050	7600	6400	14.9	356	20	20	65	28	26	70	6	2-3	1-2 1/2	228	251		
471-5	471-6	5360	6510	8300	7000	16.3	383	22	22	60	34	32	65	8	2-4	1-3	273	295		
472-5	472-6	6150	7460	8900	7450	18.0	439	22	22	65	34	32	70	8	2-4	1-3	305	335		
473-5	473-6	6940	8430	9500	7900	19.7	496	22	22	70	34	32	75	8	2-4	1-3	370	400		
551-5	551-6	8460	10270	11000	9200	21.5	604	24	24	65	36	34	70	8	2-4	1-3 1/2	466	500		
552-5	552-6	9420	11440	12200	10300	23.0	673	24	24	70	36	34	75	8	2-4	1-3 1/2	500	535		
553-5	553-6	10390	12610	13400	11500	23.0	742	24	24	75	36	34	80	8	2-4	1-3 1/2	535	566		
651-5	651-6	11610	14090	15000	12950	25.2	829	28	28	75	38	36	80	10	2-5	2-3	600	635		
652-5	652-6	12950	15730	16500	14250	27.6	925	28	28	80	38	36	85	10	2-5	2-3	635	666		
653-5	653-6	14280	17340	18000	15550	29.9	1020	28	28	85	38	36	90	10	2-5	2-3	666	697		
740-5	740-6	16700	20280	20200	17550	31.9	1193	30	30	80	42	40	90	10	2-5	2-3 1/2	700	731		
741-5	741-6	18650	22640	21800	19150	31.9	1332	30	30	85	42	40	95	10	2-5	2-3 1/2	731	762		
742-5	742-6	20590	25010	23400	20550	34.7	1471	30	30	85	42	40	100	10	2-5	2-3 1/2	762	793		
743-5	743-6	22540	27370	25000	21900	37.4	1610	30	30	85	42	40	100	10	2-5	2-3 1/2	793	824		
860-5	860-6	24680	29970	27200	23850	40.9	1763	36	34	90	52	50	95	12	2-6	2-3 1/2	824	855		
861-5	861-6	27380	33250	29000	25650	40.9	1956	36	34	95	52	50	100	12	2-6	2-3 1/2	855	886		
862-5	862-6	30080	36530	30800	26450	40.9	2149	36	34	100	52	50	110	12	2-6	2-4	886	917		
863-5	863-6	32790	39810	32600	29000	44.1	2342	36	34	110	52	50	120	12	2-6	2-4	917	948		

Height Water Line—see FF in table below. Height Boiler—see C in table below. Length Boiler—see BB in table below. Width Boiler—see A in table below. To figure ratings of hot water boilers add 60 per cent to steam rating.

Measurements of Monco Fire Tube Boilers

Number of Boiler	Width of Firebox	Width of Base	Length of Boiler Overall	Length of Boiler	Height of Boiler	Height of Base	Floor to Center of Smoke Connection	Height Floor to Top of Combustion Chamber	Height of Water Line	Diameter of Smoke Connection	Depth of Front Smoke Box	Depth of Rear Smoke Hood	Location Safety Valve	Rear Combustion Chamber Dimension	Distance from Safety Valve to Steam Outlet	Location Steam Outlet	Width of Ashpit	Width of Foundation	Foundation Dimension	Foundation Dimension	Foundation Dimension	Length of Foundation	Location of Return	Location of Return
A	AA	B	BB	C	D	E	F	FF	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	
301*	25 1/2	30	61	51 1/2	62 1/2	12 49 1/2	34	54 1/2	16	6	9 1/2	7 1/2	19 1/2	12	26 1/2	22	38	8	27 1/2	23 1/2	59 1/2	12 1/4	9	
302*	25 1/2	30	73	63 1/2	62 1/2	12 49 1/2	34	54 1/2	16	6	9 1/2	13 1/2	19 1/2	12	32 1/2	22	38	8	33 1/2	29 1/2	71 1/2	12 1/4	9	
303*	25 1/2	30	85	75 1/2	62 1/2	12 49 1/2	34	54 1/2	16	6	9 1/2	15 1/2	19 1/2	12	38 1/2	22	38	8	39 1/2	35 1/2	83 1/2	12 1/4	9	
401*	33 1/2	40	74 1/2	64	69	12 53 1/2	38	59	18	7	10 1/2	14	19 1/2	16	40 1/2	32	48	15	26 1/2	22 1/2	64	12 1/4	9	
402*	33 1/2	40	86 1/2	76	69	12 53 1/2	38	59	18	7	10 1/2	16	19 1/2	16	46 1/2	32	48	15	32 1/2	28 1/2	76	12 1/4	9	
403*	33 1/2	40	98 1/2	88	69	12 53 1/2	38	59	18	7	10 1/2	18	19 1/2	16	52 1/2	32	48	15	38 1/2	34 1/2	88	12 1/4	9	
404*	33 1/2	40	110 1/2	98	80	12 62	40	69	20	9	12 1/2	20	21 1/2	20	48 1/2	32	48	15	44 1/2	40 1/2	100	12 1/4	9	
405*	33 1/2	40	122 1/2	108	80	12 62	40	69	20	9	12 1/2	22	21 1/2	20	54 1/2	32	48	15	50 1/2	46 1/2	112	12 1/4	9	
406*	33 1/2	40	135 1/2	102	80	12 62	40	69	20	9	12 1/2	24	21 1/2	20	60 1/2	32	48	15	56 1/2	52 1/2	124	12 1/4	9 1/4	
471*	40 1/2	47	103 1/2	90	84	12 63 1/2	41	71	22	9	12 1/2	26	21 1/2	20	66 1/2	32	48	15	62 1/2	58 1/2	136	12 1/4	9 1/4	
472*	40 1/2	47	115 1/2	102	84	12 63 1/2	41	71	22	9	12 1/2	28	21 1/2	20	72 1/2	32	48	15	68 1/2	64 1/2	148	12 1/4	9 1/4	
473*	40 1/2	47	127 1/2	114	84	12 63 1/2	41	71	22	9	12 1/2	30	21 1/2	18	60 1/2	47	63	18	74 1/2	70 1/2	160	12 1/4	9 1/4	
551*	48 1/2	55	127 1/2	114	89	12 68	44	74	24	9	12 1/2	32	21 1/2	18	66 1/2	47	63	18	80 1/2	76 1/2	172	12 1/4	9 1/4	
552*	48 1/2	55	139 1/2	126	89	12 68	44	74	24	9	12 1/2	34	21 1/2	18	72 1/2	47	63	18	86 1/2	82 1/2	184	12 1/4	9 1/4	
553*	48 1/2	55	151 1/2	138	89	12 68	44	74	24	9	12 1/2	36	21 1/2	18	78 1/2	47	63	18	92 1/2	88 1/2	196	12 1/4	9 1/4	
651*	57	64 1/2	132	117 1/2	104	15 81 1/2	52	89	28	10	15 1/2	36 1/2	24	18	63 1/2	56 1/2	72 1/2	18	92 1/2	88 1/2	196	14 1/4	11 1/8	
652*	57	64 1/2	144	129 1/2	104	15 81 1/2	52	89	28	10	15 1/2	38 1/2	24	18	69 1/2	56 1/2	72 1/2	18	98 1/2	94 1/2	208	14 1/4	11 1/8	
653*	57	64 1/2	156	141 1/2	104	15 81 1/2	52	89	28	10	15 1/2	40 1/2	24	18	75 1/2	56 1/2	72 1/2	18	104 1/2	100 1/2	220	14 1/4	11 1/8	
740*	66	73 1/2	132	117 1/2	122	15 89 1/2	55	102	30	10	15 1/2	36 1/2	24	18	65 1/2	65 1/2	81 1/2	18	110 1/2	106 1/2	232	14 1/4	11 1/8	
741*	66	73 1/2	144	129 1/2	122	15 89 1/2	55	102	30	10	15 1/2	38 1/2	24	18	71 1/2	65 1/2	81 1/2	18	116 1/2	112 1/2	244	14 1/4	11 1/8	
742*	66	73 1/2	156	141 1/2	122	15 89 1/2	55	102	30	10	15 1/2	40 1/2	24	18	77 1/2	65 1/2	81 1/2	18	122 1/2	118 1/2	256	14 1/4	11 1/8	
743*	66	73 1/2	168	153 1/2	122	15 89 1/2	55	102	30	10	15 1/2	42 1/2	24	18	83 1/2	65 1/2	81 1/2	18	128 1/2	124 1/2	268	14 1/4	11 1/8	
860*	77 1/2	85 1/2	139 1/2	123 1/2	134	15 99 1/2	56 1/2	112	36	11 1/2	16	36 1/2	24	18	51 1/2	77 1/2	93 1/2	18	134 1/2	130 1/2	280	15 1/2	12 1/8	
861*	77 1/2	85 1/2	151 1/2	135 1/2	134	15 99 1/2	56 1/2	112	36	11 1/2	16	38 1/2	24	18	57 1/2	77 1/2	93 1/2	18	140 1/2	136 1/2	292	15 1/2	12 1/8	
862*	77 1/2	85 1/2	163 1/2	147 1/2	134	15 99 1/2	56 1/2	112	36	11 1/2	16	40 1/2	24	18	63 1/2	77 1/2	93 1/2	18	146 1/2	142 1/2	304	15 1/2	12 1/8	
863*	77 1/2	85 1/2	175 1/2	159 1/2	134	15 99 1/2	56 1/2	112	36	11 1/2	16	42 1/2	24	18	69 1/2	77 1/2	93 1/2	18	152 1/2	148 1/2	316	15 1/2	12 1/8	

*Numbers of all Monco Fire Tube Boilers, Coal and Oil Burning, begin with these three numerals.