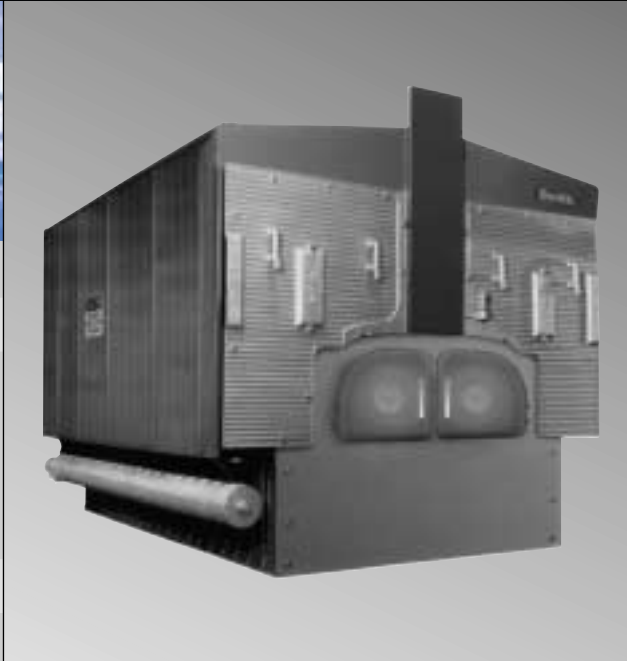




Smith
CAST IRON BOILERS

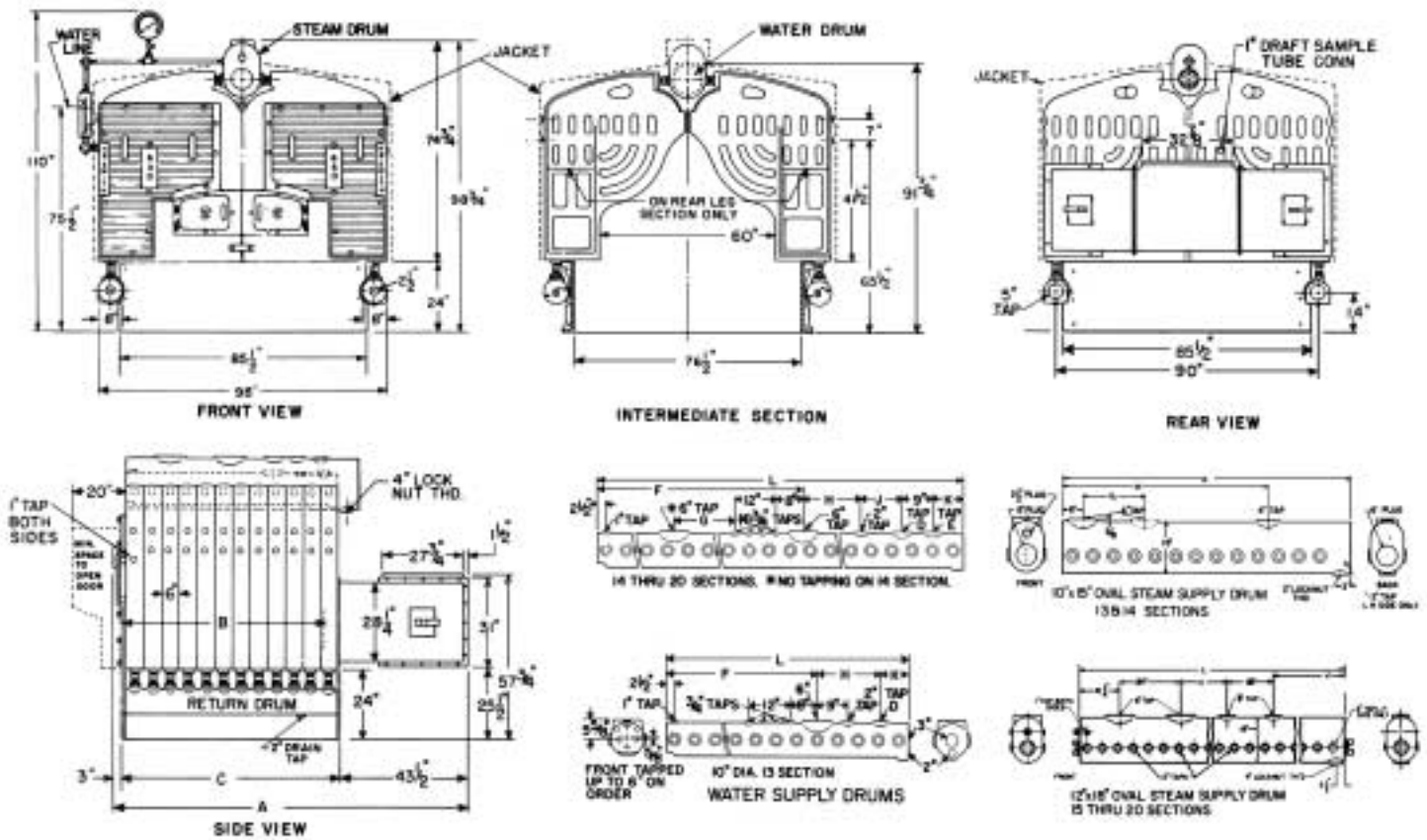


Mills 651

BITUMINOUS COAL-FIRED
CAST IRON BOILER



SPECIFICATIONS AND DIMENSIONS – Mills 651 Stoker-fired Boiler



Smith Certified Ratings, Burner Capacities, Chimney Sizes

Dimensions (inches) — MILLS 651

Boiler Number *	RATINGS†				Coal Firing Rate (Lb./Hr.)	Furnace Volume (Cu. Ft.)	Chimney Size (In. x In. x Ft.)	Water Supply Drum													Steam Supply Drum					
	Gross Output MBH	Steam (Net) *		Water (Net) MBH				Tapping Sizes		Tapping Location									Tapping Location							
		Sq. Ft.	MBH					D	E	F	G	H	J	K	L	10"x15" Drum			12"x18" Drum							
A	B	C	D	E	F	G	H	J	K	L	G	H	K	L	J	K										
651-Δ-13	2,948	9,538	2,289	2,564	351	87.8	28 x 28 x 43	125 1/2	73	79	4	-	50 1/2	-	18	-	9	77 1/2	-	42 1/2	85 1/2	-	-	-	-	-
651-Δ-14	3,209	10,381	2,491	2,790	382	95.6	28 x 28 x 45	131 1/2	79	85	2	4	44 1/2	-	12	9	9	83 1/2	18	48 1/2	91 1/2	-	-	-	-	-
651-Δ-15	3,478	11,250	2,700	3,024	414	103.5	28 x 28 x 47	137 1/2	85	91	2	4	50 1/2	7	12	9	9	89 1/2	-	-	-	97 1/2	22	18	-	-
651-Δ-16	3,746	12,117	2,908	3,257	446	111.4	28 x 28 x 50	143 1/2	91	97	4	2	62 1/2	10	9	9	6	95 1/2	-	-	-	103 1/2	28	18	-	-
651-Δ-17	3,998	12,933	3,104	3,477	476	118.9*	30 x 30 x 52	149 1/2	97	103	4	2	68 1/2	16	9	9	6	101 1/2	-	-	-	109 1/2	34	18	-	-
651-Δ-18	4,200	13,588	3,261	3,652	500	124.9*	30 x 30 x 54	155 1/2	103	109	4	2	68 1/2	16	12	12	6	107 1/2	-	-	-	115 1/2	40	18	-	-
651-Δ-19	4,402	14,242	3,418	3,828	524	130.9*	30 x 36 x 56	161 1/2	109	115	4	2	74 1/2	22	12	12	6	113 1/2	-	-	-	121 1/2	46	18	-	-
651-Δ-20	4,603	14,892	3,574	4,003	548	137.0*	30 x 36 x 58	167 1/2	115	121	4	3	74 1/2	22	17	12	7	119 1/2	-	-	-	127 1/2	40	30	-	-
651-Δ-21	Consult the Smith Co. for ratings and data																									
651-Δ-22																										
651-Δ-23																										
651-Δ-24																										
651-Δ-25																										

- (Δ) Insert "S" for Steam, "W" for Water.
- * For 17 through 20 section boilers, combustion volume based on a maximum hearth length 82".
- (†) Ratings are based on:
 - (a) Firing rates based on bituminous coal with a heating value of 12,000 BTU/lb.
 - (b) 48,000 BTU heat release per cubic foot of furnace volume with stoker grate 10" below bottom of boiler water leg. Stoker manufacturer may request lower heat release which could require pitting or elevated settings.
 - (c) Firing rate based on 70% overall boiler efficiency.

Stoker sizing
 The rated capacity of the stoker should not be less than the coal firing rate listed for the boiler. Corrections in stoker capacity will be required should the heating value of the coal be other than the 12,000 BTU per pound used as a basis of listed firing rate. For unusual piping and pickup conditions, consult the Smith Co.
 Induced draft fans available, check with Smith Co. for proper selection.
 Note: Dimensions are approximate and should not be used to "rough in" equipment.

Smith
 CAST IRON BOILERS

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