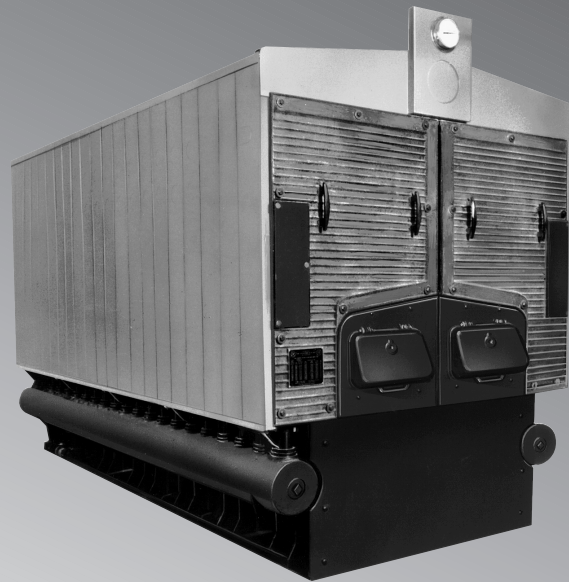




Smith
CAST IRON BOILERS

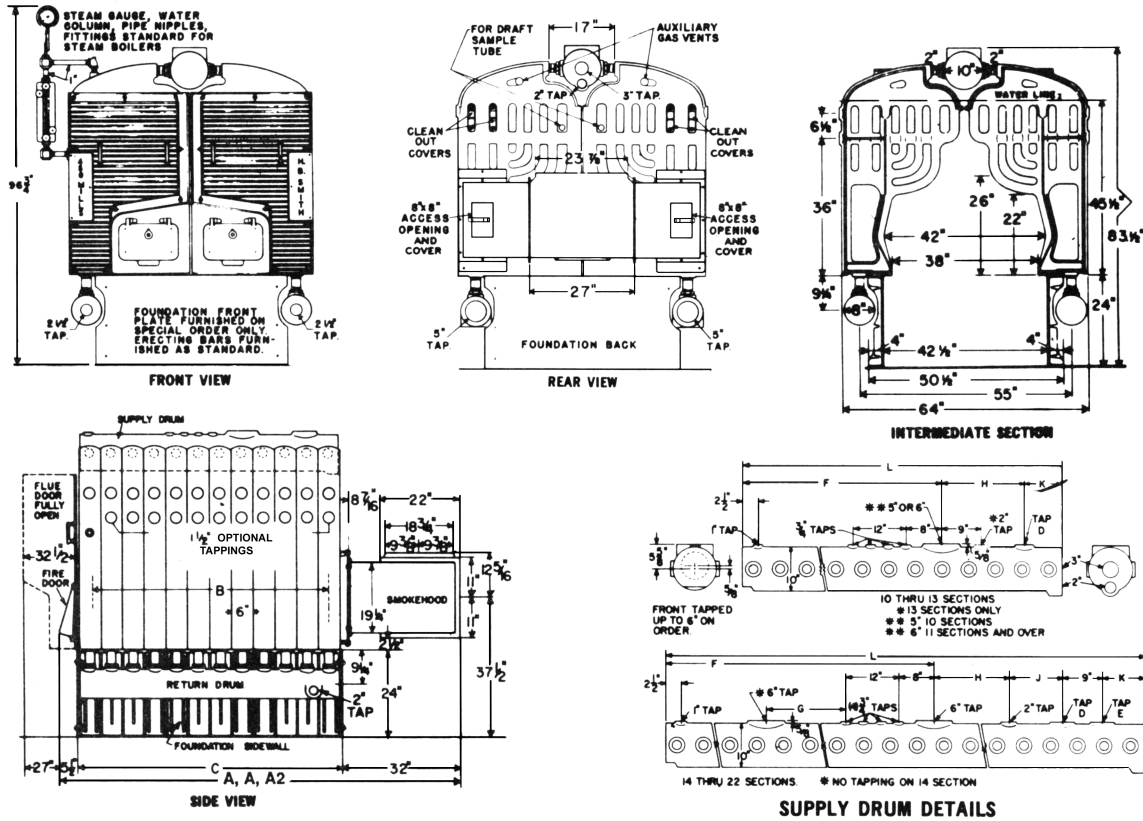


Mills 450

ALL FUELS BOILER
GROSS OUTPUT 1,584 TO 4,540 MBH



Smith Certified Ratings: Gross Output 1,584 to 4,540 MBH



Smith Certified Ratings, Burner Capacities, Chimney Sizes

Designed and tested according to the A.S.M.E. boiler and pressure vessel code, section IV for maximum allowable working pressure, steam 15 lbs., water 40 lbs.

Boiler Number	Boiler Horsepower	Smith Certified Gross Output MBH	Smith Certified Net Ratings		Smith Certified Burner Capacity		Chimney Size (Note 5)		Inside Dimensions Smoke Pipe To Fit Over Smokehood Outlet (in.)	Heating Surface (Sq. Ft.)	
			Sq. Ft.	MBH (Note 2)	MBH (Note 3)	Oil GPH (Note 4)	Gas MBH (Note 4)	Size (Inches)			Height (Feet)
450-A-8	47.3	1,584	5,060	1,214.7	1,377.4	13.20	2,041	16 x 20	25	15 x 19	288.7
450-A-9	53.7	1,796	5,795	1,391.2	1,561.7	14.90	2,307	16 x 20	26	15 x 19	325.3
450-A-10	60.0	2,008	6,495	1,559.0	1,746.1	16.65	2,573	20 x 20	27	15 x 19	361.3
450-A-11	66.3	2,220	7,180	1,723.6	1,930.4	18.35	2,843	20 x 20	28	15 x 19	398.0
450-A-12	72.6	2,428	7,855	1,885.1	2,111.3	20.10	3,104	20 x 20	29	15 x 19	434.0
450-A-13	78.9	2,640	8,540	2,049.7	2,295.7	21.80	3,370	20 x 24	30	19 x 19	470.7
450-A-14	85.2	2,852	9,225	2,214.3	2,480.0	23.50	3,636	20 x 24	31	19 x 19	506.7
450-A-15	91.5	3,064	9,910	2,378.9	2,664.3	25.25	3,902	20 x 24	32	19 x 19	543.3
450-A-16	97.7	3,270	10,580	2,538.8	2,843.5	26.95	4,168	24 x 24	33	19 x 19	579.3
450-A-17	104.0	3,490	11,290	2,709.6	3,034.8	28.70	4,433	24 x 24	34	24 x 19	616.0
450-A-18	110.2	3,700	11,970	2,872.7	3,217.4	30.40	4,699	24 x 24	35	24 x 19	652.0
450-A-19	116.8	3,910	12,650	3,035.7	3,400.0	32.10	4,965	24 x 24	36	24 x 19	688.7
450-A-20	123.1	4,120	13,330	3,198.8	3,582.6	33.85	5,231	24 x 28	37	24 x 19	724.7
450-A-21	129.4	4,330	14,010	3,361.8	3,765.2	35.55	5,497	24 x 28	38	24 x 19	760.7
450-A-22	135.6	4,540	14,685	3,524.8	3,947.8	37.25	5,761	24 x 28	39	24 x 19	796.7

Dimensions — MILLS 450

Boiler Number	Furnace Volume (Cu. Ft.)	Covering Surface Including Drums (Sq. Ft.)	Overall Length (inches)				Furnace Length (inches)	Foundation Length (inches)	Supply Drum										
			Natural Draft	Auburn Axial Fan	Auburn Fan	B			C	D	E	Tapping Location (Inches)							
												F	G	H	J	K	L		
450-A-8	29.43	70	86 1/2	90	94 7/8	42	49	3	-	32 1/2	-	8	-	7	47 1/2				
450-A-9	33.54	77	92 1/2	96	100 7/8	48	55	3	-	32 1/2	-	14	-	7	53 1/2				
450-A-10	37.64	84	98 1/2	102	106 7/8	54	61	3	-	38 1/2	-	14	-	7	59 1/2				
450-A-11	41.75	91	104 1/2	108	112 7/8	60	67	4	-	44 1/2	-	12	-	9	65 1/2				
450-A-12	45.86	98	110 1/2	114	118 7/8	66	73	4	-	44 1/2	-	18	-	9	71 1/2				
450-A-13	49.96	105	116 1/2	120	124 7/8	72	79	4	-	50 1/2	-	18	-	9	77 1/2				
450-A-14	54.07	112	122 1/2	126	130 7/8	78	85	2	4	44 1/2	-	12	9	9	83 1/2				
450-A-15	58.18	119	128 1/2	132	138 3/4	84	91	2	4	50 1/2	7	12	9	9	89 1/2				
450-A-16	62.28	126	134 1/2	138	144 3/4	90	97	4	2	62 1/2	10	9	9	6	95 1/2				
450-A-17	66.39	133	140 1/2	144	150 3/4	96	103	4	2	68 1/2	16	9	9	6	101 1/2				
450-A-18	70.50	140	146 1/2	150	156 3/4	102	109	4	2	68 1/2	16	12	12	6	107 1/2				
450-A-19	74.60	147	152 1/2	156	162 3/4	108	115	4	2	74 1/2	22	12	12	6	113 1/2				
450-A-20	78.71	154	158 1/2	162	168 3/4	114	121	4	3	74 1/2	22	17	12	7	119 1/2				
450-A-21	82.81	161	164 1/2	168	174 3/4	120	127	4	3	80 1/2	28	17	12	7	125 1/2				
450-A-22	86.92	168	170 1/2	174	180 3/4	126	133	4	3	86 1/2	34	17	12	7	131 1/2				

STANDARD EQUIPMENT

- All Boilers
- 24-inch high foundation
 - Steel smokehood
 - Steel erecting bars
 - Insulated metal jacket
- Steam Boilers
- C.I. water column and piping
 - Steam gauge with syphon
 - Safety valve set at 15 psi, side outlet

- Water Boilers
- ASME 40 psi water relief valve
 - 80 psi working pressure

OPTIONAL EQUIPMENT

- Prefabricated return yoke with flexible seals
- Air elimination dip tube for water boilers
- Foundation back plate with opening
- Combination pressure-altitude gauge
- 4 1/2" remote-reading dial thermometer
- Low water cutoffs
- Automatic water feeder
- Induced draft fans

(Note 1) Important information.
 (Δ) Insert "S" for Steam, "W" for Water. Example, 450-S-8 is an 8 section MILLS 450 boiler for steam.
 (Note 2) The Net Smith Certified Steam Ratings shown are based on piping and pick-up allowance of 1.288 except 8-section (1.304), and 9-section (1.291).
 (Note 3) The Net Smith Certified Water Ratings shown are based on an allowance of 1.15.
 (Note 4) Heavy Oil having heat content of 150,000 BTU/Gal.
 (Note 5) If the oil burner being used requires a draft over the fire greater than .06", the chimney height should be adjusted accordingly.
 The manufacturer should be consulted before selecting a boiler for installations having unusual piping and pickup requirements, such as intermittent system operation, extensive piping, etc.
 For forced hot water heating systems where the boiler and all piping are within the area to be heated, the boiler may be selected on the basis of its Gross Output.
 Note: Dimensions are approximate. Should not be used to "rough in" equipment.