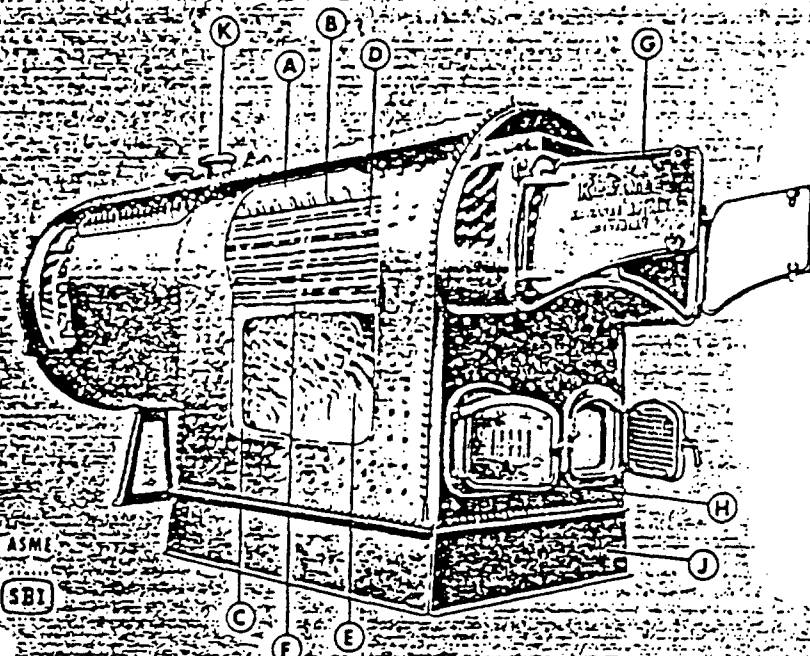


KEWANEE®

500 series

high pressure • oil, gas or stoker

MARCO 1934



125-150 lb wp • 30 to 304 hp

For heavy duty heating, power or process requirements of hospitals, schools, industries or apartment buildings. They are available for pressures of 150 lb steam and for high temperature hot water systems above 250° F.

The 500 Series will operate economically at capacities of 150% and more of their catalog ratings because of their generous proportions of heating surface, steam space and disengaging area.

A constant supply of dry steam is assured by ample steam space (A), large unbroken disengaging area (B), wide water legs (C) and well spaced tubes (D) which eliminate agitation of the water and provide rapid circulation of the boiler water.

Large firebox (E) provides correct space for complete combustion without waste of fuel and two-pass 3" diameter tubes (D) permit maximum transfer of heat and lower stack temperatures.

Arched crown sheet (F) is self-cleaning and not subject to accumulations of sediment and sludge.

Heavy cast flue doors (G) furnish easy access to tubes. Cast iron

firedoors (H) have safety latches, liners and slotted openings for secondary air adjustment. Flanged firedoor openings are sized for convenient stoker operation.

Mud ring is of heavy steel, riveted in place. Heavy steel base (J) has four cast iron corner posts for boiler support and steel panels with flanges support boiler covering.

Steam outlets (K) have 300 lb American Standard flanged nozzles suitable for non-return valves.

Specifications and data are shown for mechanically fired boilers. For information regarding hand-fired coal types, consult the nearest Kewanee representative.

ratings • mechanically fired—oil, gas or stoker

boiler number	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590
SBI rating — horsepower	30	35	39	44	52	61	74	87	109	130	152	174	217	251	304
— steam ————— sc/h	4250	4860	5470	6080	7990	8500	10330	12150	15180	18220	21250	24290	30360	36430	48500
— MB/h	1020	1166	1313	1459	1750	2040	2479	2916	3643	4373	5100	5830	7286	8743	10700
— steam per hour 212° F	1050	1200	1350	1520	1790	2100	2550	3000	3760	4490	5240	6000	7490	9000	10490
— firing rate — oil ————— gph	13	15	16	18	22	26	31	37	46	54	64	73	91	110	137
— gas ————— MB/h	1910	2180	2460	2740	3280	3830	4650	5460	6840	8700	9360	10920	13670	16400	19180
— stoker ————— lb per hr	170	194	218	244	291	340	412	485	607	729	850	972	1215	1457	1720
heating surface (SBI min) ————— sq ft	250	286	322	358	429	500	608	715	893	1072	1250	1429	1786	2143	2500
furnace volume (SBI min) ————— cu ft	30.4	34.8	39.1	43.5	55.1	65.8	73.8	85.8	108.5	130.2	151.8	173.5	216.9	260.3	303.5
furnace height (SBI min) ————— ft	2-6	2-6 1/4	2-7 1/4	2-7 3/4	2-8 1/4	2-10	2-11 1/4	2-11 3/4	2-14	2-17	2-19	2-20 1/2	2-24 1/2	2-29 1/2	2-34 1/2
firebox vol. above mud ring ————— cu ft	39.6	39.6	48.5	48.5	62.1	69.6	97.0	110.4	130.9	157.2	183.2	207.8	231.9	245.5	
— additional furnace height for stoker (SBI min) ————— ft														0-6	1-1
safety valve capacity															
— oil-gas fired ————— lb steam per hr	2000	2288	2576	2864	3432	4000	4864	5720	7144	8576	10000	11432	14288	17144	20000
— stoker fired ————— lb steam per hr	1750	2000	2254	2506	3003	3500	4256	5005	6251	7504	8750	10000	12500	15000	17500

— firing rates calculated to develop boiler output of 150% of SBI rating

— based on 150,000 Btu oil

— based on 12,000 Btu coal

— feed water distance below bottom of water leg that height must be set for SBI

— minimum furnace volume and height

Standard equipment — fire and flue doors with frames, metal base, backband and live cleaner with handle. Manhole on S82 and larger.

Standard steam fittings — safety valve(s), steam gage with siphon and cock, Kewanee water column with water gage and air cock assembly — chain operated on S82 and larger.

AS 000015