

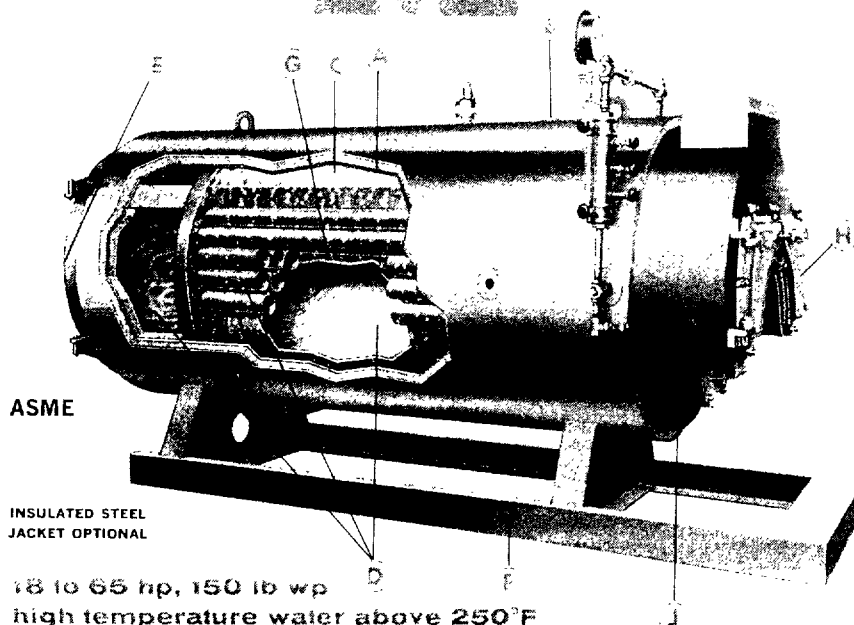
AMERICAN-STANDARD

PLAINTIFF'S EXHIBIT

ASI-1216

scottie junior SERIES HM

high pressure • oil or gas



ASME

INSULATED STEEL
JACKET OPTIONAL

18 to 65 hp, 150 lb wp
high temperature water above 250°F

Where limited space and head room are of paramount importance, the Scottie Jr. scotch type boiler provides the solution for many power and industrial process steam problems. It is particularly adaptable to laundries, dairies, dry cleaning plants, tire re-capping stations and manufacturing plants.

Ratings for the Scottie Jr. series are conservatively computed, and based on approximately 5.5 square feet of heating surface per boiler horsepower. 80% efficiency is guaranteed . . . may be even higher under normal operating conditions.

The Scottie Junior boiler is also available as a boiler-burner unit using oil, gas, or combination gas-oil.

- A **Shell** of flange quality steel. All welds in accordance with ASME Code x-rayed where required, and stress relieved.
- B **Threaded forged steam outlet** assures tight fitting, leak-proof connections with steam mains.
- C **Ample steam space**, large unbroken disengaging area and well spaced tubes eliminate violent agitation of water . . . insure rapid circulation, fast pick-up and constant supply of dry quality steam.
- D **Generous combustion space** in large diameter furnace, rear combustion chamber and 3" firetubes permit lower velocities and resistance . . . greatly reduce noise factor.
- E **Combustion chamber door** swings wide open on substantial hinges to provide full access to tubes from rear.
- F **Sturdy steel skids** simplify handling and installation. No special foundation is required.
- G **Plain circular furnace** has sufficient volume for complete combustion of fuels.
- H **Heavily insulated cast iron doors** precision ground and gasketed for gas tight fit provide quick access to tubes without interference with firing equipment.
- J **Heads**, flanged of firebox quality steel with all tubes rolled and beaded in trepanned tube holes.

ratings • mechanically fired — oil or gas

BOILER NUMBER		HM-18	HM-29	HM-39	HM-45	HM-59	HM-65	HM-78	HM-92
*Rating—horsepower		18	29	39	45	59	65		
—MBtuh		606	967	1316	1530	1971	2191		
—steam per hour—212° F.	lb	624	996	1356	1577	2031	2258		
Firing rate—No. 2 oil**	gph	5.4	8.6	11.7	13.6	17.5	19.5		
—No. 5 oil**	gph	5.0	8.0	10.9	12.7	16.4	18.2		
—gas	MBtuh	757	1208	1645	1912	2463	2738		
Heating surface	sq ft	99	158	215	250	322	358		
Furnace volume	cu ft	16.9	21.4	29.6	32.0	47.9	50.8		
Safety valve capacity	lb steam per hr	792	1264	1720	2000	2576	2864		

*Certified output. **Based on 140,000 Btu No. 2 oil—150,000 Btu No. 5 oil.

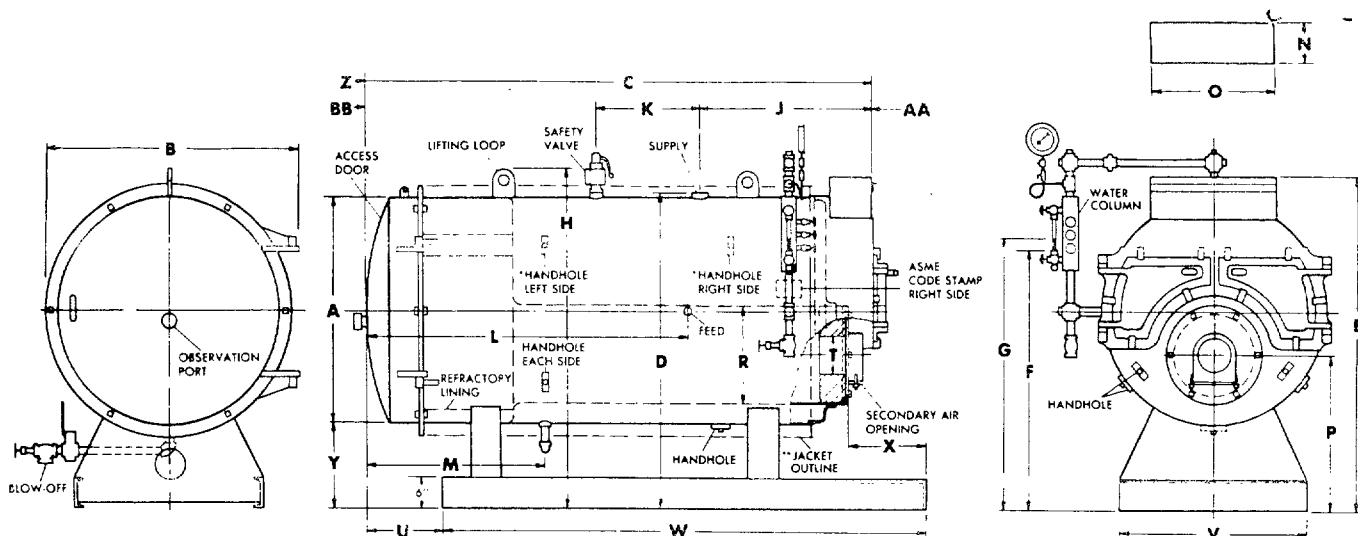
Standard equipment—Manhole in HM-59 and HM-65, refractory lined rear combustion chamber and hinged door with pyrex observation port; flue scraper with handle; standard burner mounting plate with secondary air opening and Kewanee standard refractory ring for oil burning. Plain burner mounting plate only (less refractory) for gas burning. Gas-tight steel front smokebox with insulated cast iron gasketed flue doors, boiler lifting loops, and steel skids.

Standard steam trimmings—Kewanee water column with water gage and try cocks assembly, safety valve; steam gage with siphon and cock; blow-off valves.

Standard water trimmings—Relief valve(s) as required by ASME Code. Standard equipment subject to change without notice.

BULLETIN 84-3-84B
Supersedes Bulletin 3107-1

28694



MANHOLE ON HM 59 AND HM 65
*THESE HANDHOLES ON HM 18 THRU HM 45 **OPTIONAL

scottie junior **H** SERIES **M**

high pressure • oil or gas

BOILER NUMBER	HM-18	HM-29	HM-39	HM-45	HM-59	HM-65
A—boiler—inside diameter	42	42	48	48	54	54
B—width overall	48½	48½	54½	54½	60½	60½
C—length	85	115	121	134	143½	154½
D—Steam supply height	59½	59½	65½	65½	72	72
E—Smoke outlet height	63	63	69	69	75	75
F—Water column height	48½	48½	53	53	58	58
G—Water line height	50½	50½	55	55	60	60
H—Lifting loop height	64½	64½	70½	70½	77	77
J—Steam supply	27	33	35	35	36	42
K—Safety valve	20	20	20	20	42	42
L—Feed water, each side	55½	79	83	96	83	88
M—Blow-off	32½	32½	36½	36½	40½	40½
N—Smoke outlet—outside width	8¾	8¾	10¾	10¾	11¾	11¾
O—outside length	24¾	24¾	26¾	26¾	29¾	29¾
P—Furnace—height	29½	29½	30½	30½	34	34
R—inside diameter	18	18	20	20	24	24
T—Hole diameter—oil burner refractory	7	7	7½	7½	7½	7½
U—Base—location	11	11	15	15	19	19
V—width	36	36	42	42	48	48
W—length	86½	116½	116½	130	141	152
X—extension	17½	17½	18	18	24	24
Y—Floor to boiler	16	16	16	16	16	16
Z—Rear door clearance	39	39	44	44	49	49
AA—Tube replacement space—front	41½	71	69½	82½	86	97
BB—rear	24	53½	50	63	63½	74½
Breeching diameter	17	18	20	20	21	22
Stack—diameter	14	15	17	18	19	20
—height	15-0	20-0	20-0	20-0	20-0	25-0
Steam supply size	2 in.	2	2	2	3	3
Blow-off size	1 in.	1	1	1	1¼	1¼
Feed water size	¾ in.	¾	¾	¾	¾	¾
Water column size	1 in.	1	1	1	1¼	1¼
*Outside surface to cover	63 sq ft	90	107	121	145	158
Approximate weight—150 lb wp.	3550 lb	4550	5900	6450	8500	9200

*Front of boiler and smokebox NOT included

SUPERSEDED
JULY 1, 1963
BY FOLLOWING
MODELS LISTED
IN BULLETIN
84-1-49A

HM-880 HM-881



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