

O. E. Frank Heater and Engineering Co., Inc.

Associated with FARRAR & TREFTS, Inc.
BUFFALO, N. Y.

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NEW YORK BALTIMORE
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DETROIT CHARLOTTE, N. C.
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CLEVELAND HARRISBURG, PA.
MINNEAPOLIS ROANOKE, VA.

O. E. F. products consist of a complete line of heaters for every hot water need. Storage Heaters for hot water service in either U-tube or Straight tube type. Instantaneous Heaters for hot water service, heating systems, power plants. Complete information on materials, construction, service and our guarantee on request.

Large stocks of tanks, castings and tubes insure prompt shipments.

Capacities and General Dimensions O. E. F. Instantaneous Heaters, Heating Water from 50 to 180° F. with Steam at 212° F.

Gals. per Hr.	Size	Approx. Overall Dimensions				Max. Steam	Max. Water	Drain	Gals. per Hr.	Size	Approx. Overall Dimensions				Max. Steam	Max. Water	Drain
		Width	Length	Height	Ver. Type						Width	Length	Height	Ver. Type			
200	1H-7	15 1/4"	7'-5"	8'-1 1/2"	3"	3"	3"	1"	2000	1H-60	21 1/4"	8'-8 1/2"	9'-8 1/2"	4"	5"	1 1/2"	1 1/2"
300	1H-11	15 1/4"	7'-5"	8'-1 1/2"	3"	3"	3"	1"	2500	1H-70	25 1/4"	8'-11"	9'-10"	6"	6"	2"	2"
400	1H-14	15 1/4"	7'-5"	8'-1 1/2"	3"	3"	3"	1"	3000	1H-90	25 1/4"	8'-11"	9'-10"	6"	6"	2"	2"
500	1H-15	18"	8'-7"	9'-8"	3"	4"	1 1/2"	1 1/2"	4000	1H-120	26 1/4"	9'-1 1/2"	10'-4 1/2"	8"	8"	3"	3"
600	1H-18	18"	8'-7"	9'-8"	3"	4"	1 1/2"	1 1/2"	5000	1H-150	26 1/4"	9'-1 1/2"	10'-4 1/2"	8"	8"	3"	3"
800	1H-24	18"	8'-7"	9'-8"	3"	4"	1 1/2"	1 1/2"	6000	1H-162	26 1/4"	9'-1 1/2"	10'-4 1/2"	8"	8"	3"	3"
1000	1H-30	18"	8'-7"	9'-8"	3"	4"	1 1/2"	1 1/2"	7000	1H-189	30 1/4"	10'-3 1/2"	11'-4 1/2"	10"	8"	3"	3"
1250	1H-38	18"	8'-7"	9'-8"	3"	4"	1 1/2"	1 1/2"	8000	1H-216	30 1/4"	10'-3 1/2"	11'-4 1/2"	10"	8"	3"	3"
1500	1H-45	21 1/4"	8'-8 1/2"	9'-8 1/2"	4"	5"	1 1/2"	1 1/2"	9000	1H-243	30 1/4"	10'-3 1/2"	11'-4 1/2"	10"	8"	3"	3"
1800	1H-54	21 1/4"	8'-8 1/2"	9'-8 1/2"	4"	5"	1 1/2"	1 1/2"	10000	1H-270	30 1/4"	10'-3 1/2"	11'-4 1/2"	10"	8"	3"	3"

Capacities and General Dimensions O. E. F. Feed Water Heaters, Heating Feed Water from 50 to 200° F. with Steam at 212° F.

Horse Power	Size	Lbs. per Hour	Approximate Overall Dimensions				Maximum Steam	Maximum Water	Drain
			Width	Length	Height	Ver. Type			
50	FW-9	1500	15 1/4"	7'-5"	8'-1 1/2"	3"	3"	3"	1"
75	FW-13	2250	15 1/4"	7'-5"	8'-1 1/2"	3"	3"	3"	1"
100	FW-17	3000	15 1/4"	7'-5"	8'-1 1/2"	3"	3"	3"	1"
150	FW-25	4500	18"	8'-7"	9'-8"	3"	4"	4"	1 1/2"
200	FW-35	6000	18"	8'-7"	9'-8"	3"	4"	4"	1 1/2"
250	FW-43	7500	21 1/4"	8'-8 1/2"	9'-8 1/2"	4"	5"	5"	1 1/2"
300	FW-52	9000	21 1/4"	8'-8 1/2"	9'-8 1/2"	4"	5"	5"	1 1/2"
350	FW-61	10500	21 1/4"	8'-8 1/2"	9'-8 1/2"	4"	5"	5"	1 1/2"
400	FW-69	12000	21 1/4"	8'-8 1/2"	9'-8 1/2"	4"	5"	5"	1 1/2"
450	FW-78	13500	25 1/4"	8'-11"	9'-10"	6"	6"	6"	2"
500	FW-87	15000	25 1/4"	8'-11"	9'-10"	6"	6"	6"	2"
600	FW-104	18000	25 1/4"	8'-11"	9'-10"	6"	6"	6"	2"
700	FW-121	21000	26 1/4"	9'-1 1/2"	10'-4 1/2"	8"	8"	8"	2"
800	FW-136	24000	26 1/4"	9'-1 1/2"	10'-4 1/2"	8"	8"	8"	2"
900	FW-156	27000	26 1/4"	9'-1 1/2"	10'-4 1/2"	8"	8"	8"	2"
1000	FW-160	30000	26 1/4"	10'-1 1/2"	11'-4 1/2"	8"	8"	8"	2"
1100	FW-165	33000	26 1/4"	10'-1 1/2"	11'-4 1/2"	8"	8"	8"	2"
1200	FW-180	36000	26 1/4"	10'-1 1/2"	11'-4 1/2"	8"	8"	8"	2"
1300	FW-195	39000	30 1/4"	10'-3 1/2"	11'-4 1/2"	10"	8"	8"	3"
1400	FW-210	42000	30 1/4"	10'-3 1/2"	11'-4 1/2"	10"	8"	8"	3"
1500	FW-225	45000	30 1/4"	10'-3 1/2"	11'-4 1/2"	10"	8"	8"	3"
1800	FW-270	54000	30 1/4"	10'-3 1/2"	11'-4 1/2"	10"	8"	8"	3"
2000	FW-300	60000	34 1/4"	11'-0 1/2"	12'-0 1/2"	10"	10"	10"	3"
2500	FW-375	75000	34 1/4"	11'-0 1/2"	12'-0 1/2"	10"	10"	10"	3"
3000	FW-450	90000	39 1/4"	11'-6 1/2"	12'-6 1/2"	10"	12"	12"	3"
4000	FW-600	120000	39 1/4"	11'-6 1/2"	12'-6 1/2"	10"	12"	12"	3"

O. E. F. Feed Water Heaters and Instantaneous Heaters are designed for a maximum working pressure of 125 lbs. on the water spaces and 50 lbs. on the steam spaces.

O. E. F. Instantaneous Heaters are constructed of heavy close grain castings with rolled steel tube sheets and eighteen gauge Admiralty Metal tubes. Admiralty Metal tubes are unexcelled for feed-water service. Write us about them.

O. E. F. Instantaneous Heater for General Hot Water Service, Feed Water, Bleeder Turbines and Forced and Gravity Hot Water Heating Systems. Also Vertical Type. Steam opening may be located on top or either side of shell to suit requirements.

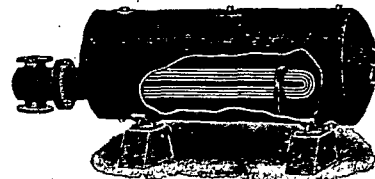
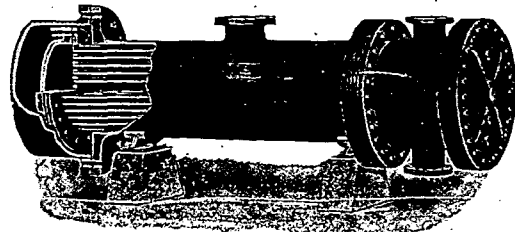


Fig. 1. O. E. F. U-Tube Storage Heater

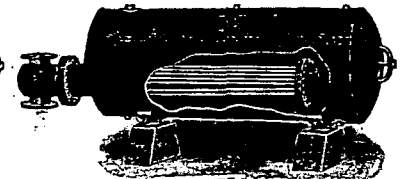


Fig. 7. O. E. F. Straight Tube Storage Heater

O. E. F. Storage Heaters are made of best quality flange steel, have rolled steel tube sheets, and sixteen gauge copper tubes. Chemical analysis and physical test of all steel used furnished on request. O. E. F. Heaters are doubly guaranteed by O. E. Frank Heater & Engineering Company and Farrar & Trefts, Inc.

O. E. F. Storage Heaters are furnished in either the U-bend Pattern, per Fig. 1 or the Straight Tube type, per Fig. 7. The shells are of best quality steel plate, the smaller sizes welded and the larger sizes riveted construction. The heating surface consists of 1 1/4 in. OD seamless drawn copper tubes No. 16 or 18 SWG as required. They are properly supported with a cast iron tube supporting plate to prevent wear of the tubes due to sagging and rubbing together. The tube sheets are steel, eliminating any possibility of cracks and leaks, which so commonly occur with cast iron tube sheets. The tube nests or bundles are removable from the tank for cleaning or repairing.

Where it is necessary to use both low and high pressure steam, the steam chamber and tubes may be arranged without the necessity of installing a separate tube bundle.

Openings of ample size are provided, and we call your attention to the arrangement of the steam inlet and outlet, making it possible to remove the tube bundle by simply unbolting the flanges and avoiding the necessity of breaking any length of pipe.

All storage heaters, unless otherwise specified, will be furnished for a working pressure of 100 pounds per square inch gage pressure, on both the steam and water spaces.

Storage heaters furnished for higher pressures.

CAPACITIES—O. E. F. U-Tube and Straight Tube Storage Heaters—Heating Given Quantities of Water from 50-180 Deg. Fahr. with Steam at 212 Deg. Fahr.

Tank Size	16x77	18x84	24x72	24x84	24x96	30x72	30x84	30x96	30x108	36x84	36x96	36x108	36x120	42x96	42x108	42x120	42x132	42x144	48x96	48x108	48x120
Gallons per Hour	A5	B5	C5	D5	E5	F5	G5	H5	I5	J5	K5	L5	M5	N5	O5	P5	Q5	R5	S5	T5	U5
100	A11	B11	C11	D11	E11	F11	G11	H11	I11	J11	K11	L11	M11	N11	O11	P11	Q11	R11	S11	T11	U11
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