

# 3

## Fulton Electric Thermal Fluid Heaters

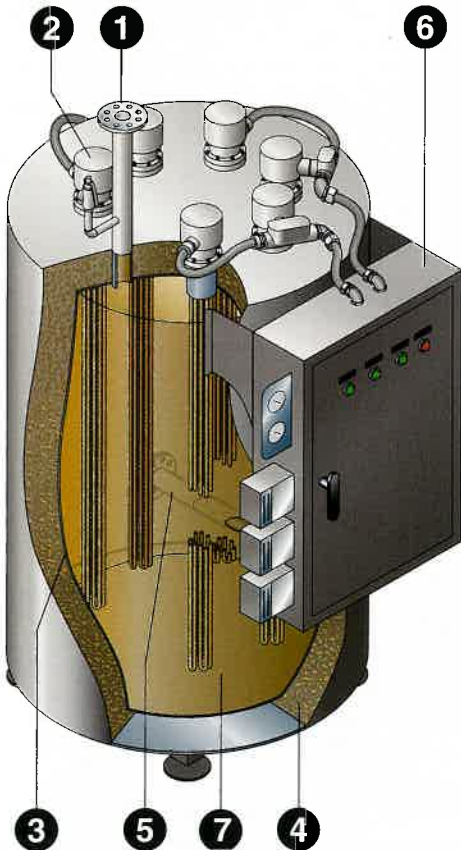
### These heaters feature top-mounted multiple low watt density elements

Available in 75,000 to 1,719,000 BTU/HR output, Fulton electric thermal fluid heaters include a large number of features.

- The low watt density elements are made of carbon steel, installed vertically and are easily removed, enabling periodic maintenance to be done without completely dismantling the system or fully draining the heater.
- High temperature insulation is wrapped by a neatly finished stainless steel jacket.
- Complete safety controls are included.
- Easy to use and operate temperature controls maintain precise temperatures at any level up to 650° F.
- Vertical design requires minimal floor space.



An overhead view of the Fulton electric thermal fluid heater. All elements are immediately accessible and permit each to be easily removed for service or inspection.



### Even circulation of thermal fluid is created within the vessel

This unique circulation method (upward spiraling fluid) results in an even flow of thermal fluid across the multiple low watt density elements. As the thermal fluid circulates across the elements, it is being uniformly heated. This results in low film temperatures and assures long element life.

Fulton can skid mount the entire packaged heater, pump, deaerator cold seal expansion tank with interconnecting piping to meet customer specifications.

- 1 Thermal fluid outlet
- 2 Top mounted, easily accessible elements
- 3 Robust fluid vessel
- 4 High density, tightly packed high temperature insulation
- 5 Thermal fluid inlet
- 6 Electrical panel box contains all operating safety controls
- 7 Upward spiraling fluid vessel

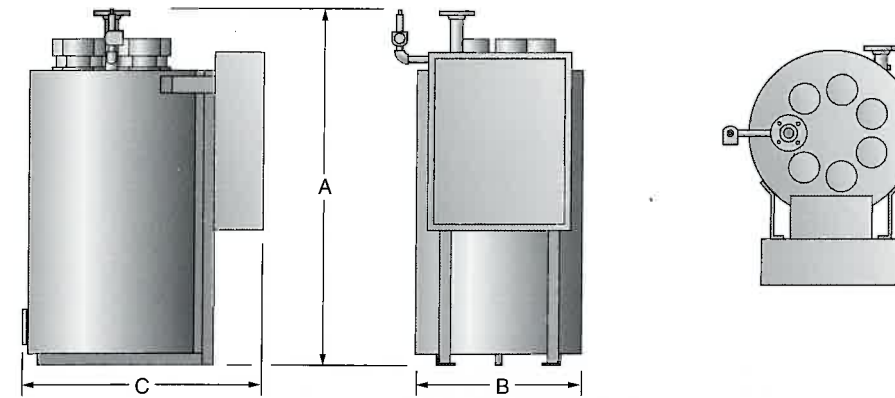


Diagram for guidance purposes only. Comprehensive details of dimensions, connections, etc. for each model are given on product dimensional data sheets available from Fulton.

### Specifications - Vertical Electric Thermal Fluid Heater

Model FT-N		0075	0150	0225	0300	0375	0430	0640	0860	1070	1290	1500	1720
	KW	22	44	66	88	110	126	189	252	315	378	441	504
Heat Input	1000 BTU/HR	75	150	225	300	375	429	644	859	1074	1289	1504	1719
	1000 KCAL/HR	18.9	37.8	56.7	75.6	94.5	108	162	216	271	325	379	433
Heat Output	1000 BTU/HR	74	148	222	294	368	420	631	842	1053	1263	1474	1685
	1000 KCAL/HR	18.6	37.3	59.9	74.1	92.7	105.8	159	212.2	265.4	318.3	371.4	424.6
Thermal Fluid Content	GAL	18	36	42	54	63	79	79	102	127	152	168	185
	LITERS	68	136	159	204	238	299	299	386	480	575	636	700
Recommended Flow Rate	GPM	50	50	50	90	90	125	125	150	150	175	200	200
	M3/HR	11.4	11.4	11.4	20.5	20.5	28.4	28.4	34	34	39.8	45.5	45.5
Typical Circulating Pump Motor	HP	7.5	7.5	7.5	10	10	15	15	15	15	15	20	20
Amps	KW	5.6	5.6	5.6	7.5	7.5	11.2	11.2	11.2	11.2	11.2	14.9	14.9
	208V	61	122	183	245	306	350	525	700	875	1050	1224	1399
	480V	26	53	79	106	132	151	228	303	379	455	531	606

### Dimensions - Vertical Electric Thermal Fluid Heater

Model FT-N		0075	0150	0225	0300	0375	0430	0640	0860	1070	1290	1500	1720
Heater Inlet/Outlet Connections	IN	1.5	1.5	1.5	1.5	1.5	2	2	2	2	2	2.5	2.5
	MM	38	38	38	38	38	51	51	51	51	51	64	64
(A) Overall Height	IN	60	60	60	60	60	80	80	80	80	80	80	80
	MM	1524	1524	1524	1524	1524	2032	2032	2032	2032	2032	2032	2032
(B) Heater Diameter	IN	20	26	28	32	32	32	32	38	44	50	54	58
	MM	508	660	711	813	813	813	813	965	1118	1270	1372	1473
(C) Overall Depth	IN	38	40	42	47	47	47	47	55.5	60.5	65.5	63	74.5
	MM	965	1016	1067	1194	1194	1194	1194	1410	1537	1664	1600	1892
Approx. Dry Weight	LB	1,060	1,220	1,400	1,540	1,660	2,040	2200	2370	2650	2950	3340	3600
	KG	481	555	636	700	756	927	1000	1077	1205	1341	1518	1636

### Fulton electric thermal fluid heaters are often used when a fuel fired heater is not feasible

At times an installation will have an atmosphere not suited to the utilization of fuel fired equipment.

For these applications Fulton has manufactured explosion proof units to comply with Class I, Division 1 or 2, Groups C & D, of the NEC Code.

The skid mounted unit at the right consists of a Fulton electric thermal fluid heater Model FT-0640-N with one main circulation pump, FT-500-L expansion deaerator tank, 200 gallon holding tank with drain/fill pump and two secondary loops. Each secondary loop consists of one circulation pump, one cooling heat exchanger and one automatic 3-way valve. This system was manufactured to provide heat to platens for the manufacture of specialty papers (i.e. resume' stock).

