



## **Vertical Coil Design Thermal Fluid Heaters**

Fulton's coil design thermal fluid heaters eliminate deficiencies of steam, high temperature hot water, and direct firing.

Fulton's time proven heater is a compact unit even up to its 12,000,000 BTU/hr. size. High efficiencies, rapid processing, and tight temperature control tolerances are associated with these heaters-plus or minus 2°F.

While still utilized in applications today, direct firing is a very crude and wasteful process. Heating is uneven; temperature is difficult to control; and the processing of combustible materials can be hazardous.

Fulton's four pass coil design heater features efficient overall even heating and low thermal inertia. Combustion air enters the bottom mounted burner fan inlet, passes upward between the inner and outer jacket and is pre-heated before it enters the top mounted burner. The hot gases are directed through four passes across the heating coils and exit at the flue outlet.

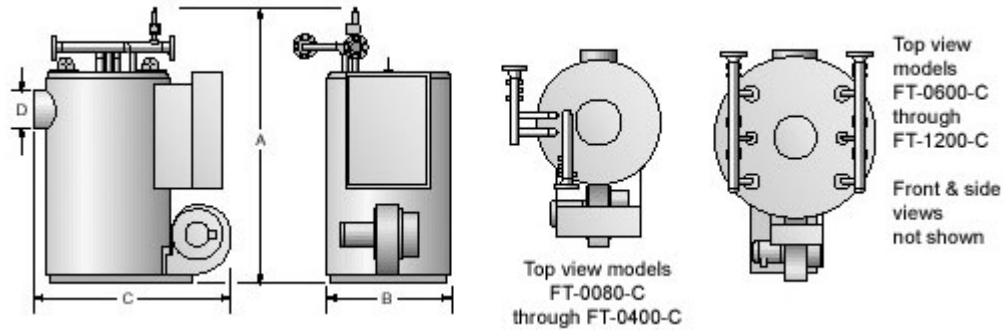
This principle dispenses with the need for large quantities of refractory insulating materials, resulting in extremely low thermal inertia, preventing overheating of the fluid in the event of pump or power failure.

For any process application, consider Fulton's coil design thermal fluid heater available from 800,000 to 12,000,000 BTU/Hr. with operating temperatures up to 750°F. Low emission burners are available as an option.

## Specifications

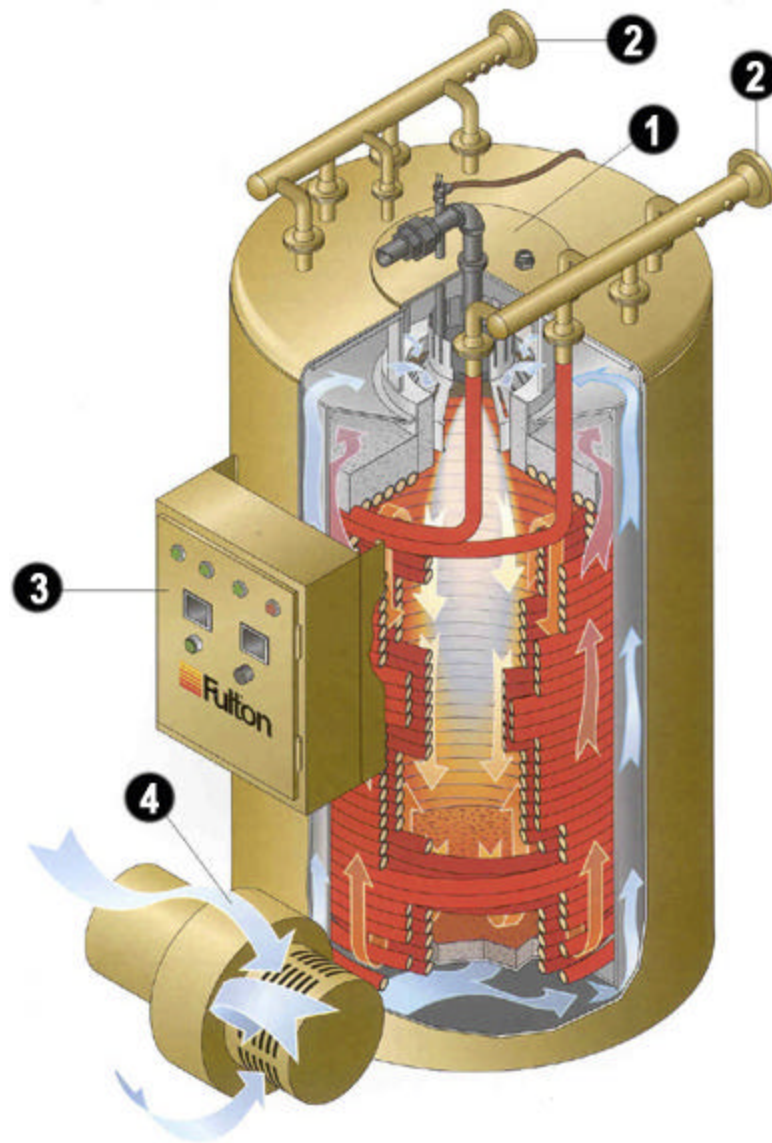
Model FT-C		0080	0120	0160	0240	0320	0400	0600	0800	1000	1200	1400
Heat Output	1000 BTU/HR	800	1200	1600	2400	3200	4000	6000	8000	10000	12000	14000
	1000 KCAL/HR	200	300	400	600	800	1000	1500	2000	2500	3000	3500
Thermal Fluid Content	GAL	10	21	19	31	68	76	132	171	290	383	460
	LITERS	38	80	72	116	258	288	500	648	1097	1450	1741
Recommended Flow Rate	GPM	50	75	100	150	250	250	375	500	615	730	800
	M3/HR	11.4	17	22.7	34	56.8	56.8	85.2	113	139	167	182
Typical Circulating Pump Motor	HP	7.5	10	10	15	20	20	30	40	50	50	60
	KW	5.6	7.5	7.5	11.2	14.9	14.9	22.4	29.8	37.3	37.3	45
Typical Burner Motor	HP	1.5	3	3	3	7.5	7.5	7.5	15	20	20	20
	KW	1.1	2.2	2.2	2.2	5.8	5.6	5.6	11.2	14.9	14.9	14.9
Fuel Consumption @ Full Output No.2 Oil	GPH	7.1	10.7	14.3	21.4	28	35.3	53	69.7	87.1	104.5	122
	LITER/HR	27	40.6	54.1	81	108.8	136	201	263.7	329.6	395.5	461.5
Natural Gas	FT3/HR	998	1498	1998	2999	4000	4997	7498	9997	12496	14998	17500
	M3/HR	28.3	421.4	56.5	84.9	113.2	141.5	212.3	283	253.8	424.6	495.5

## Dimensions



Model FT-C		0080	0120	0160	0240	0320	0400	0600	0800	1000	1200	1400
<b>Heat Inlet/Outlet Connections</b>	<b>IN</b>	1.25	1.25	2	2.50	3	3	4	4	6	6	6
	<b>MM</b>	32	32	50	65	80	80	100	100	150	150	150
<b>(A) Overall Height</b>	<b>IN</b>	60	76	76	86	101	108	139	139	143.5	144	163
	<b>MM</b>	1524	1930	1930	2184	2559	2793	3531	3531	3645	3658	4144
<b>(B) Heater Diameter</b>	<b>IN</b>	25	34	34	40	49	49	57	71	90	108	108
	<b>MM</b>	635	865	865	1015	1252	1245	1450	1805	2285	2745	2745
<b>(C) Overall Depth</b>	<b>IN</b>	41	56	56	62	80	70	79	103	130	148.5	153.3
	<b>MM</b>	965	1422	1422	1525	2030	1780	2007	2615	3302	3772	3893
<b>(D) Flue Outlet Diameter</b>	<b>IN</b>	10	10	10	12	14	14	18	20	20	22	22
	<b>MM</b>	254	254	254	304	356	356	457	508	508	558	558
<b>Recommended</b>	<b>IN</b>	10	12	12	14	18	18	22	24	24	26	26
<b>Vertical Stack Diameter</b>	<b>MM</b>	254	304	304	356	457	457	558	609	609	661	661
<b>Approx. Dry Weight</b>	<b>LB</b>	1,500	2,100	2,550	3,400	5,300	5,300	8,250	11,450	19,250	21,700	23,000
	<b>KG</b>	680	953	1,150	1,550	2,400	2,400	3,750	5,200	8,750	9,850	10,455

## Cutaway



1. **Top mounted burner** with special cone design produces a "narrow" long flame. By keeping the flame away from the inner row of coils, it avoids flame impingement on the coils.
2. **Fluid inlet** and outlet Fluid travels through a continuous closed loop system. The fluid is pumped through the coils to the fluid outlet and continues on through the entire system to the users.
3. **All safety and operating controls** are located in one central panel.
4. **Fan air inlet** for Combustion.