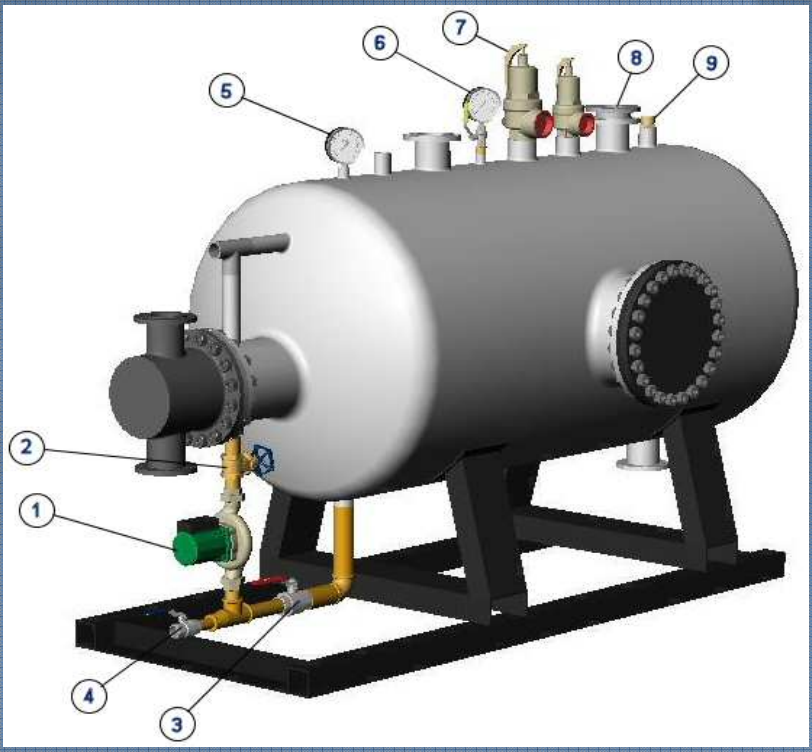
Thermal Products Ltd

SEMI STORAGE VESSELS

The Thermax unit pumps cold water from the bottom of the thermal storage vessel through a powerful heat exchanger. This heats the water to the set temperature. The heated water flows over a temperature sensor at the heat exchanger outlet. This adjusts primary fluid flowrate via a proportioning valve to maintain temperature. After this the heated water is returned to the vessel at the top. The vessel contains special baffles to prevent excessive stirring. The hot water now at the top of the vessel can be drawn off for use. Peaks of demand which exceed heat exchanger output are met from the hot water stored in the vessel. The vessel is then re-charged with hot water during the subsequent lower demand.



1) Loading Valve
2) Flow Trim Valve
3) Isolation Valve
4) Drain Valve
5) Thermometer & Pocket
6) Pressure Gauge and Valve
7) Safety Valve
8) Bursting Disc
9) Anti-Vacuum Valve

Primary controls are available as an optional extra, including high limit valve, control valve, sensors, thermostats and digital control panel. Primary steam conditioning equipment also available, all factory packaged.

"Hot Water is our Topic"

Thermax Semi-Storage / Semi-Instantaneous DHWS Calorifiers

· Compact
· Flexible
· Steam, LTHW or MTHW primary
· Virtually instantaneous domestic hot water
· Optimises peak input power.

Background:

Thermax units are designed to meet high DHWS demands in a compact and cost-effective way. Hot water is available within a few minutes of a cold start, temperature control is excellent and - thanks to the built-in thermal store - the primary input power requirement is much lower than for instantaneous water heaters.

Standard Specification:

Thermax Storage Vessel:
Materials: copper, copper-lined steel, galvanised steel, stainless steel or glass lined.
Each vessel is designed to suit the particular application, its working pressure and whether it is a vented or unvented system.

Heat Exchanger:
U-Tube type, 2 tube passes, 2 shell passes, copper or stainless steel tubes, copper or stainless steel baffles, brass or stainless steel tubeplate. Fabricated carbon steel header.

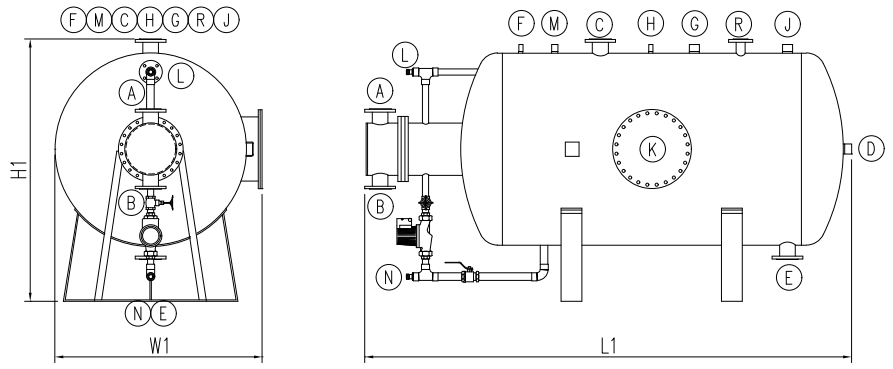
Loading Pump:
Bronze, in-line.

Intermediate Pipework:
This links vessel, pump and heat exchanger. Material; copper or stainless steel

DIMENSIONAL INFORMATION

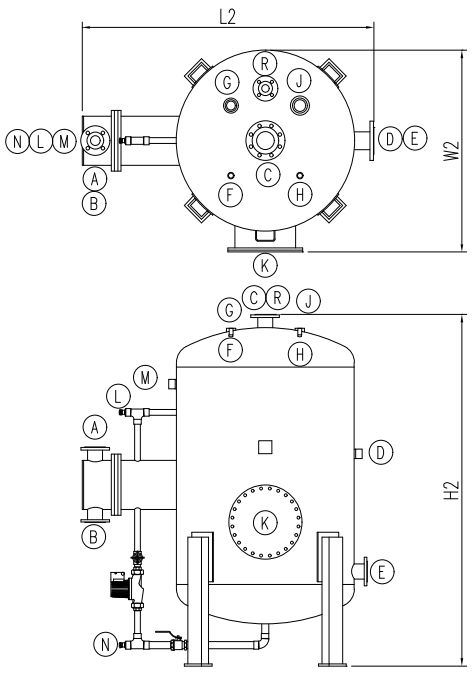
Unit Size	Storage Capacity (Litres)	Maximum Input kW	Output (L/Hour)	2 Min Peak (L/Sec)	20 Min (L/Sec)	Dimensions (mm) (Horizontal Units)			Dimensions (mm) (Vertical Units		
						L1	W1	H1	L2	W2	H2
TM1	450	130	2036	2.7	0.9	2153	740	1010	1300	740	1963
TM2	500	142	2223	3	1	1873	810	1100	1310	810	1683
TM3	550	153	2396	3.3	1.1	2127	810	1100	1310	810	1937
TM4	600	165	2584	3.6	1.2	1848	895	1180	1400	895	1683
TM5	700	200	3132	4.2	1.4	2078	895	1180	1400	895	1913
TM6	800	224	3507	4.8	1.6	2330	895	1180	1400	895	2165
TM7	900	260	4071	5.4	1.8	2356	940	1250	1450	940	2191
TM8	1000	283	4431	6	2	2153	1040	1350	1550	1040	2033
TM9	1200	342	5355	7.2	2.4	2486	1040	1350	1550	1040	2366
TM10	1500	425	6655	9	3	2356	1190	1475	1685	1190	2236
TM11	2000	566	8863	12	4	2788	1190	1475	1685	1190	2668
TM12	2250	638	9990	13.5	4.5	2533	1340	1625	1850	1340	2413
TM13	2500	708	11080	15	5	2788	1340	1625	1850	1340	2668
TM14	3000	850	13310	18	6	3245	1340	1625	1850	1340	3125
TM15	3500	990	15500	21	7	3143	1500	1780	2000	1500	3023
TM16	4500	1270	19880	27	9	3168	1645	1925	2150	1645	3048

Horizontal Thermax Unit



Ref	Service
A	Primary Inlet
B	Primary Outlet
C	Secondary Flow
D	Secondary Return
E	Cold Feed
F	Thermometer
G	Safety Valve (s)
H	Pressure Gauge
J	Anti-Vacuum Valve
K	Inspection Opening
L	Control Thermostat
M	High Limit Thermostat
N	Drain Point

Vertical Thermax Unit



If you can't see the size or duty that you require, feel free to contact us to discuss your specification and we can discuss alternative options. You can also contact our technical team who will discuss the design in more detail if required. Also connections are positioned as required on our standard units, as each is individually tailor made.

Contactable on:

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