

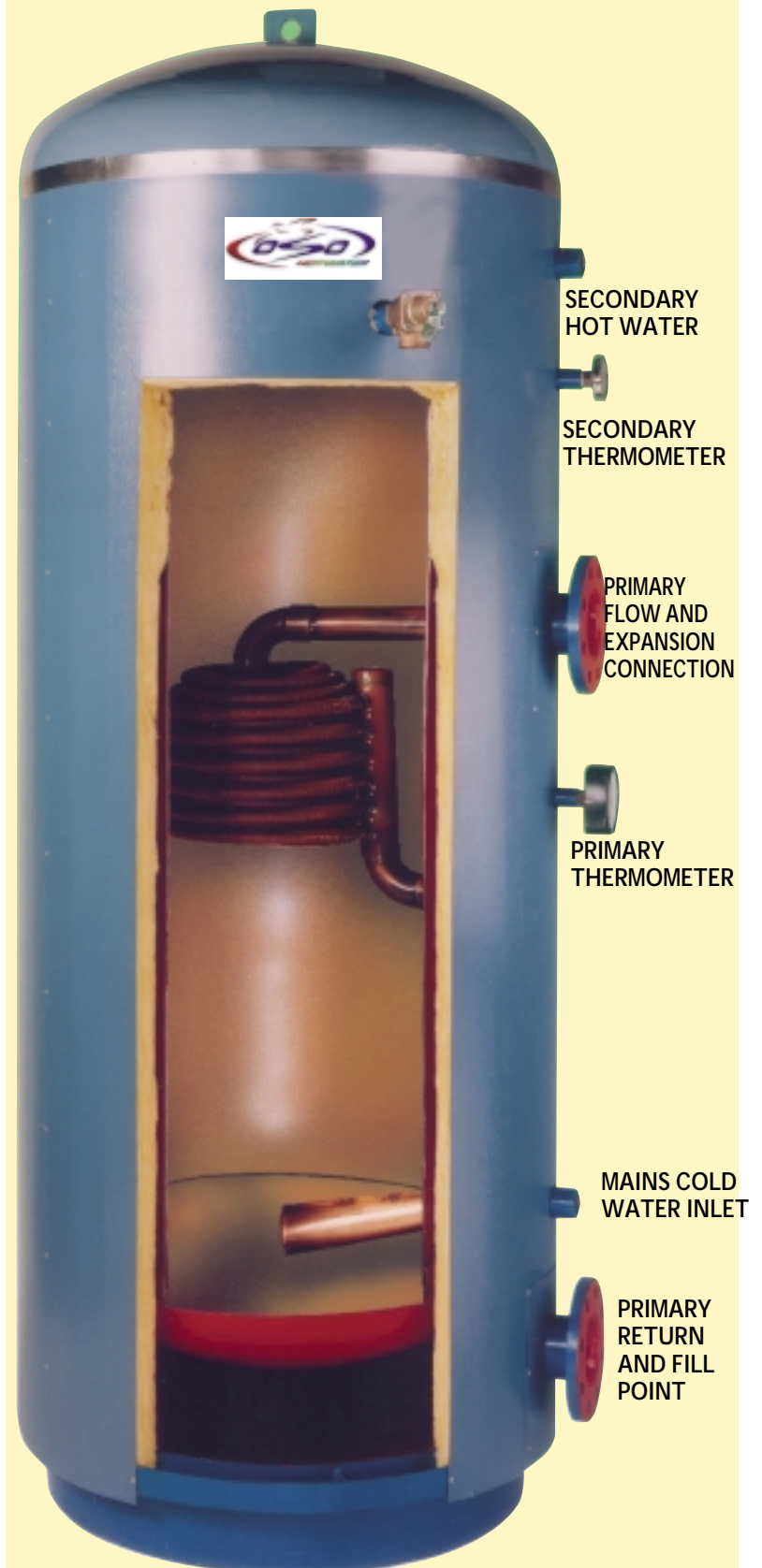


- builds water heaters for the future

## OSO 21S SERIES

The OSO 21S hot water calorifier is available in eight storage capacities. The secondary water can either be heated by electric immersion heaters or indirect flow and return heating from a boiler. If required the calorifier can be supplied for connection to both heat sources.

- Secondary pressure vessel factory pressure tested to 15 BAR.
- Secondary maximum working pressure 10 BAR.
- Primary pressure vessel factory pressure tested to 4 BAR.
- Primary maximum working pressure 3 BAR (higher pressures upon request).
- Double convex constructions eliminates dead zones in calorifier.
- Outer primary water jacket design ensures even heat transfer.
- All units manufactured to the international standard ISO/DIS 2694 (BS 5500).
- All units supplied with 1" BSP secondary return as standard, larger sizes available upon request.



**CALORIFIER CONSTRUCTION** Secondary inner vessel manufactured from copper lined steel having a uniform thickness is of double convex construction with all steel seams fusion welded. Incorporated within the 21S series is a finned copper heat exchanger, this additional primary heating surface ensures a rapid recovery rate and also increases the primary KW loading of this unit. The inner vessel of every calorifier is factory pressure tested to 15 bar and has a working pressure of 10 bar. The outer primary water jacket is factory pressure tested to 4 bar and has a working pressure of 3 bar. Higher primary working pressures can be accommodated. (Details available from OSO UK). Connections to secondary vessel are copper lined.

**INSULATION** CFC free conventional glass wool. The insulation will not encourage vermin or bacteria and is not susceptible to damage from moisture. The outer casing is manufactured from mild steel having an attractive blue plastic coated finish.

**IMMERSION HEATERS** If the calorifier is required to be heated by immersion heaters please specify at time of ordering. Elements supplied can either be single or three phase, which ever option is required the calorifier will be supplied with the elements factory fitted. Control of elements being by individual factory fitted and hard wired surface mounted thermostats. The working thermostat being adjustable between 55°C and 85°C, a non adjustable safety cut out is incorporated in the design and will operate at 96°C +/- 3°C. The immersion heaters are located in the outer primary water jacket to ensure a longer scale free life for elements.

**SECONDARY EXPANSION** Expansion of secondary water is accommodated internally in a self initiating air gap.

**VALVES & GAUGES** As standard each calorifier will be supplied with a pressure and temperature relief valve(s). Also supplied as standard with each calorifier one secondary thermometer range 0°C to 120°C and one combined primary

altitude gauge and thermometer range 0 meters to 15 meters and 0°C to 120°C.

**GENERAL** (\*Supplied as an extra) \*Mains cold water inlet valve set comprising isolating valve and check valve. \*Secondary hot water blending valve which allows secondary water to be blended between 55°C and 85°C. The blending set comprises a check valve, anti vacuum valve and a thermometer. Also incorporated within the valve is a second draw off point which allows hot water to be used at the calorifier store temperature. Note: anti vacuum valve not incorporated in 22mm blending valve.

While the height and diameter of the units can not be altered the position and quantity of extra thermostat bosses, size of flow, returns and secondary returns can in most instances be altered to suit your particular requirements. The 21S series can be supplied with inspection manhole and PN flanges at extra cost.

**INSTALLATION** OSO calorifiers are designed for connection directly to the cold mains supply or to a pressurised water source ie. storage tanks and booster pumps. Calorifiers should be installed vertically on a suitable base.

Horizontal calorifiers can also be supplied details available upon request.

OSO calorifiers can if required be installed on a conventional open vented system ie. cold water storage gravity feed tank with open vent to atmosphere. If the calorifier is to be installed this way you must specify OPEN VENTED SYSTEM when ordering.

Also available from OSO (UK) stainless steel 18R series with capacities up to 809 litres, and the 18S series copper lined steel calorifier having lower KW loadings than the 21S series.

OSO (UK) Limited also supply a range of direct and indirect unvented cylinders with capacities from 100 litres to 330 litres suitable for domestic and smaller commercial applications.

**Technical Data**

Product & Order Code	Domestic Capacity Litres	Primary Capacity Litres	Maximum KW Rating	Dimensions		Dry Weight KG	Insulation Thickness mm	Connections BSP Female
				Height	Dia			
21S 650	529	100	95	2100	780	350	65	1"
21S 1000	809	110	106	2150	1000	450	100	1"
21S 1500	1311	270	172	2300	1200	700	100	1 1/2"
21S 2000	1611	310	180	2400	1300	750	100	1 1/2"
21S 3000	2299	400	260	2600	1500	1100	100	1 1/2"
21S 5000	4129	730	303	3000	1850	1850	100	2"
21S 7000	6197	1070	377	4300	1950	2600	100	2"
21S 10,000	8847	1120	476	4970	1950	3450	100	2"

Note: Primary Flow & Return Fittings are ND 80 Flanges



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