EUREKA®

since 1967

TSS

Thermostream-System®

The Eureka Heat Recoverer With Thermostream System

Universal Application

The Eureka heat recoverer with Thermostream System is designed for universal application including dairy and agriculture, grocers, supermarkets, butchers shops, bakeries and restaurants. It provides hot water of potable quality.

Hot Water At 45 - 55°C

The Eureka Thermostream heat recoverer harnesses waste heat from refrigeration plant to generate hot water at approximately 45 – 55°C, depending on the condensing temperature. Hot water is available within minutes of the refrigerant plant running. Approximately 70% of the available waste heat can be recovered.

Insulated Storage Cylinder

The hot water produced is stored in a cylinder insulated against heat loss with a CFC-free polyurethane jacket. Thus hot water can be stored over a prolonged period without significant temperature loss. The cylinder is internally-lined with two coats of vitreous enamel and incorporates a sacrificial magnesium anode for corrosion protection. The cylinder is also equipped with a TÜV approved, push-button control unit for monitoring the effectiveness of the corrosion protection system both during and after the guarantee period. This enables the user to exploit the life-expectancy of the cylinder to the full.

Special Eureka Design

The design of the Eureka Thermostream heat recoverer is borne out of considerable practical experience. It operates automatically and without pumps. The patented Eureka design enables de-scaling to be carried out quickly and economically. It is not necessary to disconnect the water or refrigerant circuits.

Five Year Guarantee

The design and construction of the heat recoverer is such that virtually all known forms of corrosion have been eliminated. Based on the proven longevity of the unit, Eureka guarantee the cylinder for five years whilst all other parts carry a two-years guarantee.

German Patent 31 371 46

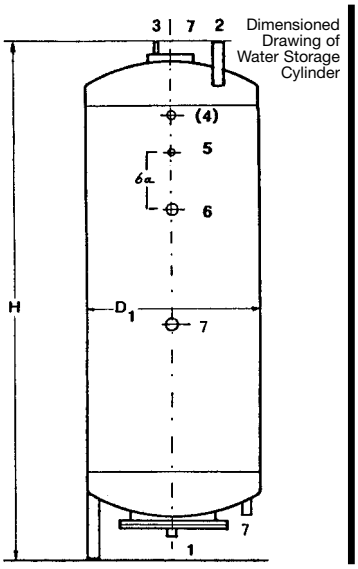
European Patent 75 157

- **Thermostream (TSS) Operating Principle**
- **Safety Circuit**
- **Delivery Content**

Technical Data – Water Storage Cylinders

Model TSS	Volume in Litres	Height mm Dim H in drg.	Diameter Including Insulation mm	Diameter Excluding Insulation mm	Weight in kg	Volume Heated By Auxillary Immersion Heater in Litres above	Cold Water Connection Male Spigot inch BSP Pos.1 in drg.	Hot Water Connection Male Spigot inch BSP Pos. 2 in drg.	Connection For Air Vent And Secondary Circulation Male Spigot inch BSP Pos. 3 in drg.	Thermostat Connection Male Spigot inch BSP Pos. 4 in drg.	Thermometer 0 - 120°C Male Spigot inch BSP Pos. 5 in drg.	Auxillary Heater Connection Male Spigot inch BSP Pos. 6 in drg.	Position of Auxillary Heater Centre Line Thermometer to Centre Line HeaterSpigot mm Pos. 6a in drg.	Anode mm Pos. 7 in drg.	Maximum Operating Pressure bar	Maximum Operating Temperature °C
TSS 110*	110	1050	500	400	40	30	1	1½	installer supply	-	¾	2	110	1 x bottom 22 ∅ x 510	10	95
TSS 220	220	1275	670	550	85	70	1	1	½	-	¾	2	215	1 x top 33 ∅ x 450	10	95
TSS 450	450	1800	740	600	170	100	1¼	1¼	½	-	¾	2	270	1 x top 33 ∅ x 700	10	95
TSS 750	750	2030	1000	800	240	300	2	2	½	¾	¾	2	265	1 x top, 1 x centre 33 ∅ x 700	6	95
TSS 1000	1000	2430	1000	800	280	300	2	2	½	¾	¾	2	265	1 x top, 1 x centre 33 ∅ x 700	6	95
TSS 1500	1500	2290	1200	1000	345	500	2	2	½	¾	¾	2	265	1 x top, 1 x centre 33 ∅ x 700	6	95
TSS 2000	2000	2520	1300	1100	410	600	2	2	½	¾	¾	2	265	1 x top, 1 x centre 33 ∅ x 700	6	95

* Wall mounted units. All other models floor-standing



Dimensioned Drawing of Water Storage Cylinder

Technical Data – Safety-Circuit Heat Exchangers

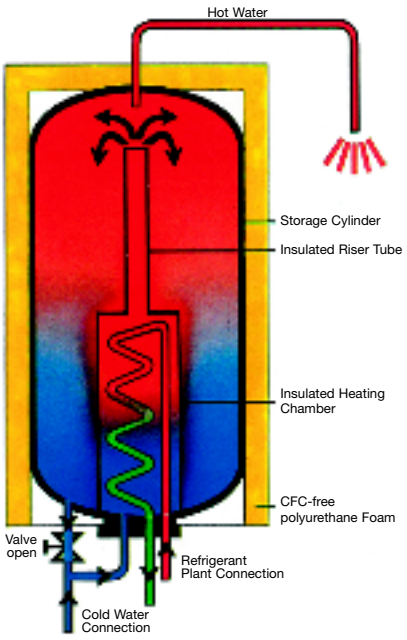
	3 kW	6 kW	12 kW	18 kW	and 1½kW to max.:
SMALL	-	-	-	-	4
	1	-	-	-	-
	-	1	-	-	-
	-	-	1	-	-
	-	-	-	1	-
LARGE	1	1	-	-	8
	4	-	-	-	-
	2	2	-	-	-
	1	3	-	-	-
	1	1	1	-	6
	1	1	-	1	6
	-	1	2	-	6
	-	1	1	1	6
	-	-	1	2	6
	-	-	-	3	6

Heat Exchanger Permutations Using Small and Large Flange Plates

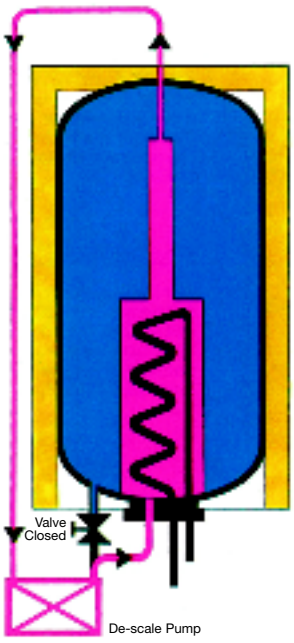
Further Permutations and Capacities up to 116 kW upon request.

Exchanger Selection

Max. Capacity kW	Connection ∅ mm
1½	12 x 1
3	16 x 1
6	18 x 1
12	22 x 1
18	22 x 1
Max. Operating Pressure 35 bar	



Thermostream System Flow Schematic



The Patented Eureka Service Points Permit Quick and Econimical De-Scaling

Thermostream System (TSS) Operating Principle

With the Eureka Thermostream System cold mains water is heated in a separate heating chamber using an immersion type heat exchanger. The hot water produced flows through a riser tube to the top of the storage cylinder. Cold replenishment water is supplied exclusively via an external pipe. The heat exchanger is connected directly to the refrigeration plant. The refrigerant waste heat passes in contraflow with the water raising it quickly to approximately condensing temperature.

Safety Circuit

All heat exchangers incorporate a safety circuit which is TÜV-approved and registered with and monitored by the German Association of Gas and Water Engineers (DVGW).Test Mark DIN-DVGW NW 9401 AR 3329. The exchangers are manufactured from high-grade copper, externally electro-tinned. Each exchanger is housed within a plastic chamber fitted with a riser tube. This maintains a flow of cold, replenishment water to the base of the exchanger for the maximum period possible, whilst ensuring that the heated water is passed to the top of the cylinder.

Delivery Content

The TSS heat recoverer is supplied complete with insulation, thermometer and the specified number and type of safety-circuit heat exchangers. The unit is supplied packed suitable for transportation and ready for installation.

Your Approved Dealer

Manufacturer: EUREKA®

seit 1967
Wärmerückgewinnung und Kühltechnik GmbH & Co.KG
Nickelweg 5 - D-48282 Emsdetten
Postfach 1564 - D-48273 Emsdetten
Telefon + 49 (0) 25 72 - 9 55 40 - Telefax + 49 (0) 25 72 - 70 58
e-mail: eureka@deltacity.net
Internet: www.eureka-emsdetten.de