

LEGIONELLA ERADICATION UNIT



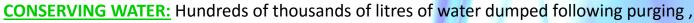
DHW Production & Legionella Eradication System <u>Guaranteed</u>
Anti Legionella system for continuous pasteurisation and production of hot sanitary water.

Continuing pasteurization and DHW (Domestic Hot Water) production systems.





SAVING ENERGY: Thousands of kW hours wasted to frequently heat a mass of water to above 70°c when purging,



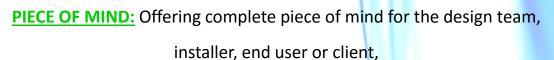
SAVE LABOUR: Many thousands of man hours related to frequent purging (usually by maintenance or healthcare personnel needlessly running taps,



<u>MAINTENANCE COSTS:</u> Save on maintenance costs of chemical hyper-chlorination treatment systems that only discourage bacteria growth at best,

SAVING MONEY: On the constant purchasing of chemicals for hyper-chlorination,

NO ADDITIONAL COST: Initial cost is similar to that of a standard DHW generation system,





PROVEN, INNOVATIVE: Proven innovation, over 500 European installations,

Quality assured system.





Europak Pastormaster is the only solution on the market that GUARANTEES the permanent elimination of legionella and all other bacteria within a hot water system.

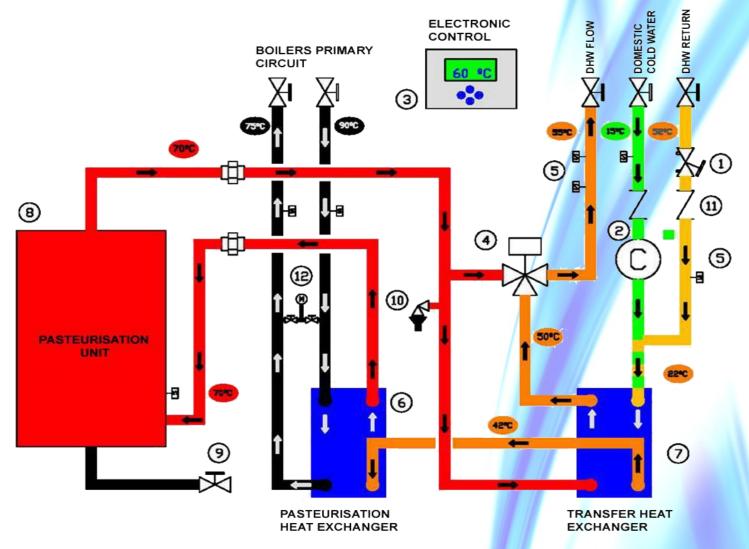
o Safe & Consistent: Europak Pastormaster system ensures a continuing pasteurisation process and DHW production.

o The Europak Pastormaster is a Thermal treatment process – Eliminates the requirement of Traditional ineffective methods of Legionella control:

Chemical Threatment:

- -Hyperchlorination chemical additives will change the natural physical properties of water. The effectiveness is arguable as legionella adapts to that environment. Constant chlorination in amounts approved to use is not sufficient to kill legionella. Hyper-chlorination treats the circulating water but not the biofilm.
- -Copper—silver ionization Is now banned in France and Germany and its use is currently under question in the UK as it creates the problem of transmission of heavy metals to the water. Physical Treatment:
- -Ultraviolet used mainly in Germany, totally dependant on expensive filtration.
- -Thermal treatment effective when carried out correctly but fully dependant on a strict routine maintenance process. There is wasted energy consumption associated with thermal shock treatment to DHW systems, the process of routinely increasing system temperature for short periods of time, then dumping.
- o No additional energy consumption the Europak Pastormaster does not entail any further running costs or energy consumption.
- o Incorporates DHW Production along with legionella & bacteria eradication at source.
- o Over 500 European installations
- o Can be installed on existing and new build projects.
- o All materials in contact with water are in 316 stainless steel.
- o The Europak Pastormaster should be considered for:
- Hospitals, Clinics, Retirement / Nursing Homes, Sports Centres, Hotels





The Process:

Incoming Cold water supply (10°C) is consolidated with hot water return (52°C), and the mixed 22°C is pumped through the transfer heat exchanger using the system's external hot water return pump (on no demand) or booster pump (when there is a demand).

The 22°C water is pre-heated to 42°C using 70°C water from the pasteurisation unit.

The 42°C water is then passed through a pasteurisation heat exchanger and heated to 70°C using a boiler primary flow & return.

The 70°C water is then passed through the patented pasteurisation unit, slowing the velocity of the water for the quantity of time known to eradicate all bacteria including legionella.

At this stage legionella and all other bacteria is eradicated from the water supply.

On exiting the pasteurisation unit, the 70°C water is split, to 1 - the transfer heat exchanger used to pre-heat the incoming 22°C and 2 - to an electronic three port mixing valve, where it will be mixed with 50°C from the transfer exchanger to the required hot water supply set temperature. It is an energy balanced system.

**For upcoming project consultation or further details, please contact Eurofluid

COMMISSIONING - SERVICE MAINTENANCE - PREVENTATIVE MAINTENANCE - CONTRACTS - SPARE PARTS



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