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ISO 9001

spirax sarco

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EasiHeat Packaged Heat Exchanger System

- Hot water for heating, process or washing purposes.
- Designed with integral condensate undercooling for efficiency and no flash steam wastage.
- Stable temperature control even with wide load changes.
- Spirax Sarco steam control and condensate products.
- Alfa Laval steam heat exchanger, type TS6-M.
- Fully assembled skid-mounted system.

EasiHeat system

The EasiHeat system uses steam to provide accurate heating of low temperature hot water (HTG), domestic hot water (DHW) or hot water for processes. Systems can be sized for any heating duty from 100 kW to approximately 1.2 MW and are supplied fully assembled and pressure tested ready for installation.

The EasiHeat provides the core of the system. Additional items such as steam pressure reduction, safety valve and safety high limit shut-off should be selected separately.

Temperature control

The steam flowrate is modulated to exactly match the heat demand. The control valve is pneumatically actuated and the system uses a fast response Pt100 temperature sensor and programmer / controller for precise control. The system incorporates a 7 day real time clock to control its operation.

Heat exchanger

The TS6-M plate heat exchanger for steam is used for efficient heat transfer within a very compact design. The high surface/volume ratio of the plates enables rapid heat transfer, allowing a fast response to temperature control. The heat exchanger is easily dismantled for examination or cleaning of the heat transfer surfaces. All wetted parts are stainless steel.

Limiting condition

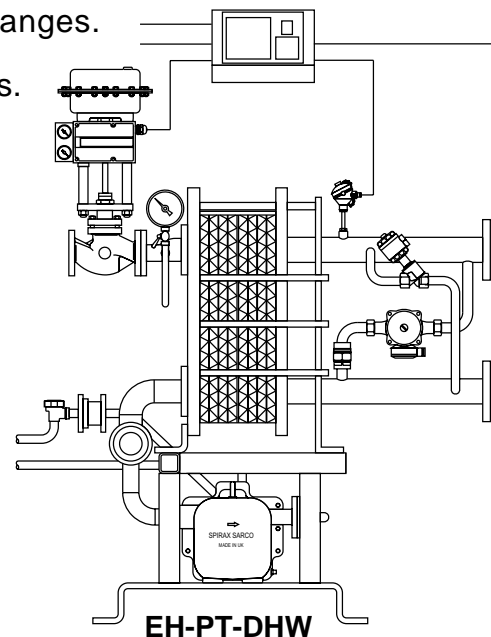
Pipework design condition	PN16
Maximum saturated steam supply pressure	8.3 bar g
Maximum secondary pressure	6 bar g
Maximum secondary temperature	110°C

Materials

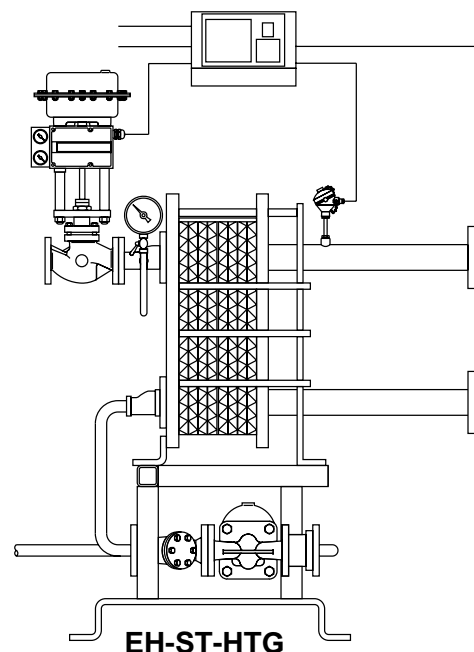
Steam and condensate pipework	Carbon steel
Steam control valve and condensate pump / trap	SG iron
Secondary pipework, circulation valve and pump	St. steel

Condensate removal

Effective condensate removal from the heat exchanger under all operating conditions is essential to achieve a stable water temperature. At part load the pressure inside the heat exchanger may go below atmospheric so a pressure powered pump is usually used to ensure condensate removal. For suitable applications a steam trap may be used instead.



EH-PT-DHW
EasiHeat with condensate pump and secondary recirculation for domestic hot water service



EH-ST-HTG
EasiHeat with steam trap for low temperature hot water (heating) service

Pipework

All pipework is correctly sized for the application and is fabricated using modern welding techniques, approved welders and weld procedures. Flanged products are used where possible for reliability and easy maintenance.

Electrics and pneumatics

All control equipment is pre-wired and piped ready for connection to the air supply and power source.

Supply voltage	EH...HTG	90 - 240 Vac
	EH...DHW	220 - 240 Vac

Support frame

The whole system is delivered pre-assembled on a compact frame and baseplate suitable for moving into position with a fork lift truck.

Domestic hot water applications

In many cases the very fast response of the packaged plate heat exchanger system will mean that large hot water storage tanks are no longer required. The system uses pumped hot water circulation and essentially becomes 'instantaneous'.

The first hot water draw-off point must be at least 5 m from the heat exchanger.

Scale formation

For open systems where the water is being used for washing etc. there is continuous make-up and there may be a danger of scale formation in the heat exchanger. This depends mainly on the water quality, and expert advice from a water treatment specialist should be sought. By reducing the steam pressure and by careful design of the system the heat exchanger metal temperature can be kept low to minimise scale formation. After long service the plate heat exchanger is easily dismantled for cleaning. If the water is scale forming, regular chemical cleaning may be considered.

Typical specification

The HTG / DHW heat provider shall be a Spirax Sarco packaged heat exchanger system with plate heat exchanger. The system shall come complete with pneumatic controls, heat exchanger and condensate removal equipment.

All items shall be pre-assembled and mounted on a compact frame.

How to order

The best way of ensuring that we have all the necessary information for your application is to complete our enquiry data sheet. Copies can be supplied on request. Any special requirements or access limitations should be detailed.