

spirax sarco®

EasiHeat Packaged Heat Exchanger System

- Hot water for heating, potable & process applications.
- Non ferrous waterside construction.
- Stable temperature control $\pm 9^{\circ}\text{F}$ on instantaneous duty
- Spirax Sarco steam control and condensate products.
- Plate and frame heat exchanger.
- 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 up to approximately 6 MBTUH 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 system demand. The control valve is pneumatically actuated and the system uses a fast response temperature sensor and programmer/ controller for precise temperature control. Electric operated control systems are available.

Heat exchanger

The 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 without disrupting any steam or water connections.

All wetted parts are stainless steel.

Design

Heat exchanger-Plate and Frame Type — ASME Constructed & Stamped at 150 psig

Steam Side = 75 PSIG MAX. allowable pressure @ 320°F (std gaskets)
125 PSIG Max allowable pressure @ 356°F
(with special gaskets)

Water Side = 150 PSIG Max allowable working pressure @ 200°F

Materials

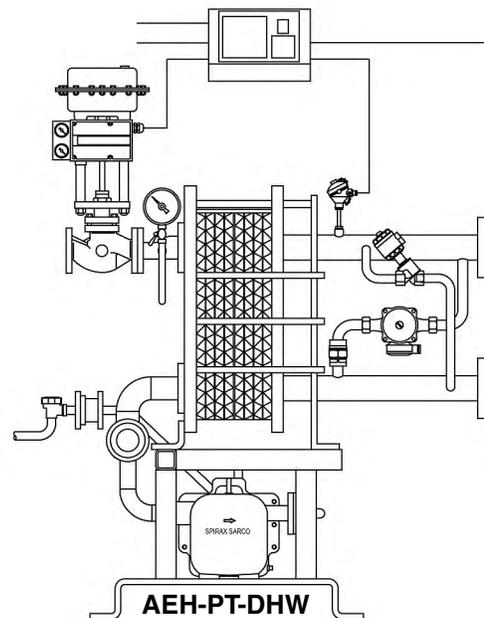
Steam and Condensate Piping = Carbon Steel

Water side Piping = 316/316L Stainless Steel

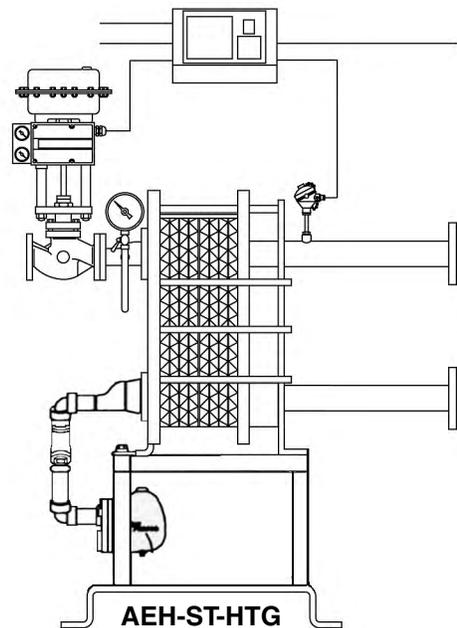
Circulation Pump - Stainless Steel

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.



EasiHeat with condensate pump and secondary recirculation for domestic hot water service



EasiHeat with steam trap for low temperature of water (heating) service

Local regulation may restrict the use of this product below the conditions quoted. Limiting conditions refer to standard connections only.

In the interests of development and improvement of the product, we reserve the right to change the specification.

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EasiHeat Packaged Heat Exchanger System

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	AEH...HTG	115VAC / 230VAC
	AEH...DHW	115VAC / 230VAC

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. The first hot water draw-off point must be at least 15' from the heat exchanger.

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 minimize scale formation. After long service the plate heat exchanger is easily dismantled for cleaning. If the water is scale forming, consult Spirax Sarco.

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

Standard EasiHeat systems are designed for conditions specified in the sizing and selection chart. The best way of ensuring that we have all the necessary information for your application is to complete our inquiry data sheet. Copies can be supplied on request. Any special requirements or access limitations should be detailed.

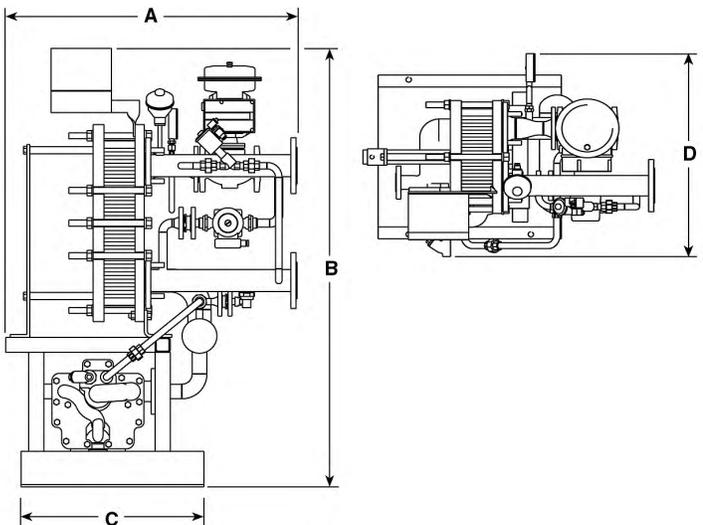
Core System

S c a l e

Dimensions / weight (approximate) in inches (Additional models available)

	Model	A	B	C	D	lbs	Pipe connections		
							Steam	Water	Condensate
AEH-PT-DHW	AEH-1-PT-DHW	44"	58"	29"	28"	416	3/4"	3"	1"
	AEH-2-PT-DHW	44"	58"	29"	28"	429	1"	3"	1"
	AEH-3-PT-DHW	44"	58"	29"	28"	440	1-1/4"	3"	1"
AEH-ST-HTG	AEH-1-ST-HTG	39"	57"	24"	25"	326	3/4"	3"	1"
	AEH-2-ST-HTG	39"	57"	24"	25"	339	1"	3"	1"
	AEH-3-ST-HTG	39"	57"	24"	26"	360	1-1/4"	3"	1-1/2"

EasiHeat AEH-PT-DHW



EasiHeat AEH-ST-HTG

