

# Spirax EasiHeat™

compact heat exchange solution



**spirax**  
**/sarco**

# Spirax EasiHeat™

from the steam heat exchange experts

Spirax EasiHeat™ is an extremely compact heat exchange solution when compared to traditional shell and tube options, with the core unit occupying only 1.2 m³. Even the largest output unit fitted with all available options occupies only 4.6 m³. Offering higher energy efficiency than shell and tube designs, EasiHeat reduces fuel bills and produces lower CO<sub>2</sub> emissions.

EasiHeat is the preferred solution for a wide range of HVAC and process hot water heating applications up to 1800 kW.



EasiHeat is a complete, compact steam heat exchange

# Key features and benefits

## Key features

## Key benefits

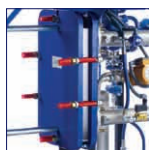


**Low costs of ownership.**

High quality low maintenance components reduce maintenance costs.

Heating the secondary water and sub-cooling the condensate in the same heat exchanger can provide substantial energy savings.

EasiHeat seldom requires an annual insurance inspection, due to the very low volume of the heat exchanger compared to a traditional shell and tube design.



**Unique Alfa Laval TS6M steam heat exchanger.**

All the benefits of a plate and frame construction, designed specifically for steam, with tolerance to the thermal fatigue that damages traditional heat exchanger designs when used on steam applications.



**Compact design.**

Reduced radiated energy losses.

Fits through a plantroom door.

Saves floor space.

Maximum output for minimum footprint.



**Tested, pre-assembled unit.**

Minimal installation time and trouble-free commissioning.

One vendor.



**Precisely matched control options.**

Accurate temperature control and responsiveness under all load conditions.

No need for storage or buffer tank in domestic water heating applications.



**Flexible option packages with a choice of either pneumatic or electric control systems.**

A complete system for any application that suits any plant condition.



**Choices of condensate management options, including the Spirax Sarco APT combined pump and steam trap.**

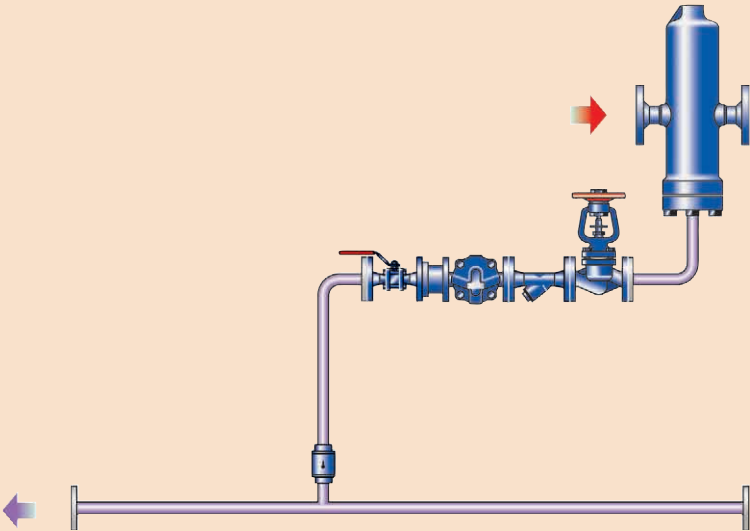

Can operate effectively against a high condensate backpressure even under low-load conditions.

Allows EasiHeat to be engineered to operate at very low steam condensing temperatures in applications where scaling may be a problem.

# solution for process and hot water heating requirements

# A complete EasiHeat system

To ensure maximum efficiency and longevity EasiHeat can be supplied with options that ensure the unit is provided with clean, dry steam of the highest quality at all times.

Option one:		
Option two:		
Option three:		Pipeline ancillaries option
Option four:	Separator option	Pipeline ancillaries option
Option five:		Pipeline ancillaries option
Option six:	Separator option	Pipeline ancillaries option
<div>  <div> <div>Separator option</div> <div>To provide dry steam for longer valve life.</div> </div> </div>		<div>  <div> <div>Pipeline ancillaries option</div> <div>EasiHeat can be provided with isolation valves and strainers as an option.</div> </div> </div>

	Basic unit
Fail-safe high limit option	Basic unit
	Basic unit
	Basic unit
Fail-safe high limit option	Basic unit
Fail-safe high limit option	Basic unit

Fail-safe high limit option

High limit temperature control should always be specified to ensure the heater will automatically and safely shut down should a problem occur. EasiHeat can be specified with an independent, fail-safe high limit option package.

Basic unit

The basic unit contains all the key components that contribute to the unmatched performance of the EasiHeat.



# Applications

EasiHeat is designed for applications where steam is the primary medium and water is the secondary medium

## Instantaneous domestic hot water

With the unique fast response secondary circuit option, EasiHeat delivers a constant stable secondary temperature even with the sudden and wide load changes found in domestic hot water applications, without the need for a secondary circuit buffer tank.

EasiHeat can operate at low or even sub-atmospheric temperatures to minimise the risk of scaling in areas where it is prevalent.

## Low temperature hot water for heating

EasiHeat provides accurate temperature control whatever the requirements, with excellent response to load change.

## Process heating

A wide range of duties can be satisfied, with low temperature primary operation for sensitive fluids where necessary.

Spirax Sarco also provides complete heat exchange solutions for many other combinations of primary and secondary media.

# Installation

EasiHeat, with its full range of option packages, provides a complete solution to your steam-to-water heat exchange needs. The basic unit contains the matched key components that will affect the control of the system. If needed, various options can then be added to this basic design to provide extra safety features and steam quality improvements.

In most cases, because of the high maximum operating pressure and temperature limits of the components used in EasiHeat, extra pressure reducing valve stations and safety valves are not required.

EasiHeat is a fully assembled, tested unit that is delivered to site ready to be connected to your utilities. The whole process of assessing your requirements, through to installation, start-up and commissioning can be completed by Spirax Sarco in a very short time.

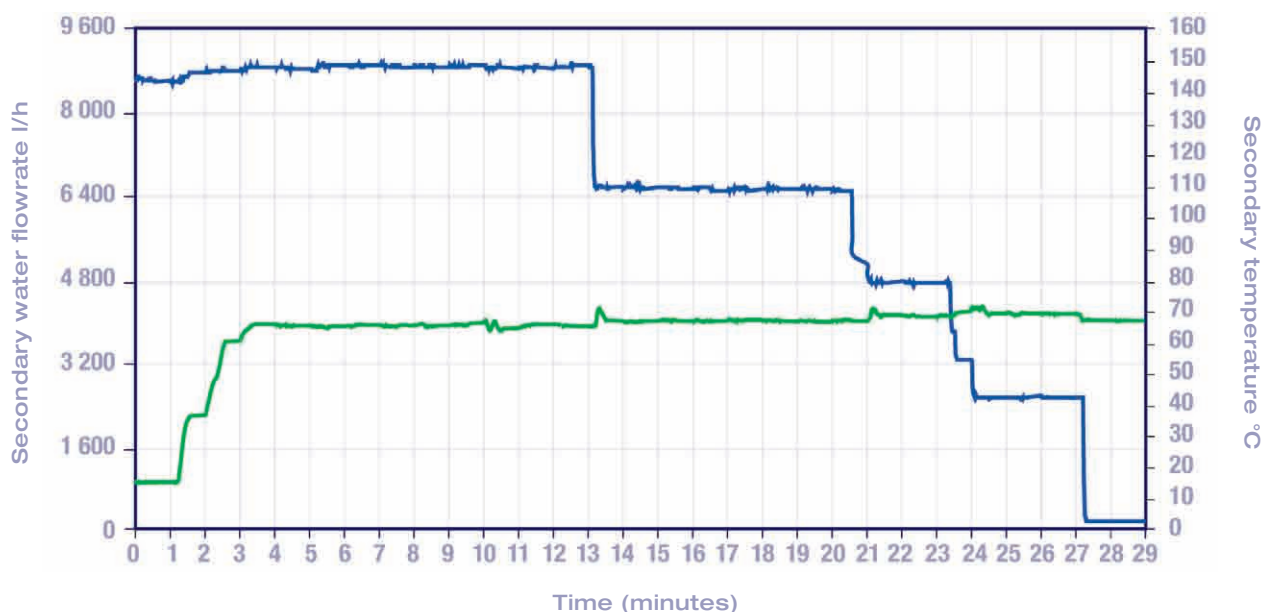


# Performance

EasiHeat is a true instantaneous steam-to-water heater. It always provides a stable secondary temperature whatever the secondary load conditions, without the need for a secondary circuit buffer tank or storage tank. With steady load conditions EasiHeat will control at  $\pm 1^{\circ}\text{C}$ . Even where there are large and sudden secondary load changes such as those found in a domestic water heating application, EasiHeat will control at  $\pm 5^{\circ}\text{C}$ .

## EasiHeat performance (with no buffer tank or storage vessel) on instantaneous duty

The application is water heating, with a high secondary temperature rise and large sudden load changes; a duty typical of domestic hot water service.



### Secondary flowrate

This is the cold water being delivered to the EasiHeat unit.

### Secondary temperature

This is the flow of hot water at a constant temperature for the domestic hot water requirements.

The design of the EasiHeat typically eliminates the need for a storage or buffer tank which saves footprint space and unit weight. Having no storage or buffer tank eradicates a potential breeding place for legionella or other bacteria and dispenses with the need for regular inspections.

## Spirax Sarco - your heat exchanger solution provider

We have long realised that our customers want assistance with complex steam applications, which do not form part of their core business.

We will assess your steam requirements, provide pre-engineering services, supply and advise on the installation of EasiHeat, and assist in start-up, and commissioning.

You will deal solely with Spirax Sarco throughout the process and we will take on the responsibility for everything, leaving you to do what you do best – running your business.

EasiHeat is a packaged solution to your heat exchange needs. Its compact, simple design provides accurate control with low ownership costs over a long life span.

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Some products, services or solutions may not be available in certain markets

Spirax-Sarco Limited  
Cheltenham UK  
GL53 8ER  
t: +44 (0)1242 521361  
f: +44 (0)1242 573342  
e: [enquiries@SpiraxSarco.com](mailto:enquiries@SpiraxSarco.com)  
[www.SpiraxSarco.com](http://www.SpiraxSarco.com)

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**/sarco**