

EasiHeat

Heating system (HTG)

Our Spirax EasiHeat is a complete, compact and ready-to-use steam to water heat transfer solution that delivers superior energy efficient performance for applications with stable load conditions such as closed circuit heating.

These systems can be sized for heating duties from approximately 70 kW to 3.4 MW and are supplied fully assembled and pressure tested.

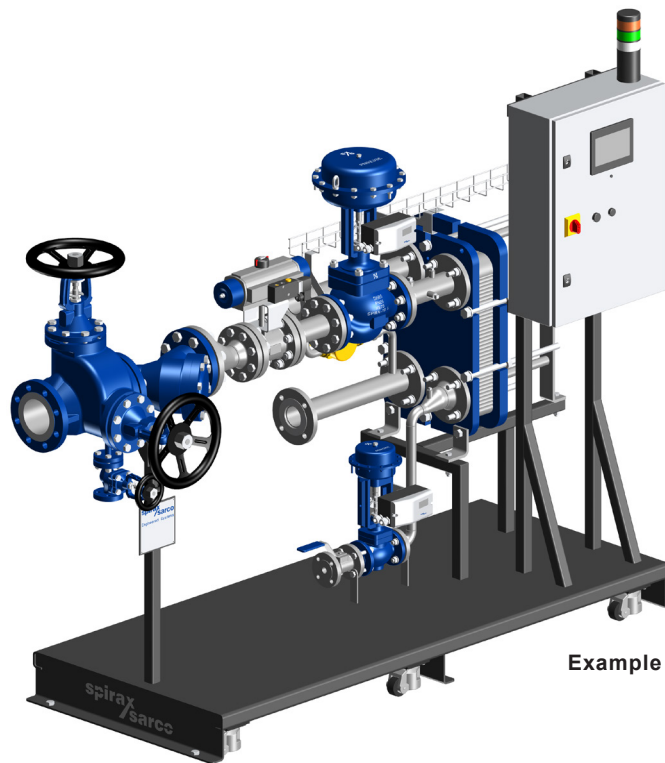
Spirax EasiHeat will help lower operational costs.

Domestic Hot Water system (DHW)

The Spirax EasiHeat DHW is a complete, compact system for accurate heating of domestic hot water or hot water for process.

These systems can be sized for any heating duty from 70 kW to approximately 3.45 MW and are supplied fully assembled and pressure tested ready for installation.

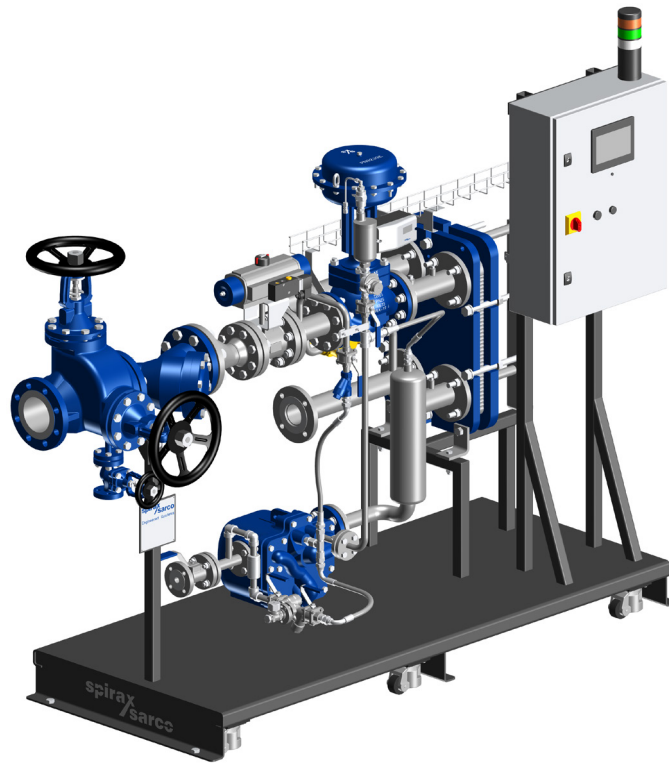
The standard Spirax EasiHeat system is expandable by the inclusion of additional items such as a steam pressure reduction valve, safety valve and safety high limit shut-off these should be selected separately.



Example of the DHW Dual Control system

Principal features and benefits:

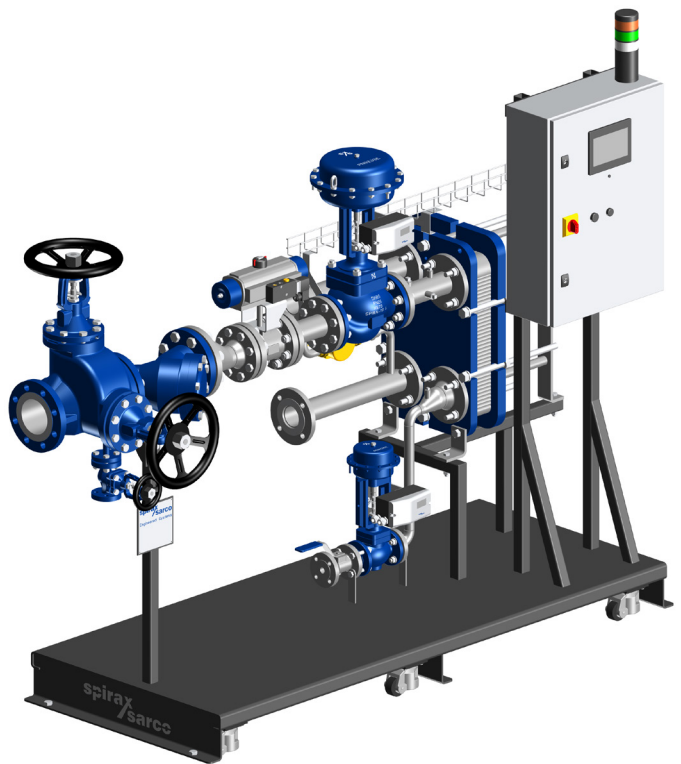
- Compact heat transfer solution
- Energy monitoring, communications
- Cloud based monitoring and reporting
- Safety start up / shutdown sequencing
- Dual Control option , for improved temperature and pressure control
- Precisely engineered system and matched components that provides accurate temperature control even with sudden load changes.
- Guaranteed performance
- Integrity test, fouling detection and intelligent diagnostics
- Options to suit all applications
- New Legionella Guardian feature (cloud based only)



EasiHeat Steam Control System



EasiHeat Condensate Control System



EasiHeat Dual Control System

Heat exchanger

One of the components that guarantees system performance is the heat exchanger, which is sized and selected to match the specific duty requirements.

With a high efficiency and low volume to pressure ratio. The plate and frame heat exchanger ensures reduced inspection requirements whilst being fully maintainable.

Control panel

The Spirax EasiHeat now features our new innovative control system delivering increased monitoring and communications.

A colour touch screen provides ease of use and clear visual access to all operating parameters and access to energy data with digital connection capabilities.

Steam control

Steam side control can respond to rapid fluctuations in secondary water flow.

Only heats the water that is required.

Reducing steam demand helping to reduce CO₂ emissions by using the Latent heat from the condensate.

Condensate control

Condensate Control ensures all of the useful energy in the steam is used within the unit resulting in less waste than other available alternatives which, in turn, reduces both fuel demand and your CO₂ emissions. A correctly sized heat exchanger and downstream control valve guarantees system performance, both electric and pneumatically actuated systems are available.

Dual control

The innovative design combines all the benefits of both steam and condensate control, provides high level of set point accuracy while providing sub-cooled condensate under any operating load changes.

Intelligent monitoring and control

The EasiHeat control system can be connected to existing customer networks and integrate with a broad range of building management systems. The new features include: configurable E-Stops, Start-up and shutdown sequencing.

(Optional) Cloud based monitoring and reporting

Fail-safe high limit option

High limit temperature control should always be specified to ensure the system will automatically and safely shut down to prevent risk of scalding should a problem occur. The EasiHeat can be specified with a range of different independent, fail-safe, high limit options, including an EN14597 or INAIL compliant version.

Legionella Guardian

Legionella Guardian monitors the return loop water temperature (TA01) and can trigger a low limit alarm. This alarm is configurable and can help to prevent the conditions that promote Legionella bacteria in your hot water system.

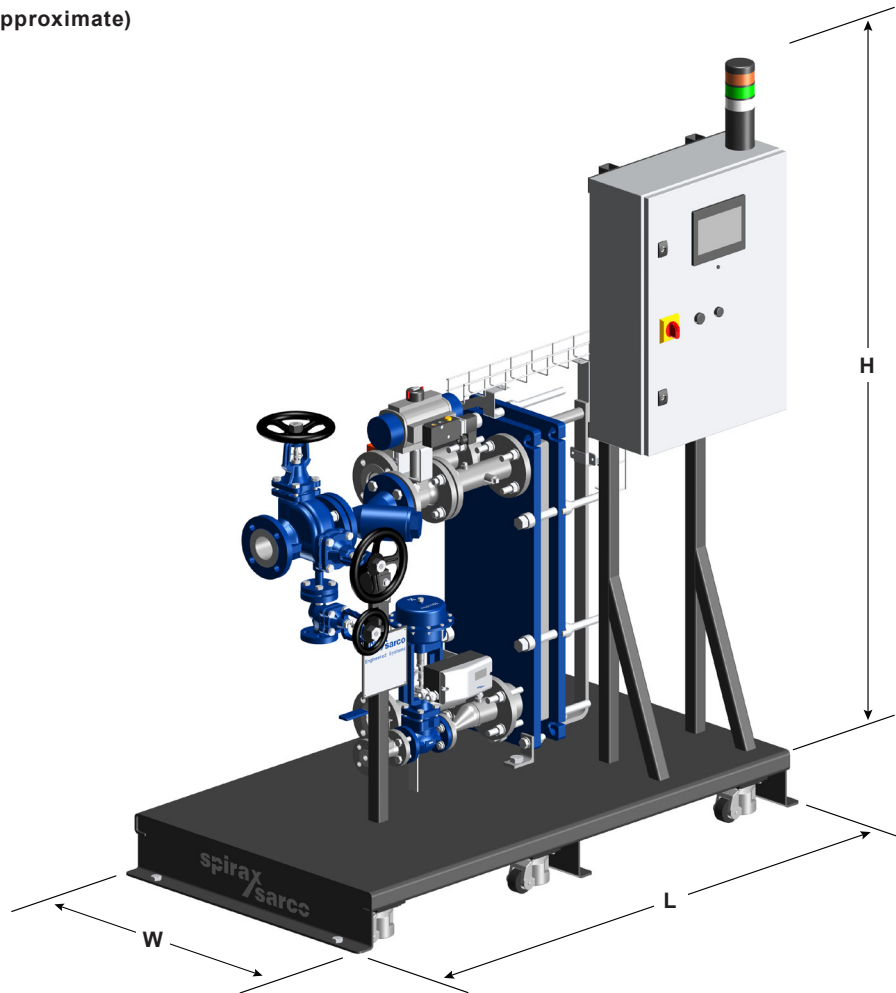
Legionella Guidance

Legionella Guidance monitors the outlet water temperature (TA21) and can also trigger a low limit alarm. This alarm is configurable and can also help to prevent the conditions that promote Legionella bacteria in your hot water system.

Materials

Steam and condensate pipework		Carbon steel
Steam control valve and condensate pump trap		SG Iron
Water side pipework	HTG	Carbon steel
	DHW	Stainless steel
Condensate control valve		SG Iron

Dimensions (approximate)



Metric		Maximum dimensions (mm)			Piping connections		
Type	Valve actuation	H	L	W	Steam	Water	Condensate
EHDSC	EL or PN	1760	1950	850	DN65	DN65	DN25
EHDDC	EL or PN	1760	2320	950	DN65	DN65	DN15
EHHCC (T6)	EL or PN	1760	1950	870	DN50	DN50	DN15
EHHCC (T8)	EL or PN	1760	1950	850	DN80	DN80	DN20
EHHCC (T10)	EL or PN	1760	1950	870	DN100	DN100	DN25

Imperial		Maximum dimensions (inches)			Piping connections		
Type	Valve actuation	H	L	W	Steam	Water	Condensate
EHDSC	EL or PN	70	77	34	2½"	2½"	1"
EHDDC	EL or PN	70	92	38	2½"	2½"	½"
EHHCC (T6)	EL or PN	70	59	35	2"	2"	½"
EHHCC (T8)	EL or PN	70	77	34	3"	3"	¾"
EHHCC (T10)	EL or PN	70	70	35	4"	4"	1"

* EHHDC has the same dimensions as the EHHCC versions

Options selected may impact overall dimensions.

Pressure and temperature limits

Pipework design condition	PN16
Maximum saturated steam design pressure to heat exchanger	* 9 bar g
Maximum water pressure	9 bar g
Maximum water temperature	105 °C
Maximum gasket temperature	200 °C
Maximum Ambient temperature	50 °C

* 12 bar g high pressure design available on request.

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 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.

Electrical panel supply requirements	110 Vac/60 Hz	
	230 Vac/50Hz	
Actuators supply	Electric	24 Vac/50-60 Hz
	Pneumatic	5 to 6 bar g
Power consumption		400 W

Support frame

The whole system is delivered pre-assembled on a compact frame and baseplate, option of fitted wheels for ease of moving the unit into position, alternatively a fork lift truck can be used for ease of moving. The support frame is available in Carbon steel or Stainless steel.

Typical specification

The heating system shall be a Spirax EasiHeat system complete with PLC functionality with digital data collection to provide energy monitoring and remote access. The system will be pre-assembled and mounted on a compact frame with either pneumatic or electric control option.

Europe

In order to meet EN14597 or INIAL, which specifies temperature control devices and temperature limiters for heat generating systems, the selection of an Independent High Limit (IHL) is to be included.

Enquiries and Ordering

All systems are designed for the required heat load with controls to suit the application. The best way of ensuring that we have all the necessary information for quotation and manufacture is to contact your local Spirax Sarco office or sales engineer. Special requirements should be detailed.