Spirax Sarco

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CH Issue 1

Spirax EasiHeat™ HTG **EN Heating System Compact Heat Transfer Solution**

Heating system

Our Spirax EasiHeat™ HTG incorporating SIMS technology 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 applications. Spirax EasiHeat™ HTG can help you lower costs, tackle waste and mitigate your environmental impact by reducing your CO₂ emissions and carbon footprint, making a positive change towards a more sustainable future.

Principal features and benefits:

- Compact heat transfer solution incorporating SIMS technology.
- Energy monitoring, CO₂ emission, Communications, Remote monitoring, and, SMS or E-mail of system alarms.
- Produces hot water for heating and process.
- Designed for sub-cooling condensate to provide high efficiency.
- Maintains a stable temperature.
- Guaranteed performance.
- Fully assembled and tested ready to install.
- Options to suit all applications.

Heat exchanger

One of the components that guarantees system performance is the heat exchanger, which is precisely engineered to match the specific duty

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

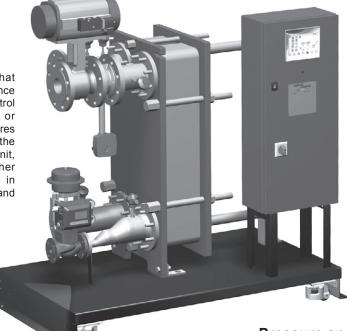
Control panel

The Spirax EasiHeat™ HTG now features our new innovative control system incorporating SIMS technology, delivering increased monitoring and communications.

A colour touch screen provides ease of use and clear visual access to all system parameters and access to energy data.

Condensate control

One of the components that guarantees system performance is the correctly selected control valve with either electric or pneumatic actuation, and ensures all of the useful energy in the steam is used within the unit, there's less waste than other available alternatives which, in turn, reduces both fuel demand and your CO2 emissions.



Metering

The TVA flowmeter has been specifically designed for large turndown on steam applications and is a key component of the Spirax EasiHeat™ HTG guaranteeing accurate measurement of energy usage.

Materials

Steam and condensate pipework	Carbon steel
Steam control valve	Cast iron
Secondary pipework	Carbon steel

Pressure and temperature limits

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Pipework design condition	PN16
Maximum saturated steam supply pressure to heat exchanger	4 bar a
Maximum secondary pressure	10 bar a
Maximum secondary temperature	105°C
Maximum gasket temperature	180°C

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 supply	Power supply	110-240 Vac / 50-60 Hz			
Electrical supply	Supply fuse	5A (T)			
Actuators	Electric	24 Vac / 50-60Hz			
Actuators	Pneumatic	4 to 6 bar g			

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 with a fork lift truck.

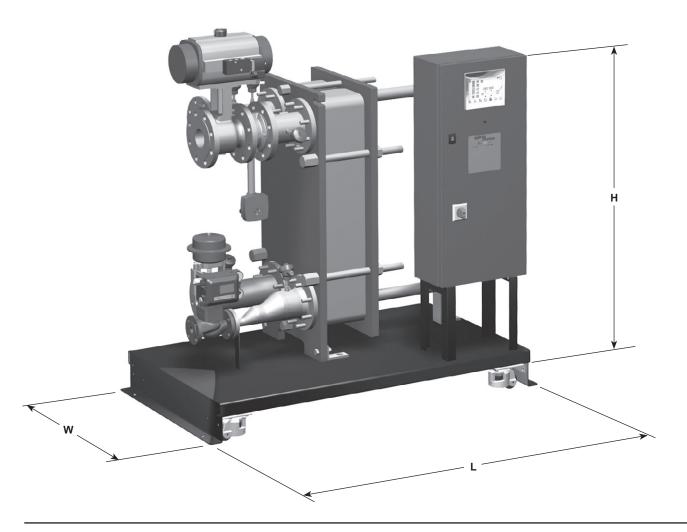
Scale formation

For systems where make-up water is introduced Spirax Sarco can adapt solutions to overcome your scaling problems. In addition all units incorporate CIP connections as standard should they be required.

Dimensions approximate in mm

Heat lo	ad (kW)	Type	Valve actuation	Maximum dimensions			Pipii	ng connectio	ons DN
Min.	Max.			н	L	w	Steam	Water	Condensate
50	550	EHH1	EL or PN	1321	1 281	684	DN50	DN50	DN15
550	1500	EHH2	EL or PN	1414	1420	834	DN100	DN100	DN20, DN25
1500	2500	EHH3	EL or PN	1414	1706	834	DN100	DN100	DN20, DN25

Notes: 1. The height of the system will increase by 25 mm if the wheels are fitted.2. The heat load has been based on a steam inlet pressure of 2 bar g and 0 bar backpressure.



Spirax EasiHeat™ HTG nomenclature example:

EHH	EHH	2	Р	EL	_	IHL	В	V2	G1		_	E	R2	C2
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Spirax EasiHeat™ HTG nomenclature

	Building heating unit	EHH	=	Spirax EasiHeat™ HTG	ЕНН
		1	=	DN15	
	CV size	2	=	DN20	2
Compulsory selection		3	=	DN25	
	Pressure vessel code	Р	=	PED	Р
	Actuation	EL	=	Electric	EL
	Actuation	PN	=	Pneumatic	
	High limit			Integrated high limit	IHL
		IHL	=	Independent high limit	
	High limit actuation	В	=	Battery back-up	В
Mechanical options	(EL only)	С	=	Super capacitor	
		V1	=	Ball valve	
	Isolation	V2	=	BSA	V2
		V3	=	DBB3	
	Gasket material	G1	=	EPDMPC	G1
	Extras	W	=	Wheels	W
	LAUdo	S	=	EN 12828 safety option	
	Energy monitoring	Е	=	With energy monitoring	Е
Panel options		R1	=	Level 1 – SMS and E-mail	
	Remote access	R2	=	Level 2 – Full web access	R2
		R3	=	Level 3 – SMS + Remote	
Communications		C1	=	Modbus RTU	
		C2	=	BACnet	
		C3	=	LonTalk (LonWorks)	
		C4	=	DeviceNet	60
		C5	=	CANopen	C2
		C6	=	Profinet	
		C7	=	Profibus	

Typical specification

The heating system shall be a Spirax EasiHeat™ compact heat transfer system complete with PLC functionality and SIMS technology 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.

How to order

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 complete our enquiry data sheet. Copies can be supplied on request and special requirements should be detailed.