Pioneering Mains Pressurised
Hot Water System

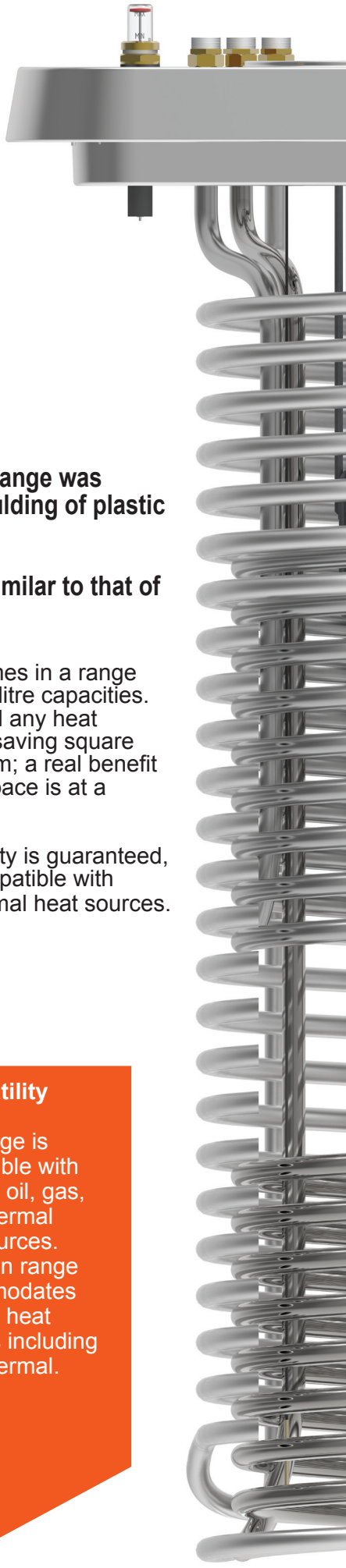
A HOT WATER REVOLUTION

DOMESTIC SYSTEMS

Find out more at:
www.harlequin-heatstream.com

Harlequin®
HeatStream®
HOT WATER SYSTEM

TOMORROW'S HOT WATER SYSTEM



A pioneering advancement in hot water storage, the Harlequin HeatStream range was created from a collaboration of industry expertise in both the rotational moulding of plastic tanks, and pressurised hot water storage systems.

By sharing these experiences, Harlequin have created a hot water system similar to that of a typical unvented hot water cylinder, but superior.

The Harlequin HeatStream brings a revolution in Hot Water Storage. A Heat Storage Tank which produces Mains Pressurised Hot water without all the drawbacks of traditional Vented, Unvented Hot Water Storage Cylinders or Thermal Stores.

The Harlequin HeatStream is designed with a large surface area heat transfer coil on both the heat up and draw off components. This simple system allows the Heat Transfer fluid to be enclosed within the most suitable material, long lasting heat durable polypropylene and designed in the most convenient shape for both the installer and consumer.

The Harlequin Heatstream comes in a range of sizes, from 150 litres to 250 litre capacities. Harlequin HeatStream can fulfil any heat requirement despite its space saving square shape with a footprint of 520mm; a real benefit for those applications where space is at a premium.

A complete range of functionality is guaranteed, with a range of 8 products compatible with electric, oil, gas and solar thermal heat sources.

Why the Harlequin HeatStream is your superior Hot Water System…

Effortless

The system produces mains pressurised hot water without all the drawbacks of traditional vented, unvented hot water storage cylinders or thermal stores.

Endurance

Heat transfer fluid is enclosed within the most suitable material, long lasting non corrosive heat durable polypropylene. This also makes the system tough and robust reducing the impact of shipping and storage mishaps.

Design

A more convenient square footprint shape, especially where space is a premium. All systems can fit easily through a standard door width. More hot water storage potential within a smaller footprint.

Versatility

The range is compatible with electric, oil, gas, solar thermal heat sources. The Twin range accommodates multiple heat sources including solar thermal.

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YOUR BENEFITS

	Installer	End User	Specifier/ Contractor
Produces Mains pressurised hot water on demand		■	
Safe, quick and easy installation	■		■
25 Year Warranty, peace of mind for a generation*		■	
Low heat loss due to high levels of insulation		■	■
No pressure test certification required to install the system	■		■
System shape can fit neatly into many locations and through a standard door width	■	■	■
Easy installation of a secondary return system	■	■	■
Tough and durable plastic casing reducing impact of shipping and storage mishaps	■	■	■
Compact system for commercial installations	■	■	■
Non corrosive polypropylene storage tank		■	■
Top Positioned Premium Boost Immersion for ultrafast heat up		■	■
Variable thermostatic mixing valve which can prevent water exceeding 45^{0}C at outlets		■	■
Immersion & thermostats protected behind durable protective covers		■	

*Terms & Conditions apply

DIRECT

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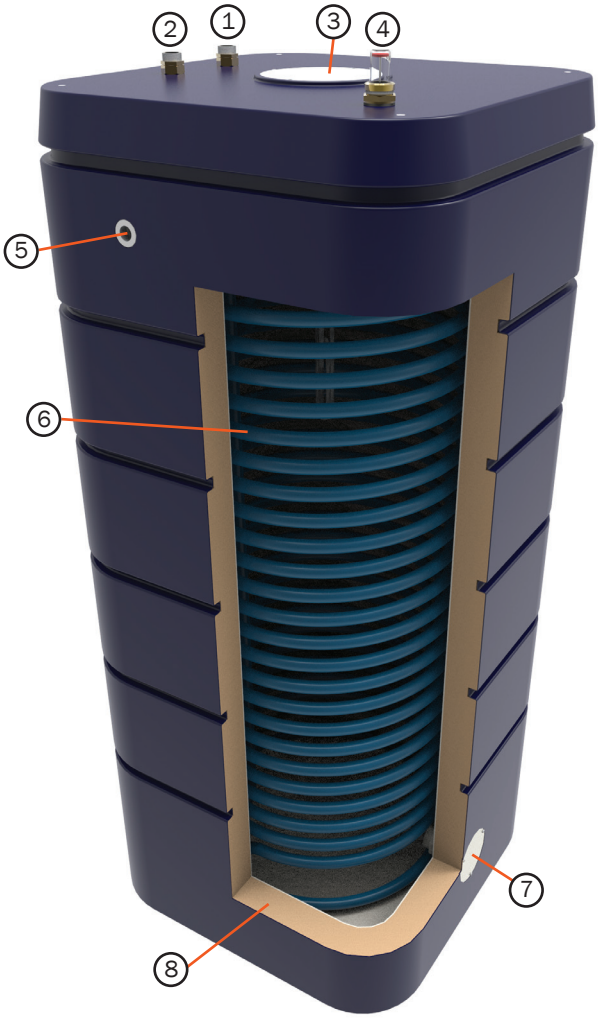

B ErP Rating

1. Hot Water Flow
2. Cold Water Feed
3. Thermostat & Top Immersion Heater Housing
4. Fluid Level Indicator
5. Overflow
6. Hot Water Coil
7. Bottom Immersion Heater
8. Foam Insulation

Model	Width (mm)	Length (mm)	Height + fittings (mm)	Empty Weight (kg)	Filled Weight (kg)	ErP Rating	Standing Heat Loss (W)	Heat up time 60°C (Mins)
HS 150DI	520	520	1,315	36	188	B	47	78
HS 200DI	520	520	1,650	44	246	B	52	105
HS 250DI	520	520	1,980	52	304	B	65	130

Heat up time refers to the period required to raise the temperature from 15°C - 60°C.

DRAW OFF VOLUMES (LITRES)

Model	60°C Core Temperature	65°C Core Temperature	70°C Core Temperature
HS 150DI	113	128	180
HS 200DI	188	228	281
HS 250DI	203	247	302

15 litres per minute flowrate & usable hot water above 40°C.

INDIRECT

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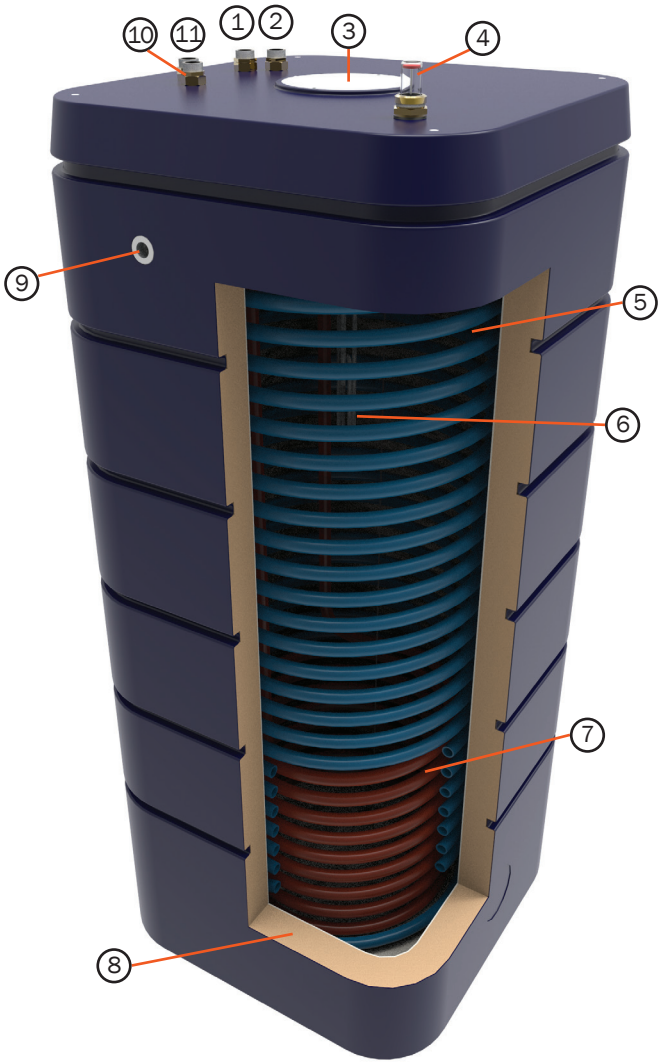

B ErP Rating

1. Hot Water Flow
2. Heat Source Coil Return
3. Thermostat & Top Immersion Heater Housing
4. Fluid Level Indicator
5. Hot Water Coil
6. Top Immersion Heater
7. Heat Source Coil
8. Foam Insulation
9. Overflow
10. Heat Source Coil Feed
11. Cold Water Feed

Model	Width (mm)	Length (mm)	Height + fittings (mm)	Empty Weight (kg)	Filled Weight (kg)	ErP Rating	Standing Heat Loss (W)	Heat up time 60°C (Mins)	Heat up time 65°C (Mins)	Heat up time 70°C (Mins)
HS 150IN	520	520	1,315	39	191	B	47	20	25	32
HS 200IN	520	520	1,650	48	250	B	52	24	33	42
HS 250IN	520	520	1,980	56	308	B	65	29	38	48

Heat up time test start temperature 15°C.

DRAW OFF VOLUMES (LITRES)

Model	60°C Core Temperature	65°C Core Temperature	70°C Core Temperature
HS 150IN	113	128	180
HS 200IN	188	228	281
HS 250IN	203	247	302

15 litres per minute flowrate & usable hot water above 40°C.

TWIN

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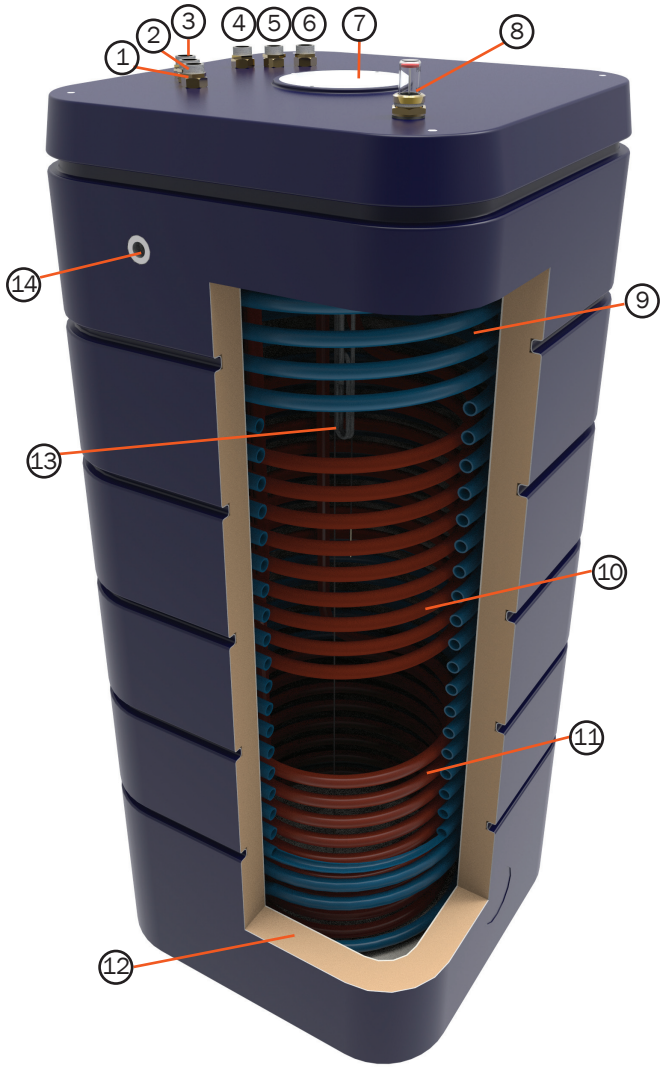

B ErP Rating

1. Heat Source Coil 2 Feed
2. Heat Source Coil 1 Feed
3. Mains Cold Water Feed
4. Hot Water Flow
5. Heat Source Coil 1 Return
6. Heat Source Coil 2 Return
7. Thermostat & Top Immersion Heater Housing
8. Fluid Level Indicator
9. Hot Water Coil
10. Heat Source Coil 2
11. Heat Source Coil 1
12. Foam Insulation
13. Top Immersion Heater
14. Overflow

								Coil 1			
Model	Width (mm)	Length (mm)	Height + fittings (mm)	Empty Weight (kg)	Filled Weight (kg)	ErP Rating	Standing Heat Loss (W)	Heat up time 60°C (Mins)	Heat up time 65°C (Mins)	Heat up time 70°C (Mins)	Dedicated Solar Volume (l)
HS 200TW	520	520	1,650	53	255	B	52	24	33	42	100
HS 250TW	520	520	1,980	61	313	B	65	28	38	48	100

Heat up time test start temperature 15°C.

DRAW OFF VOLUMES (LITRES)

Model	60°C Core Temperature	65°C Core Temperature	70°C Core Temperature
HS 200TW	188	228	281
HS 250TW	203	247	302

15 litres per minute flowrate & usable hot water above 40°C.

HOW IT WORKS

Within the tank of the Harlequin HeatStream, heat transfer fluid is stored. This is not consumed and is continually heated by the immersion heater or alternative heat source (depending on the model).

There is a stainless steel corrugated coil within each system which pressurised mains water flows into. As it travels through this coil it is heated by the heat transfer fluid.

Once it reaches the end of the coil, the water will have reached the temperature desired for the end users outlets.

INSTALLATION

An extremely easy and safe installation.

Simply fix the connections conveniently located at the top of the tank, fix the overflow, fill the tank, connect the immersion heater and temperature thermostat through an easily accessible housing and move onto the next job!

ADDITIONAL INFORMATION

	HS 150DI 200DI 250DI	HS 150IN 200IN 250IN	HS 200TW 250TW
Outer Tank	Polyethylene	Polyethylene	Polyethylene
Inner Tank	Polypropylene	Polypropylene	Polypropylene
Internal Coils	Stainless Steel	Stainless Steel	Stainless Steel
Immersion Heater(s)	2x 3kw Immersion Heaters	1x Top Mounted 3kw Immersion Heater	1x Top Mounted 3kw Immersion Heater
Hot Water Coil Inlet/Outlet Connections	22MM Pipe Tail	22MM Pipe Tail	22MM Pipe Tail
Coil 1 Inlet/Outlet Connections	n/a	22MM Compression	22MM Compression
Coil 2 Inlet/Outlet Connections	n/a	n/a	22MM Compression
Overflow	3/4”F	3/4”F	3/4”F
Hot Water Coil Operating Pressure (max.)	3 bar	3 bar	3 bar
Coil 1 Operating Pressure (max.)	n/a	3 bar	3 bar
Coil 2 Operating Pressure (max.)	n/a	n/a	3 bar
Insulation, Sides & Bottom	60mm	60mm	60mm
Insulation, Top	120mm	120mm	120mm
Warranty	25 year tank body, 2 year internal components	25 year tank body, 2 year internal components	25 year tank body, 2 year internal components

CONTACT

Sales & After Sales

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E sales@harlequin-mfg.com

Literature & Guides

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Warranty

T 028 9261 1077 (opt 3)
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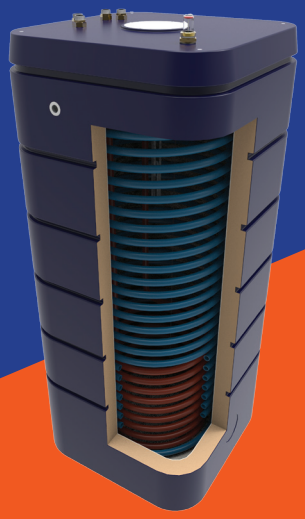
W harlequin-heatstream.com/warranty

Technical Helpline

T 028 9261 1077 (opt 3)
E info@harlequin-mfg.com

About Harlequin

Harlequin have been at the forefront of manufacturing development in the rotationally moulded plastic storage products industry for over 35 years. From its base in N. Ireland Harlequin now sell to over 25 countries worldwide with an unrivalled reputation for quality, backed up with its 9001, 14001 and 18001 Management System Certifications.



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FREQUENTLY ASKED QUESTIONS

How does the Harlequin HeatStream produce pressurised water?
The Harlequin HeatStream utilises mains water pressure to produce pressurised hot water, instantaneously through a high surface area extraction coil.

Is the Harlequin HeatStream a Thermal Store?
No, the Harlequin Heatstream incorporates a static heat transfer medium in order to ensure that no header tank is required, thus utilising the best parts of an unvented cylinder and a thermal store. The Harlequin HeatStream also operates at temperatures similar to an unvented cylinder, thus reducing costs compared to most thermal stores.

Can the Harlequin Heatstream create better flow at my taps than an unvented cylinder?
HeatStream will produce similar flows to that of an unvented cylinder, and at similar pressures. Flow rates are generally a fuction of mains water pressure.

Why does the Harlequin HeatStream use Polypropylene in its design?
As with plastic pipes, we believe that Polypropylene is a much more suitable product for hot water storage, and it also lets us produce a better designed hot water storage shape, more compact, square and much more ergonomic design.

How suitable are the Heat Transfer Coils?
The Heat Transfer Coils which provide the heart of the product are manufactured using only a high quality Stainless Steel. The coils themselves have been designed to maximise heat transfer and have an unparalleled heat transfer surface area.

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INVESTORS IN PEOPLE