

WORLD HEAT CYLINDERS · MADE IN MANCHESTER

Commercial Calorifiers, Buffer Vessels & Plant Room Equipment



INSIDE

Contents

3	Who we are
5	About World Heat
7	How we make vessels
8	Bespoke capability and standards
9	The range at a glance
STORAGE CALORIFIERS	
11	Storage Calorifiers/Cylinders
BUFFER VESSELS	
13	Buffer Vessels
15	SSBUFF stainless steel buffer vessel
LOW LOSS HEADERS	
17	Low loss header
PLATE HEAT EXCHANGERS	
19	Plate Heat Exchangers
20	Applications and sectors
21	Quality and service
22	Technical notes

Online

worldheat.co.uk



Leak testing a fabricated assembly in the World Heat Cylinders workshop



WHO WE ARE

Welcome to World Heat Cylinders.

We are a UK specialist in the design, manufacture, and supply of advanced Hot Water Storage Systems. Making cylinders since 1989 (World Heat since 2008), our commitment has been to provide high-quality hot water cylinders, calorifiers, and buffer vessels. These expertly engineered products serve the diverse needs of residential, commercial, and industrial sectors.

Every vessel is designed, welded and tested in our own factories in Dukinfield, Greater Manchester. You deal directly with our own technical team, from sizing and drawings to commissioning and aftercare, and because we design and build everything here in the UK, we control bespoke work from drawing to dispatch.

Since 1989

Making cylinders (World Heat since 2008)

Immediately

for the standard range, 48 hours for bespoke, to confirm and respond to every enquiry

Up to 10,000L

Bespoke vessels built to order

2 factories

Cylinders made in our own Dukinfield factories

[More about us →](#)



WINNER

World Heat wins Business of the Year at the Pride of Tameside Business Awards

We are delighted to share that World Heat has won Business of the Year at the Pride of Tameside Business Awards, presented by Tameside Metropolitan Borough.

[Read the story →](#)

WHY WORLD HEAT CYLINDERS

01

Specialists, not generalists

Cylinders, calorifiers and buffer vessels are what we do — it's our whole business. That focus means engineers who know hot water storage inside out, from a single domestic cylinder to a plant-room calorifier.

02

Bespoke work, turned around fast

Bespoke sizes and specifications are our niche. Because we design and build everything in our own Dukinfield factories, with our own technical team, we control bespoke work from drawing to dispatch. Lead times vary by product – call 0161 343 8610 for today's lead time on your product.

03

UK-made and dependable

Every vessel is designed, welded and tested in our own two factories in Dukinfield. Making cylinders since 1989 (World Heat since 2008), with a BSI-audited ISO 9001 quality system, WRAS-approved cylinders and a Declaration of Conformity held under the Pressure Equipment Regulations (PED) for the products they apply to.

CREDENTIALS

ISO 9001

BSI certified

WRAS

Approved cylinders

G3

Compliant, G3 kit supplied

PED

Declaration of Conformity held

UKCA

Marked

Every World Heat calorifier and cylinder carries a World Heat nameplate giving its hydraulic test date, maximum working pressure and test pressure. Letters of material conformity can be supplied with any commercial calorifier on request.



**MADE IN
MANCHESTER**

ABOUT WORLD HEAT

Made in Manchester, built to last

Durable stainless steel cylinders, low-impact insulation and ranges built for heat pumps — made in our own factory in Greater Manchester.



Operator programming a machine on the factory floor



Technician working on a stainless steel vessel at the World Heat Cylinders factory

Made in Manchester, to ISO 9001

Cylinders for UK projects are built here rather than shipped from overseas, and we control quality under a BSI-audited ISO 9001:2015 system.

[Accreditation →](#)

Investing in robotic welding

We have recently installed a robotic welder in our factory, part of a wider investment in robotics and automation. A programmed weld is made the same way every time, so you get consistent, repeatable welds on every vessel and across every production run.

[Robotic welding →](#)

Reducing our own carbon emissions

Reporting of our scope 1 and scope 2 carbon emissions is now in place. We have just installed 100 kW of solar PV on our factory roof, on top of the 16 kW system that was already there. Last year we insulated the whole factory roof.

[Our carbon emissions →](#)

ABOUT WORLD HEAT

Sustainability, robotics and our community

Materials built to last

Our domestic cylinders are made from duplex stainless steel, which resists corrosion and scale — particularly in hard water areas. Stainless steel is a recyclable material, so a cylinder's vessel doesn't have to become waste at the end of its life.

[Sustainability →](#)

Low heat loss, low-impact insulation

Our unvented cylinders use polyurethane foam insulation made with a CO₂ blowing agent: its global warming potential is less than 5 and its ozone depletion potential is zero.

[Sustainability →](#)

Part of our community

We're a Greater Manchester manufacturer, and proud to back the local sports clubs, junior teams and charities around our factory in Dukinfield.

[Social responsibility →](#)

Leak testing a fabricated assembly in the World Heat Cylinders workshop



Technicians assembling components on the factory floor



Technician using a cordless drill on the production line

HOW WE MAKE VESSELS

Made in our own factories in Dukinfield, backed by our own technical team

Cylinders made in our own Dukinfield factories, with technical support from our own team and bespoke work controlled from drawing to dispatch.

Welding of Stainless Steel is an aggressive process which, if not carried out correctly can greatly reduce the corrosion resistance of the material. World Heat Cylinders uses a process called purging during the manufacture of stainless steel cylinders to limit oxidation. All of our domestic cylinders are then pickled internally, in order to allow the formation of the passive corrosion resistant layer.



Welder joining a boss to a stainless steel vessel



Technician working on a stainless steel vessel at the World Heat Cylinders factory



Welder working on a stainless steel vessel



Welder in a helmet welding a large steel vessel shell in the World Heat Cylinders factory



A large stainless steel calorifier shell with flanged connections and an inspection



Welder at work on a large steel vessel at the World Heat Cylinders factory

WHAT WE CAN BUILD

Bespoke capability and standards

Built to your specification

At World Heat Cylinders, we possess a unique blend of expertise. Our team ranges from highly experienced design engineers to time-served tradespeople on the shop floor.

All our hot water storage calorifiers are manufactured on a bespoke basis. Consequently, this means each unit is specifically engineered to meet our customers' precise project specifications and application requirements.

From large-capacity storage calorifiers for hospitals and hotels to compact buffer vessels for optimising renewable energy systems, our commercial range provides efficient and durable solutions. Furthermore, we offer bespoke design services to tailor products precisely to your site conditions and system parameters.

[Bespoke products →](#)

The standards we build to

BS853 is an internationally recognised British Standard specifically for calorifier construction. Whenever a client requests it, World Heat Cylinders manufactures calorifiers precisely to this standard. This ensures a defined level of quality and construction methodology.

Due to expansions within our technical department, we can now offer Design and Verification Services for vessels to PD 5500. This British Standard specifies requirements for the design, construction, inspection, testing, and verification of unfired fusion welded pressure vessels.

Beyond specific design codes, World Heat Cylinders operates under a BSI audited ISO 9001 quality management system. This commitment to quality underpins all our manufacturing processes, from material sourcing and manufacture to final inspection and testing.

Every World Heat calorifier and cylinder carries a World Heat nameplate giving its hydraulic test date, maximum working pressure and test pressure. Letters of material conformity can be supplied with any commercial calorifier on request.

[Manufacturing standards →](#)

COMMERCIAL RANGE

The range at a glance

PRODUCT FAMILY

Storage calorifiers

Bespoke storage calorifiers from 100 to 10,000 litres, vertical or horizontal, in stainless or galvanised mild steel — heated by LTHW, MTHW, HTHW or steam.

10

1 product

PRODUCT FAMILY

Buffer vessels

Heating and chilled water buffer vessels from 10 to 10,000 litres, with the commercial range starting from 300 litres and bespoke sizes built to order, to stop heat pumps, boilers and chillers

12

2 products

PRODUCT FAMILY

Low loss headers

Insulated mild steel low loss headers (hydraulic separators) that keep boiler and heat pump flow within design conditions.

16

1 product

PRODUCT FAMILY

Plate heat exchangers

Gasketed and brazed plate heat exchangers, accessories and fully packaged PHE sets for DHW, LTHW, MTHW and steam duties.

18

1 product

PRODUCT FAMILY

Storage calorifiers

Bespoke storage calorifiers from 100 to 10,000 litres, vertical or horizontal, in stainless or galvanised mild steel — heated by LTHW, MTHW, HTHW or steam.

IN THIS SECTION

11 Storage Calorifiers/Cylinders

[See the range online →](#)

STORAGE CALORIFIERS

Storage Calorifiers/Cylinders

Bespoke storage calorifiers from 100 to 10,000 litres, vertical or horizontal, in stainless or galvanised mild steel — heated by LTHW, MTHW, HTHW or steam.



Key features

- ✓ 100–10,000 L standard sizes
- ✓ Vertical or horizontal
- ✓ Stainless or galvanised mild steel
- ✓ LTHW, MTHW, HTHW or steam primary
- ✓ Built to BS 853

Storage calorifier dimensions, 100L to 10,000L (vertical or horizontal)

Size (L)	Height / length (mm)	Diameter (mm)
440	1800	600
550	1700	675
700	1750	750
800	1950	750
900	2000	800
1000	1950	850
1200	2100	900
1350	2350	900
1500	1950	1050
1800	2300	1050
2000	2500	1050
2300	2400	1150
2500	2450	1200
3000	2900	1200
3500	2700	1350
4000	3050	1350
4500	3400	1350
5000	3200	1450
6000	3800	1450
7000	3300	1680
8000	3700	1680
9000	4200	1680
10000	4600	1680

Sizes and specifications

Every calorifier is built to order with a fully detailed drawing, so the sizes above are a guide. Send us the capacity, recovery and primary heat source and we'll size it.

[See it on our website →](#)
[Request a quote](#)

PRODUCT FAMILY

Buffer vessels

Heating and chilled water buffer vessels from 10 to 10,000 litres, with the commercial range starting from 300 litres and bespoke sizes built to order, to stop heat pumps, boilers and chillers short cycling.

IN THIS SECTION

13

Buffer Vessels

15

SSBUFF stainless steel buffer vessel

[See the range online →](#)

BUFFER VESSELS

Buffer Vessels

Heating and chilled water buffer vessels from 10 to 10,000 litres, with the commercial range starting from 300 litres and bespoke sizes built to order, to stop heat pumps, boilers and chillers short cycling.



Key features

- ✓ Buffer vessels from 10 L to 10,000 L
- ✓ Commercial range from 300 L
- ✓ 10–50 L inline volumisers
- ✓ Heating and chilled water
- ✓ PU injection foam insulation
- ✓ Bespoke sizes are our speciality

Buffer vessels: standard datasheet sizes

Size (L)	Height (mm)	Diameter (mm)	Standing heat loss (W)
600	1642	850	136
750	1981	850	142
800	2100	850	158
1000	1850	1000	184
1500	1950	1200	201.25
2000	2200	1300	229.58
2500	2500	1300	273.3
3000	2840	1300	312.5
4000	2500	1600	371.25
5000	2750	1700	432.5
6000	2850	1700	604.16
8000	2750	2100	867.08

Inline volumisers 10L and 20L

	10	20
Height (mm)	396	696
Width (mm)	270	270
Standing heat loss (W)	18	22
ErP class	A	A
Max working pressure	6 Bar G	6 Bar G
Max flow rate	60 litres per minute	60 litres per minute

BUFFER VESSELS

Buffer Vessels: specifications

Inline volumisers 25L and 50L

	25	50
Height (mm)	850	800
Width (mm)	270	350
Standing heat loss (W)	22	44
ErP class	A	A
Max working pressure	6 Bar G	6 Bar G
Max flow rate	60 litres per minute	60 litres per minute

[See it on our website →](#)[Request a quote](#)

SSBUFF Standard Stainless Steel Buffer Vessels

50L–300L


WORLD HEAT
CYLINDERS


High quality British manufactured, super insulated stainless steel buffer vessels designed for any application.

World Heat Cylinders manufacture a range of high quality stainless steel buffer vessels for any application.

All of our vessels are manufactured under an ISO9001 certified quality management system in our purpose made manufacturing facility in Manchester.

Key features

- High quality stainless steel
- Highly efficient injection foam insulation
- Standard range capacity 50L to 300L
- ISO9001 certified quality management
- Fitted with a 3kW immersion heater
- Bespoke fast turnaround vessels available
- Primary expansion vessels available
- Capacity available up to 10,000L

SSBUFF Standard Buffer Vessels Standard buffer vessels

Model	50 SSBUFF	100 SSBUFF	150 SSBUFF	180 SSBUFF	210 SSBUFF	250 SSBUFF	300 SSBUFF
Nominal capacity (litres)	50	100	150	180	210	250	300
Height (mm)	510	750	1200	1335	1575	1750	2110
Diameter (mm)	550						
Approximate weight (kg)	Empty	30	35	40	45	50	55
	Full	80	165	190	225	260	305
	Packaged	55	60	65	70	75	80
28mm compression fittings	5						
½" female stat pockets	1	2	3	3	3	3	3
½" female drain	No	Yes	Yes	Yes	Yes	Yes	Yes
3kW immersion heater fitted	Yes						
Immersion heater	3kW						
Maximum working pressure	6 Bar G (hydraulically tested to 10.05 Bar G)						
Vessel material	316 stainless steel						
Insulation type	Polyurethane (PU) insulation with CO2 blowing agent						
Standing heat loss (W)	48.6	54.6	60.2	64.3	75.2	86.4	94.2
ErP fiche volume (litres)	52	104	151	178	213	246	296
ErP energy efficiency class	C						
ODP of insulation	0						
GWP of insulation	Less than 5						

* 100mm insulation available on request

** Alternative volumes and bespoke buffer vessels available on request



PRODUCT FAMILY

Low loss headers

Insulated mild steel low loss headers (hydraulic separators) that keep boiler and heat pump flow within design conditions.

IN THIS SECTION

17 Low loss header

[See the range online →](#)

Low Loss Headers

9L


WORLD HEAT
CYLINDERS


High quality British manufactured low loss headers with high efficiency injection foam insulation.

World Heat Cylinders manufacture a range of low loss headers in a white gloss case finish with high efficiency injection foam insulation.

All of our vessels are manufactured under an ISO9001 certified quality management system in our purpose made manufacturing facility in Manchester.

Key features

- High quality mild steel
- 5 year manufacturing warranty
- White gloss powder coated finish
- Highly efficient injection foam insulation
- ISO9001 certified quality management

Low Loss Header Standard low loss header

Model		1000X100MSLLH
Nominal capacity (litres)		9
Height (mm)		1050
Approximate weight (kg)	Empty	7
	Full	16
	Packaged	10
Maximum duty		180kW at 11°C ΔT; 45kW at 5°C ΔT
Connections		8 x 1" female and 2 x ½" female
Vessel material		Mild steel
Insulation type		Polyurethane (PU) insulation
Insulation thickness		50mm
Standing heat loss (kWh/24h)		0.23
ODP of insulation		0
GWP of insulation		Less than 5

* Alternative sized low loss headers available on request

** Optional connection kits available, including 8 x compression connectors, an automatic air vent and drain


MADE IN
MANCHESTER

PRODUCT FAMILY

Plate heat exchangers

Gasketed and brazed plate heat exchangers, accessories and fully packaged PHE sets for DHW, LTHW, MTHW and steam duties.

IN THIS SECTION

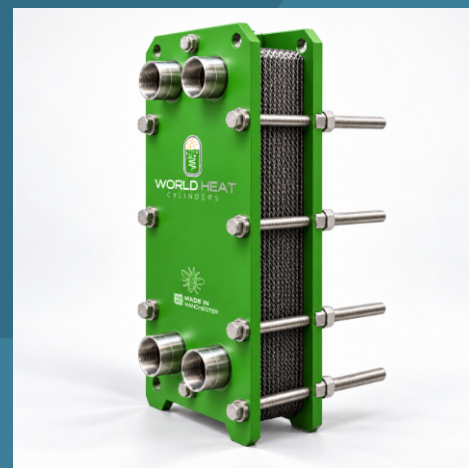
19 Plate Heat Exchangers

[See the range online →](#)

PLATE HEAT EXCHANGERS

Plate Heat Exchangers

Gasketed and brazed plate heat exchangers, accessories and fully packaged PHE sets for DHW, LTHW, MTHW and steam duties.



Key features

- ✓ Gasketed and brazed PHEs
- ✓ Compact footprint
- ✓ Packaged sets with pumps and controls
- ✓ Insulation jackets, splash guards, drip trays

Sizes and specifications

Plate heat exchangers are selected for each duty. Send us both sides' fluids, temperatures, flow rates and allowable pressure drops and we'll select and quote.

[See it on our website →](#)[Request a quote](#)

WHERE OUR PRODUCTS ARE USED

Applications and sectors

Commercial and public buildings

From large-capacity storage calorifiers for hospitals and hotels to compact buffer vessels for optimising renewable energy systems, our commercial range provides efficient and durable solutions. Furthermore, we offer bespoke design services to tailor products precisely to your site conditions and system parameters.

[Commercial products →](#)

Buffer vessels

Our buffer vessels run from compact 10-litre units (often referred to as volumisers or inline buffers) up to 10,000-litre tanks, with the commercial range starting from 300 litres and bespoke sizes built to order. Heating systems with gas, oil, or electric boilers · Biomass boiler installations · Air source and ground source heat pump systems · Solar thermal systems (albeit as part of a combined setup) · Air conditioning and chiller circuits (chilled water buffer vessels) · Combined heating and cooling applications

[Buffer vessels →](#)

Plate heat exchangers

Domestic Hot Water (DHW) generation ·
Low-Temperature Hot Water (LTHW) systems ·
Medium-Temperature Hot Water (MTHW) systems ·
Steam-to-water applications · Various industrial process heating and cooling duties

[Plate heat exchangers →](#)

WORLD HEAT CYLINDERS

Quality and service

We confirm and respond to every bespoke enquiry within 48 hours, and standard range enquiries immediately. If you need a price on a standard product, don't hesitate to call and speak to one of our team on 0161 343 8610.

Approvals and certification

- ✓ **WRAS approval**
We hold WRAS approval on products up to 6,000 litres.
- ✓ **ErP compliance**
Our cylinders are ErP compliant up to 2,000 litres.
- ✓ **ISO 9001, audited by BSI**
Our quality management system is certified to ISO 9001 and audited by BSI.
- ✓ **G3 compliant unvented cylinders**
Our unvented cylinders are G3 compliant: they are supplied with the G3 unvented kit.

[Accreditations and compliance →](#)

Lead times

Lead times as at 16 October 2026

Product	≤ 500 L capacity	501 – 1,000 L capacity	1,001 – 2,000 L capacity	> 2,000 L capacity
Storage Calorifiers/Cylinders	4 to 6 Weeks	6 to 8 Weeks	6 to 8 Weeks	8 to 10 Weeks
Buffer Vessels	4 to 6 Weeks	6 to 8 Weeks	6 to 8 Weeks	8 to 10 Weeks

Product	Lead time
Low Loss Headers	Contact Sales
Plate Heat Exchangers	Contact Sales

Lead times vary by product – call 0161 343 8610 for today's lead time on your product.

TALK TO OUR TEAM

0161 343 8610

sales@whcylinders.co.uk worldheat.co.uk

[Request a quote →](#)

BEFORE YOU INSTALL

Technical notes

Sizing a storage calorifier

Correctly sizing the volume of a storage calorifier is extremely important, to make sure enough hot water is available for the building's needs. A combination of volume and heating duty for a one-hour delivery is considered adequate for most applications.

[Storage calorifiers →](#)

Regulations and standards

Compliance with the Pressure Equipment Directive (PED) 2014/68/EU is mandatory for relevant pressure equipment placed on the European market (and UKCA marking for Great Britain). World Heat Cylinders ensures that all applicable products we produce comply with the PED. World Heat Cylinders manufactures its calorifiers and storage cylinders to meet stringent industry standards. Where necessary, they comply with BS853 (Specification for vessels for use in heating systems).

[Building regulations →](#)

Insulation and ErP

We offer a variety of high-performance insulation types and durable finishes tailored to different cylinder ranges and applications, from domestic hot water cylinders to large commercial calorifiers. Our solutions are designed to meet current building regulations, and the Energy-Related Products (ErP) requirements for cylinders up to 2,000 litres.

[Insulation →](#)



GET IN TOUCH

Hot Water Cylinder and Calorifier Manufacturer

CALL

0161 343 8610

EMAIL

sales@whcylinders.co.uk

ONLINE

worldheat.co.uk

REQUEST A QUOTE

worldheat.co.uk/quote

SITE 1

Tudor House / Unit 4, Tudor
Industrial Estate
Ashton Street
Dukinfield
Cheshire
SK16 4RN

Commercial cylinders

SITE 2

World Heat 2
Outram Road
Dukinfield
Manchester
SK16 4XE

Domestic cylinders and customer
collections



worldheat.co.uk

ISO 9001

BSI certified

WRAS

Approved cylinders

G3

Compliant, G3 kit
supplied

PED

Declaration of
Conformity held

UKCA

Marked

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