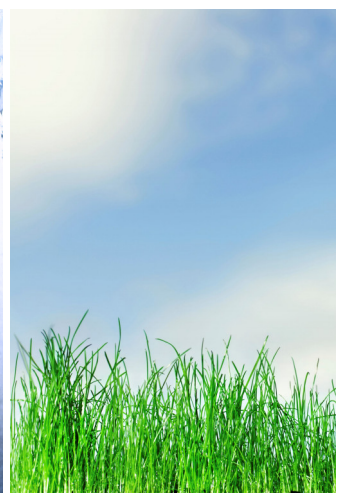
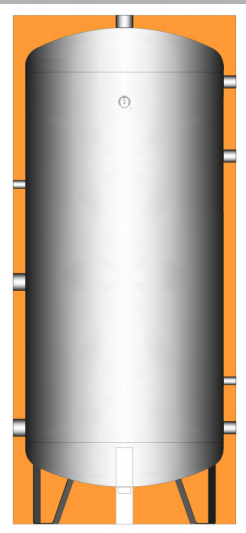


Product Guide

**DOMESTIC HOT WATER SOLUTIONS
DIRECT CYLINDERS**

Inventive Engineering





Direct Storage Cylinders

The Arbe AD series of direct cylinders are used for the storage of DHW & heating water, heated externally by heat sources such as plate heat exchangers, heat pumps, CHP units and solar thermal systems.

Arbe can assist with the design and selection of direct storage cylinders where required

All vessels supplied with insulation designed and selected to meet the ErP Directive & a high-strength PVC jacket with a grey finish. Sacrificial anodes are supplied with our enamelled steel storage cylinders as standard.

There are 3 options for materials on the vessels.

ADX - Stainless steel shell, AISI 316L

ADG - Carbon steel shell, enamelled internally with the lining carried out in accordance with DIN4753, supplied with a vessel inspection opening for maintenance and inspection purposes.

ADZ - Galvanised steel shell

Our storage cylinders can be supplied with accessories either loose or factory fitted such as unvented kits and packaged with heat exchangers or other heat sources



Energy Efficiency

All Arbe storage calorifiers are fully compliant with the latest Energy Efficiency Directive with improved energy efficiency classes, as shown on the table on the following page, compliant to Reg. 814/2013 (Dir. 2009/125/CE) with new legislation coming into force in September 2017

Warranty

All Arbe storage calorifiers have a minimum 5 year warranty on the shell and 3 years on the heater battery, covering against all manufacturing defects. If we supply controls & commissioning, this can be extended to 8 years!

Model	Maximum Pressure	Maximum Temperature
ADX	99°C	6 BarG
ADS	70°C	6 BarG
ADZ	70°C	6 BarG

Stainless Steel Direct Storage Cylinders

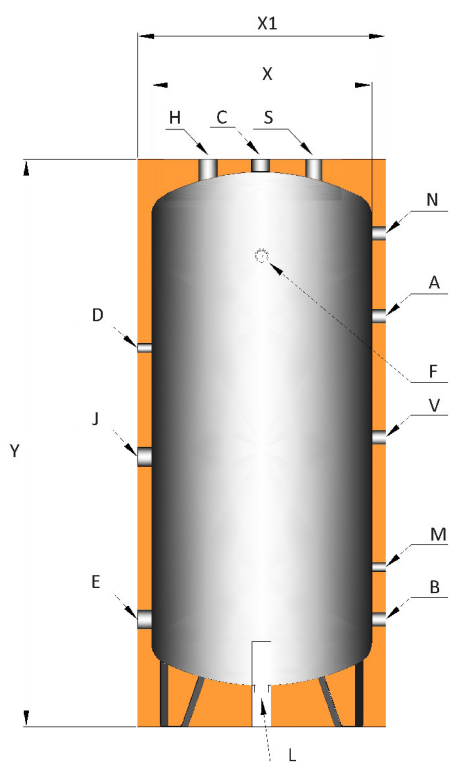


Dimensions		ADX Capacity (Litres)											
		200	300	500	800	1000	1500	2000	2050	2500	3000	4000	5000
X1	mm	550	650	750	1000	1000	1200	1400	1300	1300	1350	1500	1700
X	mm	450	550	650	800	800	1000	1200	1200	1200	1250	1400	1600
Y	mm	1510	1550	1840	1960	2210	2250	2170	2270	2600	2800	2880	2970
Y1	mm	660	760	860	1100	1100	1360	1550	1460	1510	1550	1700	1800
Z	mm	1400	1450	1730	1930	2180	2170	2110	2200	2500	2700	2800	2850
A	mm	1½"	1½"	1½"	2"	2"	2"	2"	2"	2"	2"	2"	2"
B	mm	1½"	1½"	1½"	2"	2"	2"	2"	2"	2"	2"	2"	2"
C	BSP	1½"	1½"	1½"	2"	2"	2½"	2½"	2½"	3"	3"	3"	3"
D	BSP	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"
E	BSP	1½"	1½"	1½"	2"	2"	2½"	2½"	2½"	3"	3"	3"	3"
F	BSP	½"	½"	½"	½"	½"	½"	½"	½"	½"	½"	½"	½"
H	BSP	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"
J	BSP	2"	2"	2"	2"	2"	2"	2"	2"	2"	2"	2"	2"
M	BSP	½"	½"	½"	½"	½"	½"	½"	½"	½"	½"	½"	½"
N	BSP	½"	½"	½"	½"	½"	½"	½"	½"	½"	½"	½"	½"
S	BSP	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"
V	BSP	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"
Energy Efficiency Class ErP Compliant	Rating	B	B	C	C	C	C	C	-	-	-	-	-
	W	55	68	93	115	128	153	176	-	-	-	-	-

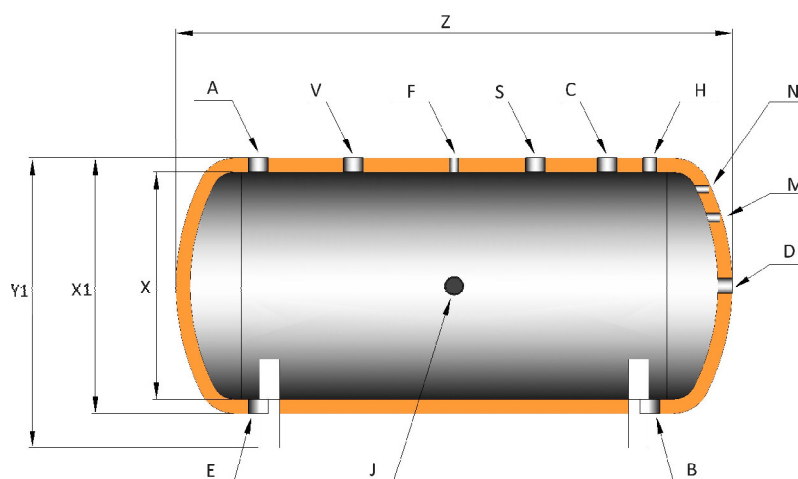
ADX Design Details		
Characteristics	Standard	Optional
Tank Capacity	200 - 5000 Litre	
Arrangement	Vertical	
Tank Material	Stainless Steel 316L	
Insulation	PLFH High Density Insulation & Cladding	
Accessories	Standard	Optional
	Thermometer	Unvented Kit & Safety Valve
	Drain Valve	Immersion Heater
		Anode
Design Code		
European Pressure Equipment Directive 2014/64/CE		

Connections

A	Flow from Heat Source	J	Immersion Heater
B	Return to Heat Source	L	Drain
C	Secondary Flow	M	Sensor
D	Secondary Return	N	Sensor
E	Cold Feed / Drain	S	Anti-Vacuum Valve (Optional)
F	Gauge	V	Anode
H	Safety Valve		



Vertical Orientation



Horizontal Orientation

Enamelled Steel Direct Storage Cylinders

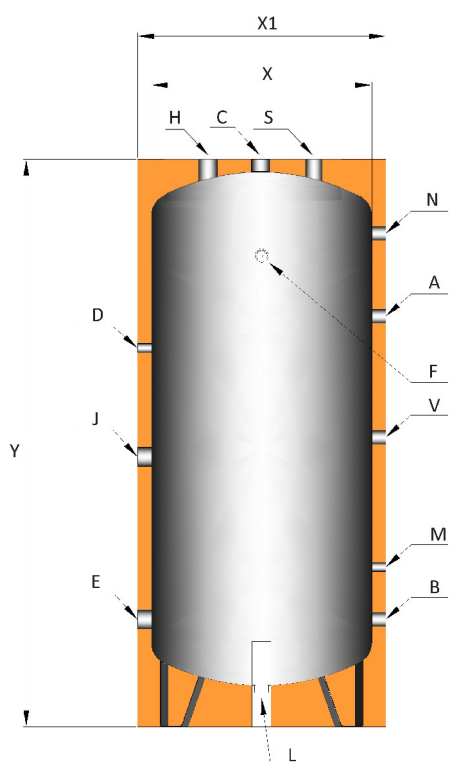


Dimensions		ADG Capacity (Litres)											
		200	300	500	800	1000	1500	2000	2050	2500	3000	4000	5000
X1	mm	550	650	750	1000	1000	1150	1300	1200	1300	1350	1500	1700
X	mm	450	550	650	800	800	950	1100	1100	1200	1250	1400	1600
Y	mm	1510	1550	1840	1960	2210	2250	2550	2530	2600	2800	2880	2970
Y1	mm	660	760	860	1100	1100	1310	1470	1360	1510	1550	1700	1890
Z	mm	1400	1450	1730	1930	2180	2460	2560	2430	2500	2700	2800	2850
A	mm	1½"	1½"	1½"	2"	2"	2"	2"	2"	2"	2"	2"	2"
B	mm	1½"	1½"	1½"	2"	2"	2"	2"	2"	2"	2"	2"	2"
C	BSP	1½"	1½"	1½"	2"	2"	2½"	2½"	2½"	3"	3"	3"	3"
D	BSP	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"
E	BSP	1½"	1½"	1½"	2"	2"	2½"	2½"	2½"	3"	3"	3"	3"
F	BSP	½"	½"	½"	½"	½"	½"	½"	½"	½"	½"	½"	½"
H	BSP	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"
J	BSP	2"	2"	2"	2"	2"	2"	2"	2"	2"	2"	2"	2"
M	BSP	½"	½"	½"	½"	½"	½"	½"	½"	½"	½"	½"	½"
N	BSP	½"	½"	½"	½"	½"	½"	½"	½"	½"	½"	½"	½"
S	BSP	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"
V	BSP	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"
Energy Efficiency Class ErP Compliant	Rating	B	B	C	C	C	C	C	-	-	-	-	-
	W	55	68	93	119	129	154	180	-	-	-	-	-

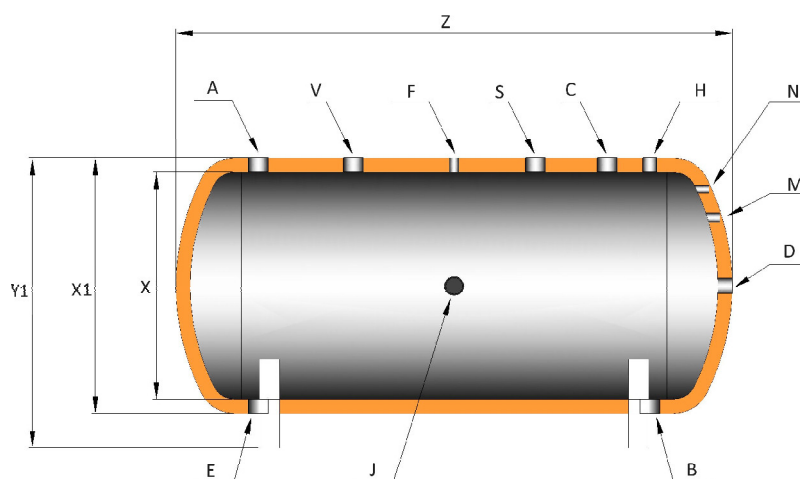
ADG Design Details		
Characteristics	Standard	Optional
Tank Capacity	200 - 5000 Litre	
Arrangement	Vertical	
Tank Material	Carbon Steel Glass Enamelled	
Insulation	PLFH High Density Insulation & Cladding	
Accessories	Standard	Optional
	Thermometer	Unvented Kit & Safety Valve
	Drain Valve	Immersion Heater
	Anode	
Design Code		
European Pressure Equipment Directive 2014/64/CE		

Connections

A	Flow from Heat Source	J	Immersion Heater
B	Return to Heat Source	L	Drain
C	Secondary Flow	M	Sensor
D	Secondary Return	N	Sensor
E	Cold Feed / Drain	S	Anti-Vacuum Valve (Optional)
F	Gauge	V	Anode
H	Safety Valve		



Vertical Orientation



Horizontal Orientation

Galvanised Steel Direct Storage Cylinders

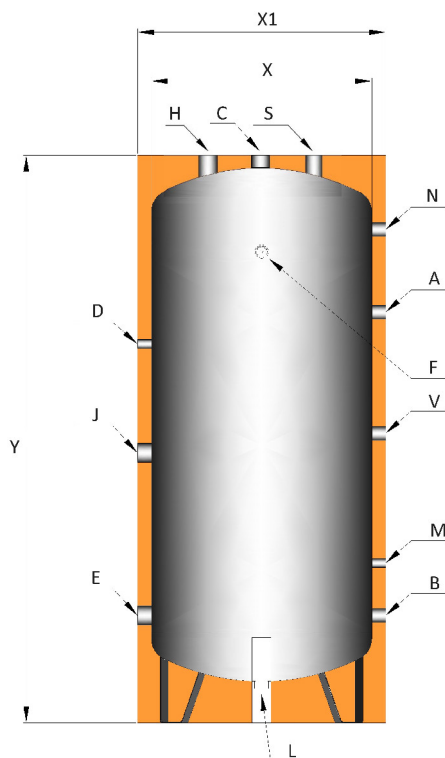


Dimensions		ADZ Capacity (Litres)											
		200	300	500	800	1000	1500	2000	2050	2500	3000	4000	5000
X1	mm	550	650	750	1000	1000	1150	1300	1200	1300	1350	1500	1700
X	mm	450	550	650	800	800	950	1100	1100	1200	1250	1400	1600
Y	mm	1510	1550	1840	1960	2210	2250	2550	2530	2600	2800	2880	2970
Y1	mm	660	760	860	1100	1100	1310	1470	1360	1510	1550	1700	1890
Z	mm	1400	1450	1730	1930	2180	2460	2560	2430	2500	2700	2800	2850
A	mm	1½"	1½"	1½"	2"	2"	2"	2"	2"	2"	2"	2"	2"
B	mm	1½"	1½"	1½"	2"	2"	2"	2"	2"	2"	2"	2"	2"
C	BSP	1½"	1½"	1½"	2"	2"	2½"	2½"	2½"	3"	3"	3"	3"
D	BSP	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"
E	BSP	1½"	1½"	1½"	2"	2"	2½"	2½"	2½"	3"	3"	3"	3"
F	BSP	½"	½"	½"	½"	½"	½"	½"	½"	½"	½"	½"	½"
H	BSP	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"
J	BSP	2"	2"	2"	2"	2"	2"	2"	2"	2"	2"	2"	2"
M	BSP	½"	½"	½"	½"	½"	½"	½"	½"	½"	½"	½"	½"
N	BSP	½"	½"	½"	½"	½"	½"	½"	½"	½"	½"	½"	½"
S	BSP	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"
V	BSP	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"
Energy Efficiency Class ErP Compliant	Rating	B	B	C	C	C	C	C	-	-	-	-	-
	W	55	68	93	119	129	154	180	-	-	-	-	-

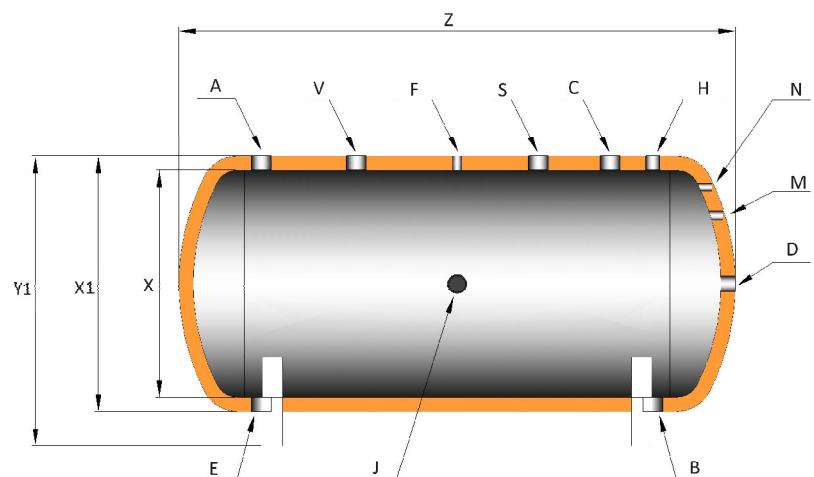
ADZ Design Details		
Characteristics	Standard	Optional
Tank Capacity	200 - 5000 Litre	
Arrangement	Vertical	
Tank Material	Galvanised Carbon Steel	
Insulation	PLFH High Density Insulation & Cladding	
Accessories	Standard	Optional
	Thermometer	Unvented Kit & Safety Valve
	Drain Valve	Immersion Heater
	Anode	
Design Code		
European Pressure Equipment Directive 2014/64/CE		

Connections

A	Flow from Heat Source	J	Immersion Heater
B	Return to Heat Source	L	Drain
C	Secondary Flow	M	Sensor
D	Secondary Return	N	Sensor
E	Cold Feed / Drain	S	Anti-Vacuum Valve (Optional)
F	Gauge	V	Anode
H	Safety Valve		



Vertical Orientation

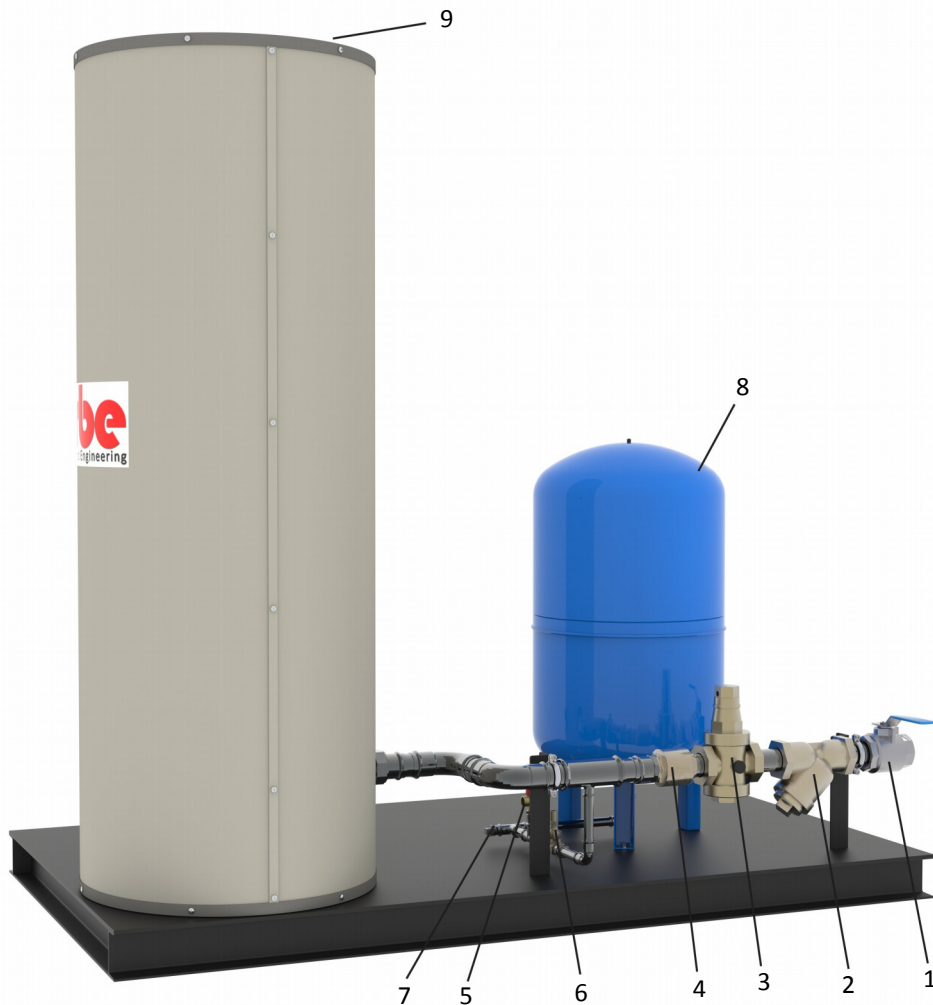


Horizontal Orientation



Direct Storage Cylinders

The layout below is the standard recommended cold feed kit available with our AD direct cylinders for unvented systems, complying with Building Regulations. The size of each cold feed and kit expansion vessel is project specific so please contact us with any queries on sizing or the kit that is required. The unit can be supplied factory packaged with the unvented kit on a fabricated skid base, reducing site installation time, which also removes the need for a concrete plinth to be made on site



Key

1. Isolating Valve
2. Strainer
3. Pressure Reducing Valve
4. Check Valve
5. Expansion Relief Valve
6. Expansion Isolating Valve
7. Expansion Drain Valve
8. Expansion Vessel
9. Vessel P/T Safety Valve

Welcome to Arbe Integrated Engineering

Arbe Integrated Engineering offer a range of products and services for the HVAC building services industry, ranging from bare heat exchangers and storage cylinders to fully packaged plantrooms and associated equipment. With over 20 years of design experience, our design and technical team can offer a complete solution for a wide range of project requirements.

Seamless Integration:

With our next generation range of equipment, our products offer complete integration with renewable and future energies, ensuring all available energy is utilised, reducing fossil fuel usage. In addition, our HevaSys products offers a unique next generation range of equipment with integral BMS style controls that can be adapted to any installation and can provide a standalone management system for buildings where the heating and hot water generation is relatively small, such as a leisure centre or a school.

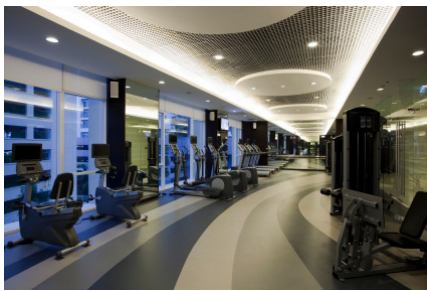
Inventive Engineering:

In addition to our standard equipment, including heat exchangers, storage calorifiers and packaged solutions, we also design and manufacture bespoke equipment to end user or consultant specifications and we carry out extensive research and development to invent new products and enhance current designs.

Application Solutions:

With our complete range of products, we have solutions to cover most applications. With our ability to carry out complete bespoke design, we have a solution for each and every project requirement. Our end users include:

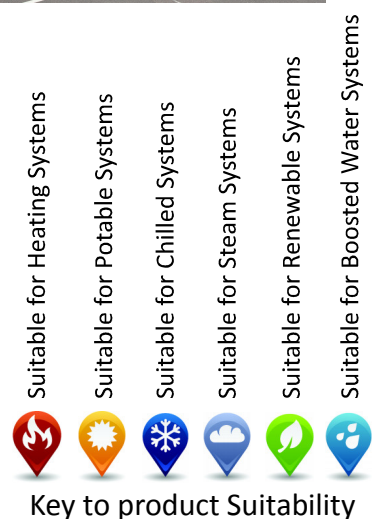
- Hotels
- Schools
- Universities
- Leisure Centres & Gyms
- Hospitals



Products Include:

Calorifiers
Indirect Cylinders
Direct Cylinders
Thermal Stores
Pressure Vessels
Plate Heat Exchangers
Braze Heat Exchangers
Shell & Tube Exchangers
Heat Exchanger Packages

TwinHeat DHW/LTHW Systems
Gas Fired Calorifiers
Boilers & Associated Equipment
Packaged Boiler Houses
Packaged Plant Rooms
Solar Energy Packages
Heat Pumps
Booster Sets & Pressurisation
Bespoke Engineering Packages



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