

HEAT POD & HEAT HUB

Self Contained Biomass Heating

HEAT **POD**

HEAT **HUB**



MYRIAD
HEAT AND POWER PRODUCTS

Quality you can trust

Myriad Heat and Power is the exclusive UK mainland distributor of Austrian Herz biomass systems. We offer unrivalled technological expertise and customer service. Operating since 2002 in the biomass industry our team has experience of designing and installing over 1700 commercial systems.

BUILT TO LAST:

We believe in offering quality systems and Herz biomass boilers are some of the best to be brought to the market. These biomass boilers can burn a wide range of sustainable wood types to provide very low carbon heating. We work to provide the complete spectrum of biomass solutions suitable for a variety of different projects.

IDEAL FOR LARGE HEAT LOADS

In commercial, historic and new buildings Herz biomass boilers can provide up to 1MW in renewable heating. The equipment is known for its longstanding quality. We know that Herz biomass boilers are worth investing in.

THE INNOVATIVE HERZ RANGE

This range offers one of the smallest footprint on the market per kilowatt. Our pellet or wood chip boilers offer a maximum automation solution for low temperature hot water systems. All of our boilers are Clean Air Act certified and Ofgem RHI approved.

Myriad Heat and Power can also offer financial assistance to help our clients invest in biomass. There are a number of ways you can finance your Heat Pod or Heat Hub. You can supply the capital investment, we can put you in touch with a finance broker or an energy supply contract can be arranged.



The Herz product range



Herz® BioFire



Herz® BioMatic



Servicing...

We offer full Service and Maintenance packages. For full details visit: myriadservice.co.uk



Herz® FireMatic



Herz® PelletStar



Herz® FireStar

Our Package:

Biomass made simple

Ready to provide sustainable heating but not sure you have the space? Our Heat Pod and Heat Hub are the ultimate solution for meeting carbon reduction targets without having to find space to house a biomass system inside. The packages house a boiler from 60kW to 995kW in size, buffer tank, pipework and fuel store.

RHI COMPLIANCE

As well as ensuring every one of our systems is RHI compliant with authorised emissions certificates, we have taken the extra step to offer an integrated RHI heat meter for every one of our packages.

Suitable for...

Hospitals, schools, offices, government, retail, rural businesses, local authorities, leisure centres, district heating, national parks and care homes.

HEAT POD OR HEAT HUB?

Our products are available in a variety of different external finishes and sizes. The Heat Pod is an 'all-in-one' package housing a plant room and fuel store. Heat Hubs are made up of a plant room with an external fuel store.

Our equipment is specifically developed to meet the requirements of schools, offices, visitor centres, hospitals and more.

PREFABRICATED SOLUTIONS

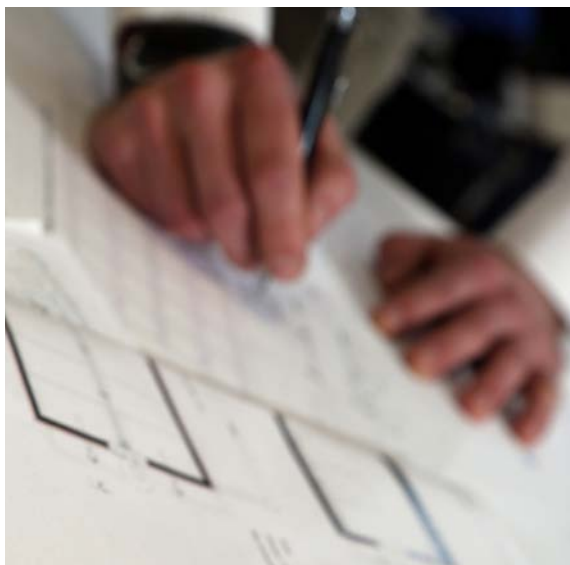
Our packages have been developed to bring trustworthy, high quality technology to clients who want to reduce their carbon footprint. This 'off the shelf' solution is compact, efficient and reliable with quality engineering at every level.

We prefabricate these packages off-site to minimise work time. This allows us to deliver a cost effective and quality controlled heating system that meets performance obligations. The Heat Pod and Heat Hub streamline the journey to cutting your carbon footprint.

DELIVERY DIRECT TO SITE

We always work in close co-operation with our local delivery and craneage specialists to provide secure and reliable delivery. Once delivered, Myriad Heat and Power will fully commission and test the module.

These biomass solutions are a straightforward and proven fast-track to sustainable heating.





All Herz biomass boilers offer remote monitoring options with the T-Control or BioControl. This gives the user an insight to the heart of our biomass boilers.

You can monitor your biomass system from anywhere with an exclusive app for PCs, tablets and smartphones. With the exact same user interface as the program inside your plant room, operation is the same. The ultimate in flexibility means that processes and parameters can be read and modified from anywhere at any time.

Interactive controls for...

- Monitoring of up to 50 boiler parts
- Buffer management
- Return temperature control (pump and mixer valve)
- Domestic hot water provision
- Controlled heating circuits (pump and mixer valve)
- Solar circuit control
- Frost protection



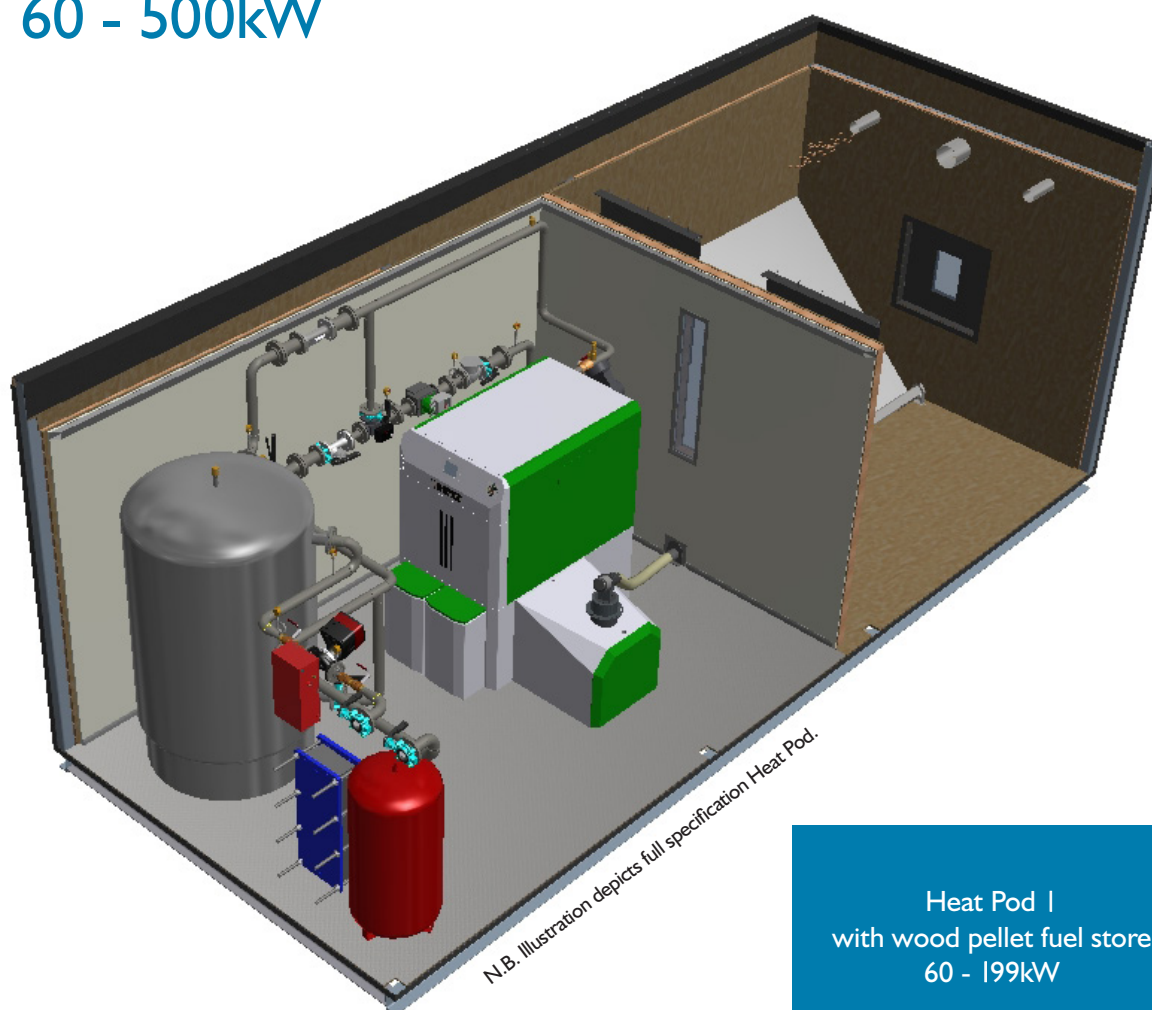
Unique...

Our Heat Pods and Heat Hubs can feature a plate heat exchanger designed to fit every kind of heating system, ideal for retrofitting and suitable for new build.



HEAT POD RANGE

60 - 500kW



Heat Pod 1
with wood pellet fuel store
60 - 199kW

Heat Pods are an all-in-one Pod consisting of a Herz biomass boiler, plant room, pipework and a fuel store. This range has two models depending on the size of biomass boiler required.

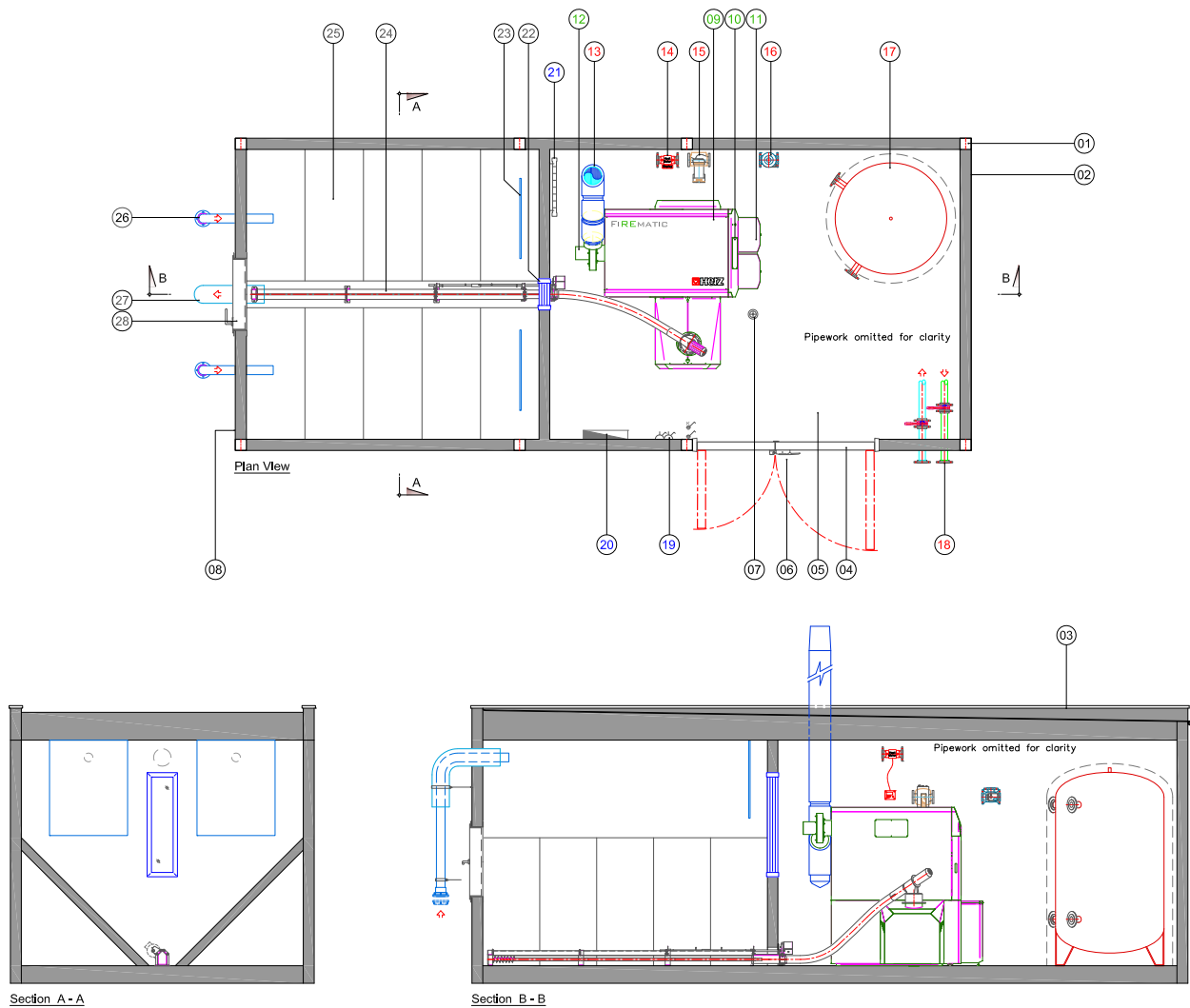
HEAT POD 1: If you need renewable heating between 60-199kW, then Heat Pod 1 is ideal for you. Pod 1 is suitable for wood chip or wood pellet fuels, and has differing fuel stores due to the unique requirements of different fuels.

HEAT POD 2: If you require heating from 250kW-500kW and wood pellets are best for your site, then Heat Pod 2 is more suitable. Please see page 9 for more detail on Pod 2.

NEED MORE HEAT?

For any biomass heating requirement over 250kW, the fuel store can be separate. This is due to the volume demands of wood fuel. We have solved this requirement with our Heat Hub model, which you can read more about on page 10. The Heat Hub range provides heating from 250-995kW with both wood pellet and wood chip options.

60-199kW (wood pellet)



Prefabricated Building

1. Steel support structure
2. Insulated wall panel, Plastisol steel coated sheet as standard, Timber cladding, other finishes available
3. Insulated roof
4. Double access doors, ventilated
5. Steel chequer plated floor, painted
6. On approach lighting
7. Floor drain
8. Earthing point

Biomass Boiler

9. Herz biomass boiler
10. Control panel
11. Ash bins
12. Flue exhaust fan

Plant Room – Mechanical

13. Flue, final height to be determined by local authority and may require a mast
14. RHI compliant heat meter
15. Shunt pump
16. 3 port valve
17. Buffer vessel
18. System flow and return

Plant Room – Electrical

19. Small electrics
20. Distribution board
21. Frost protection

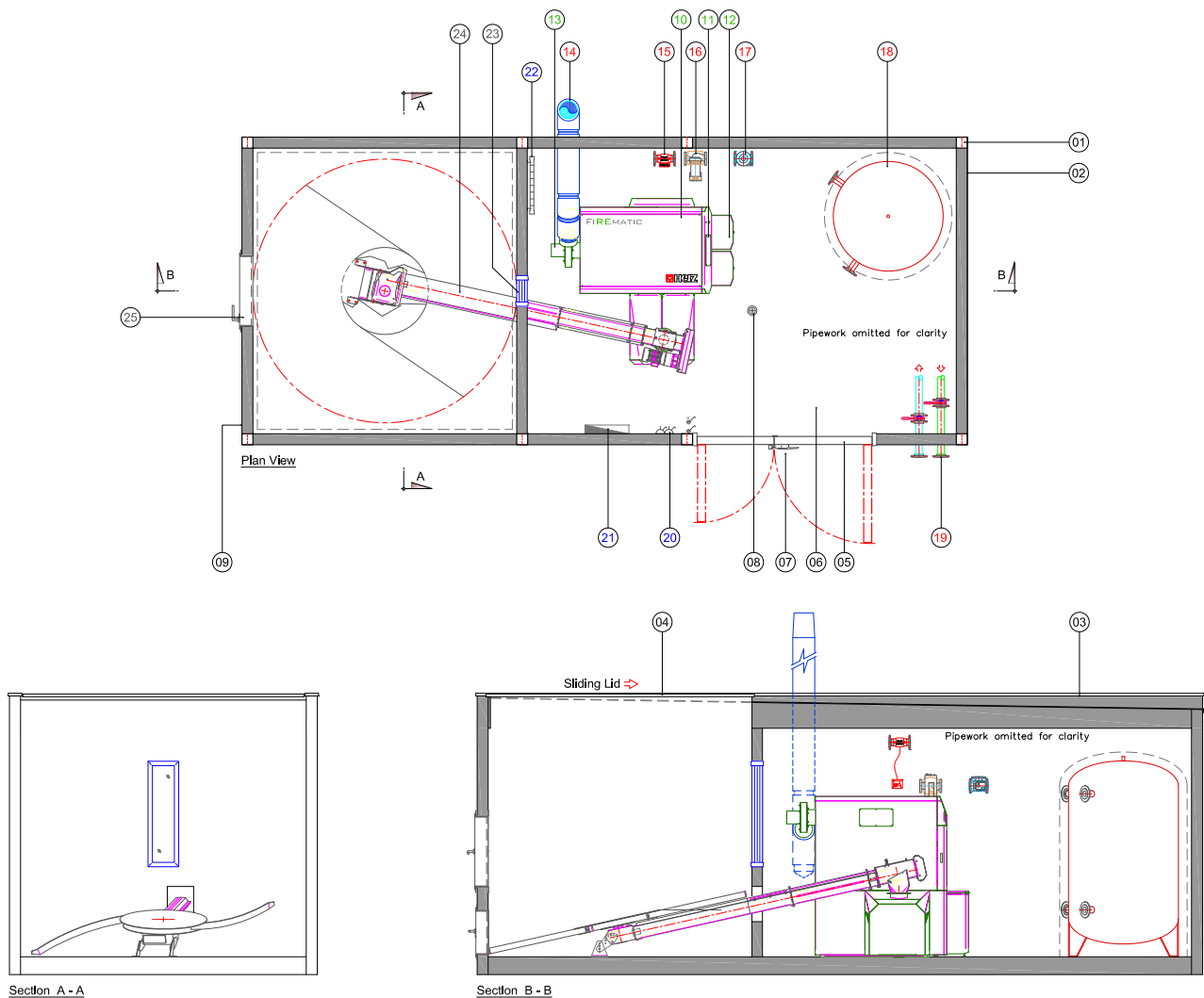
Pellet Fuel Store

22. Viewing panel
23. Pellet impact mats
24. Fuel feed auger
25. Profiled fuel store
26. Pellet fill pipe
27. Vent pipe
28. Inspection hatch with viewing panel

For full specification including external footprint and capacity see page I4

PODIC

60-199kW (wood chip)



Prefabricated Building

1. Steel support structure
2. Insulated wall panel, Plastisol steel coated sheet as standard
3. Insulated roof
4. Sliding Lid
5. Double access doors, ventilated
6. Steel chequer plated floor, painted
7. On approach lighting
8. Floor drain
9. Earthing point

Biomass Boiler

10. Herz biomass boiler
11. Control panel
12. Ash bins
13. Flue exhaust fan

Plant Room – Mechanical

14. Flue, final height to be determined by local authority and may require a mast
15. RHI compliant heat meter
16. Shunt pump
17. 3 port valve
18. Buffer vessel
19. System flow and return

Plant Room – Electrical

20. Small electrics
21. Distribution board
22. Frost protection

Chip Fuel Store

23. Viewing panel
24. Fuel feed auger
25. Inspection hatch with viewing panel

POD2

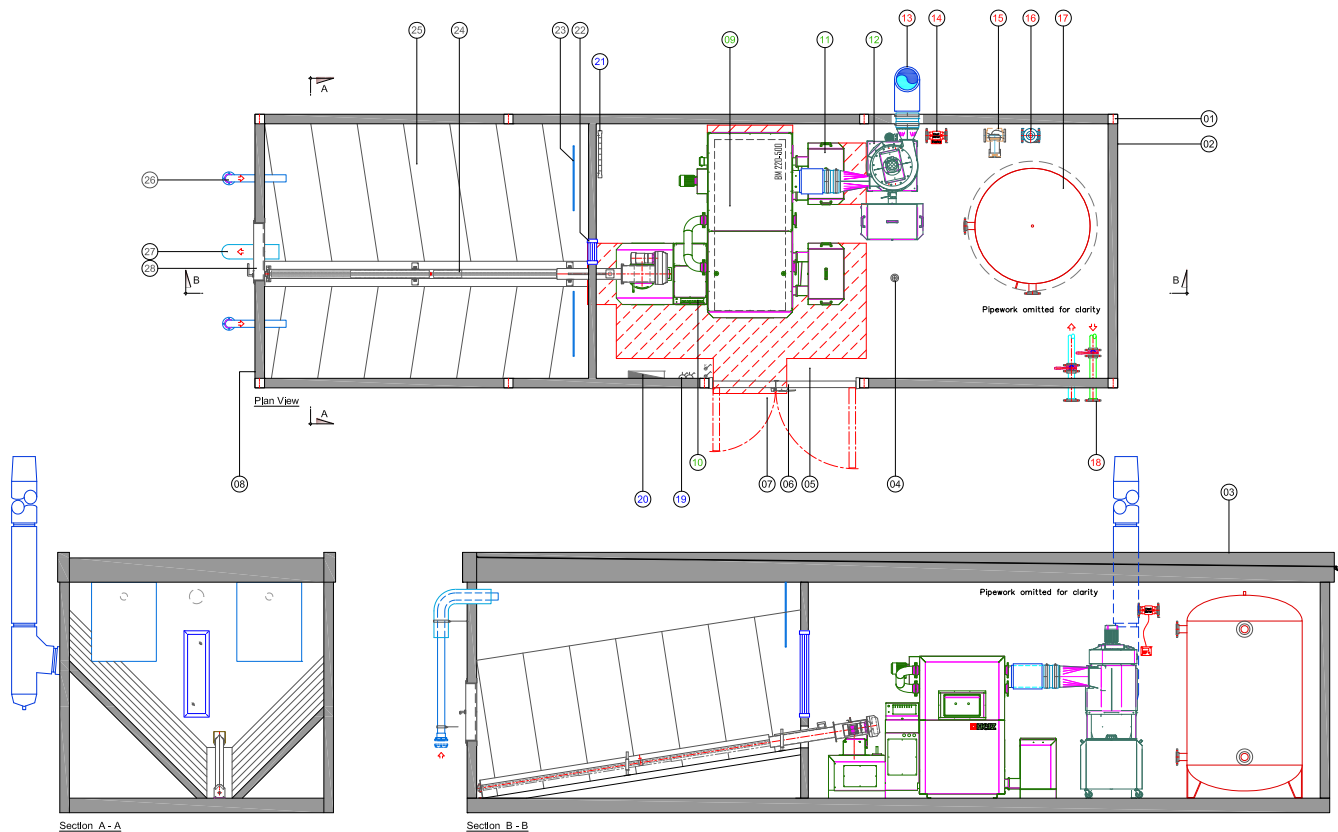


250 - 500kW (wood pellet)

Our second Pod model, Heat Pod 2, allows greater heat on a small footprint.

This is a slightly larger Pod, but still incorporates a fuel store. A Heat Pod like this is ideal for sites with limited access but a big heat requirement, as wood pellets can be blown to the fuel store from up to 20m away.

The v-profile fuel store is designed to suit wood pellet fuel and this is connected to a flexi feed auger.



Prefabricated Building

1. Steel support structure
2. Insulated wall panel, Platisol steel coated sheet as standard
3. Insulated roof
4. Floor drain
5. Steel chequer plated floor, painted
6. Double access doors, ventilated
7. On approach lighting
8. Earthing point

Biomass Boiler

9. Herz biomass boiler
10. Control panel
11. Ash bins
12. Cyclone unit

Plant Room – Mechanical

13. Flue, final height to be determined by local authority and may require a mast
14. RHI compliant heat meter
15. Shunt pump
16. 3 port valve
17. Buffer vessel
18. System flow and return

Plant Room – Electrical

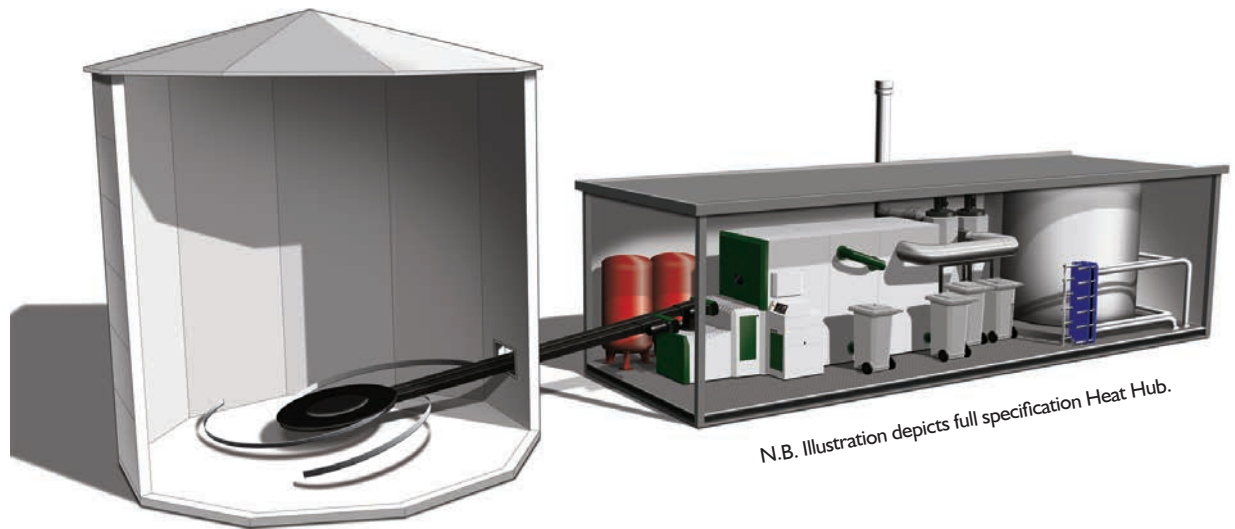
19. Small electrics
20. Distribution board
21. Frost protection

Pellet Fuel Store

22. Viewing panel
23. Pellet impact mats
24. Fuel feed auger
25. Profiled fuel store
26. Pellet fill pipe
27. Vent pipe
28. Inspection hatch with viewing panel

HEAT HUB RANGE

250 - 995kW (wood chip or pellet)



Heat Hub with wood chip
octagonal fuel store
250 - 995kW

Our Heat Hub is designed for Herz boilers from 500kW up to 995kW. The Heat Hub includes an octagonal wood chip store or cylindrical silo for the storage of wood pellets. It is all delivered together to site and craned into position as required.

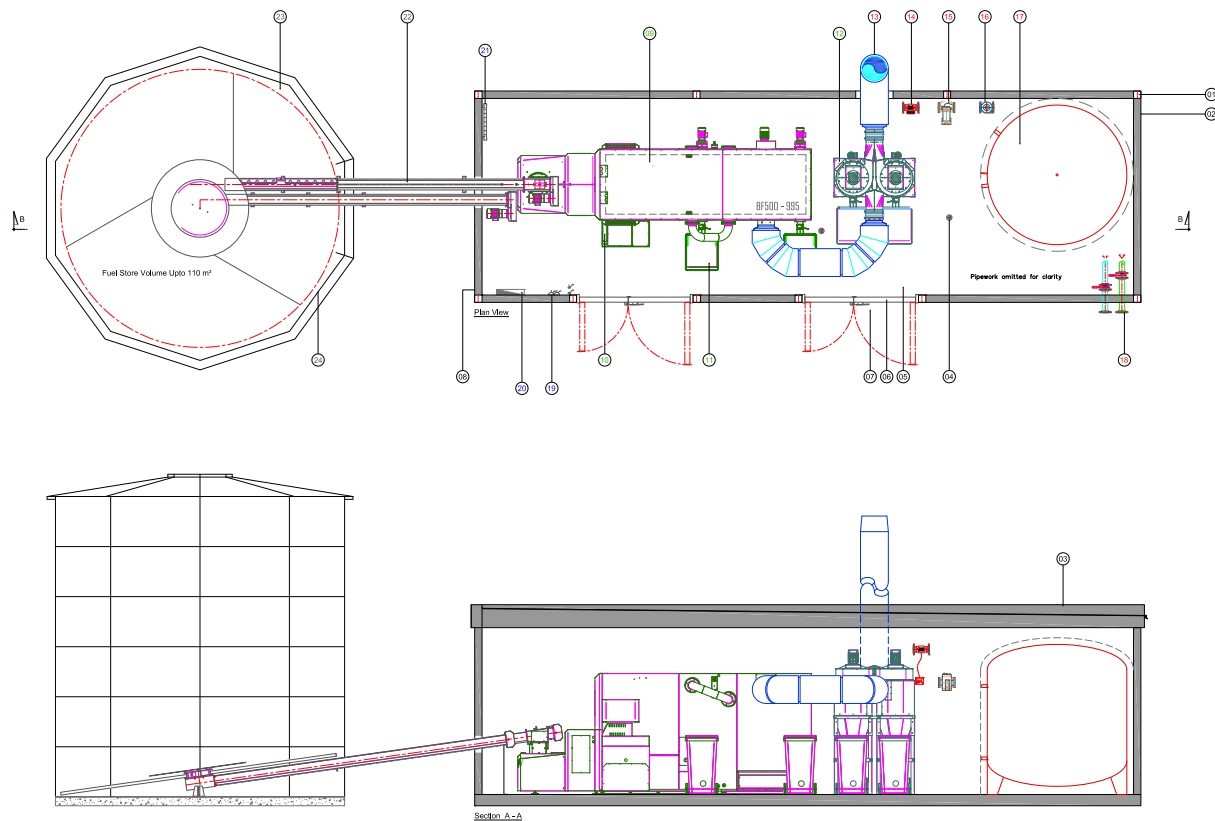
The Heat Hub has been developed to meet the increasing requirement for sustainable heating on a larger scale. The Heat Hub can heat substantial properties and serve as the heating energy hub in district heating schemes. The fuel store can be customised to reflect the eventual location of the Heat Hub.

FOR PELLETS AND CHIPS

Consisting of a rotary spring arm agitator to feed the boiler, the octagonal fuel store has up to 110m³ fuel store volume.

FOR PELLETS ONLY

The cylindrical silo feeds to the auger with an effective fuel store volume of up to 50m³.



Prefabricated Building

1. Steel support structure
2. Insulated wall panel, Plastisol steel coated sheet as standard, Timber cladding, other finishes available
3. Insulated roof
4. Floor drain
5. Steel chequer plated floor, painted
6. Double access doors, ventilated
7. On approach lighting
8. Earthing point

Biomass Boiler

9. Herz biomass boiler
10. Control panel
11. Ash bins
12. Cyclone unit

Plant Room – Mechanical

13. Flue, final height to be determined by local authority and may require a mast
14. RHI compliant heat meter
15. Shunt pump
16. 3 port valve
17. Buffer vessel
18. System flow and return

Plant Room – Electrical

19. Small electrics
20. Distribution board
21. Frost protection

Chip / Pellet Fuel Store

22. Fuel feed auger
23. Fuel store
24. Inspection hatch with viewing panel



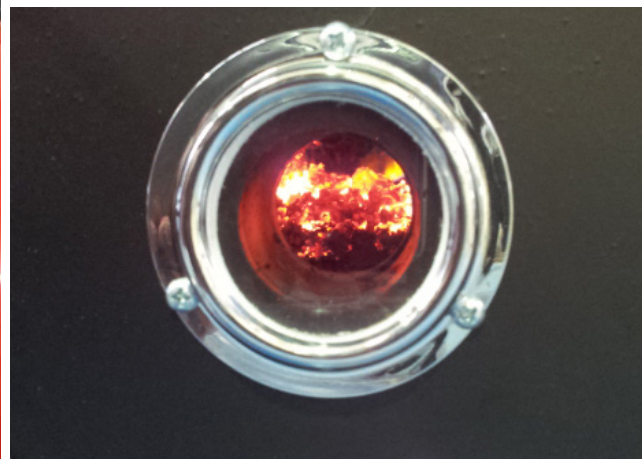
Our Heat Pods and Hubs include the following as standard:

INTERIOR

- Herz biomass boiler with T-Control or BioControl
- Pipework from boiler to buffer
- Pipework from buffer to isolated external flanges
- Buffer tank sized accordingly with insulation
- Building Management System interface panel
- Iso-genopac pipe insulation
- Clean white internal finish on walls and ceiling
- Load bearing floor – smooth steel plate painted with non-slip finish
- Distribution board
- Small lights and power
- Electric wall mounted heater for frost protection
- Internal drain
- Large fuel store viewing panel in Perspex
- Low level capacitive sensor to detect low fuel level for reordering
- Internal fuel store for Heat Pod: up to 22m³ capacity for wood chip or 26m³ capacity for wood pellet

EXTERIOR

- Standard high spec Plastrocoat (Plastisol) available in 32 RAL colours
- 1 x double access door (Heat Pod) 2 x double access doors (Heat Hub)
- External fuel store for Heat Hub: agricultural cylindrical wood pellet silo/steel octagonal wood chip fuel store



Variation Option 1:

Interior

- Pressurisation unit
- Expansion vessel
- Additional connections in BMS interface unit

Exterior Options +

- Wood cladding

Variation Option 2:

All of Variation Option 1 PLUS

Interior

- Plate heat exchanger to separate biomass and the distribution system
- Pipework between buffer and plate heat exchanger, including secondary pump
- Additional connections to BMS interface unit for external control of secondary pump
- Control of secondary pump using the T-Control/BioControl heating circuit

We offer full Service and Maintenance Packages through our sister company Myriad Plantroom Services to request a service or to discuss your needs with one of our engineers

Call 0203 189 0666

or email service@myriadservice.co.uk



MYRIAD
PLANTROOM SERVICES

N.B. Price upon application

Specification

MEASUREMENTS – POD1 Wood Chip / Pellet

Boiler size kW	Buffer litres	External Footprint (m)			Fuel store volume m ³ - Pellet*	Fuel store volume m ³ - Chip*	Capacity tonnes - Pellet	Capacity tonnes - Chip
		L	W	H				
60	1,000	8.3	3.5	3.2	17	17	11	4.2
80	1,000	8.3	3.5	3.2	17	17	11	4.2
100	1,000	8.3	3.5	3.2	17	17	11	4.2
130	1,500	8.3	3.5	3.2	17	17	11	4.2
151	2,000	8.3	3.5	3.2	17	17	11	4.2
180	2,000	8.3	3.5	3.2	17	17	11	4.2
199	2,500	8.3	3.5	3.2	17	17	11	4.2

MEASUREMENTS – POD2 Wood Pellet

Boiler size kW	Buffer litres	Fuel type	External Footprint (m)			Fuel store volume m ³ *	Capacity tonnes
			L	W	H		
250	3,000	Pellet	12	3.8	3.6	25	16
301	3,000	Pellet	12	3.8	3.6	25	16
350	4,000	Pellet	12	3.8	3.6	25	16
400	4,000	Pellet	12	3.8	3.6	25	16
450	5,000	Pellet	12	3.8	3.6	25	16
500	5,000	Pellet	12	3.8	3.6	25	16

MEASUREMENTS – HEAT HUB

Boiler size kW	Buffer litres	Fuel type	External Footprint (m)			Fuel store volume m ³ *	Capacity tonnes
			L	W	H		
250 - 450	3,000 - 5,000	Chip & Pellet	8.3	3.8	3.6	Silo up to 50m ³ Octagonal up to 110m ³	Silo up to 32.5 tonnes Octagonal up to 23 tonnes for wood chip
500 - 995	5,000 - 10,000	Chip & Pellet	12	3.8	3.6		up to 71 tonnes for wood pellet

*Based on the calculated volume of wood fuel in the store that is truly useable.

Case Studies

Dumfries & Galloway NHS, Scotland



Product: 6 x 199kW Heat Pods

Fuel: Wood pellet

Dumfries and Galloway NHS has committed to meeting carbon reduction targets for oil, gas, butane and propane usage to be reduced annually by 3% to 2014/15 and increase the use of local woodlands as part of this programme.

In 2012 Myriad Heat and Power was contracted to provide six Heat Pod packaged biomass plant rooms across six different hospitals. The NHS requested a high specification internal finish with cedar wood panelling at the design stage.

The Pods were prefabricated and delivered to each site in a short turnaround time. Some of the deliveries were particularly challenging due to the urban settings and phone lines, in two cases the Heat Pods had to be craned neatly over buildings.

After delivery the installations were connected to the existing heating system and commissioned. The six Heat Pods provide 43.2% of the region's NHS annual heating. To date the six NHS sites have reduced their carbon emissions by 24%. This includes an estimated total of 160 Tonnes of carbon savings.



'Six Heat Pods provide 43.2% of the region's NHS annual heating.'

Thames Valley Police, Reading

Product: 2 x 100kW Heat Pods

Fuel: Wood pellet

Myriad Heat and Power was commissioned by Thames Valley Police to design, supply and install two 100kW Heat Pods to their construction project at the new build training headquarters in Reading, featuring a swimming pool, gym and personnel accommodation.

For this project high specification Heat Pods were specified with a grey Plastisol exterior finish, outdoor lights and a spacious plant room.

Working with Perfect Pipework and BAM Construction, Myriad Heat and Power's team delivered two bespoke packages to the training centre site to heat the new building and pool.

The Heat Pods each feature a 100kW Herz Firematic with a T-Control, a buffer tank, pipework, a v-profile fuel store with two viewing hatches and a capacitive sensor.



'Two bespoke packages were delivered to the training centre site to heat the new building and pool.'



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Call us on: 0203 189 0665

Or email: info@myriadproducts.co.uk

Myriad Heat and Power, Unit 21, Burrough Court, Burrough on the Hill,
Melton Mowbray, Leicestershire, LE14 2QS