

# BIDFORD HEALTH CENTRE

Case Study; 150kW



#### PROJECT BACKGROUND

Rainbow Heat and Power are in the middle of a biomass boiler heating system installation at Bidford Health Centre, an NHS Primary Health Care Centre Practice in Warwickshire. The biomass boiler is being installed as part of a building project being managed by Hardyman Construction to develop a 'health village' with a wide range of new health services and an opening date of Easter 2014.

## SL 150kW BIOMASS BOILER HEATING SYSTEM

The project incorporates the supply and installation of a SL 150kW Linder & Sommerauer biomass boiler which will run on EN Plus grade wood pellets. A 4,000 litre Buffer Store plus all associated fitting accessories including and auger and suction system for delivery of the wood pellets are also included.

### **FUEL STORE IN 15 TONNE AGRICULTURAL SILO**

The fuel store will be fitted into a Collinson 15 tonne Biostor agricultural silo including an extraction auger. This gives the boiler a constant supply of wood pellets to ensure a reliable supply of heat. The 60° cone and smooth internal walls of BioStor provide excellent mass flow for EN plus grade wood pellets and this solution is widely used in farming and rural applications.

## WHO ARE RAINBOW HEAT AND POWER?

WE ARE RENEWABLE TECHNOLOGY INSTALLERS BASED IN THE SOUTH WEST PROVIDING BESPOKE RENEWABLE HEAT AND POWER SYSTEMS NATIONWIDE. WE CAN HELP;

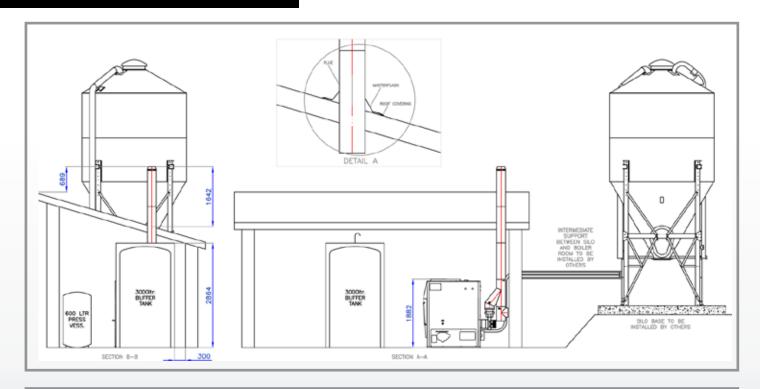
- SIGNIFICANTLY REDUCE FUEL COSTS
- GAIN RENEWABLE ENERGY INCENTIVE PAYMENTS
- 3. REDUCE YOUR CO, EMISSIONS

## LET'S TALK ABOUT YOUR PROJECT

## BIOMASS BOILER: SL30-150kW

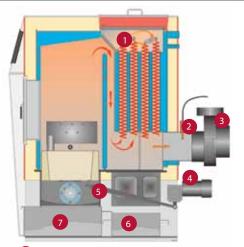


## **SIDE ELEVATION**



#### **KEY FEATURES**

BIOMASS BOILER SYSTEM		SL 30	SL 40	SL 50	SL 65	SL 80	SL 110	SL 150
Max Heat Output	kW	30	40	50	65	80	110	150
Min Heat Output	kW	8.4	8.4	12.4	12.4	21.5	23.7	41.9
Combustion Efficiency	%	93.1 Min 93.3 Max	93.0 Min 93.1 Max	91.9 Min 92.1 Max	93.1 Min 93.5 Max	91.7 Min 93.0Max	91.3 Min 93.7 Max	91.8 Min 93.8 Max
Width	mm	630	630	770	770	870	870	1,050
Depth	mm	1,050	1,050	1,050	1,050	1,265	1,265	1,465
Height	mm	1,330	1,430	1,430	1,530	1,520	1,620	1,810
Flow & Return Diameter	mm	40	40	40	40	40	40	40
Flue Connection Diameter	mm	180	180	180	200	200	200	250
Flue Connection Height	mm	650	650	650	650	615	615	640
Boiler Weight	kg	555	595	675	740	920	980	1,405
Auger Weight	kg	82	82	82	82	83	83	85
Water Content	Litres	73	87.5	110	116	120	190	340



- Heat Exchanger Cleaning
- 2 Lambda Sensor
- 3 Induced Draft Fan
- Moto
- Cleaning Mechanism
- Ash Container
- 7 Grate