



Sustainable Heating with

# WOOD ENERGY SCOTLAND

## Lanarkshire Biomass Fact Sheet Taylor High School

Carfin Street, Motherwell,  
Lanarkshire ML1 4JP

**Boiler: Fröling Turbomat 500kW**

**Woodfuel specification: W50:G50**



SCOTTISH EXECUTIVE



**Fuel store and fuel handling:** blockwork fuel hopper 5 x 5 x 4.5 (h) steel lid 3 x 3; hydraulic lift spring outfeeder to boiler feed screw

**Estimated annual fuel requirement:** 235 tonnes @ 25% mc

**Estimated max daily fuel use:** 7m<sup>3</sup> @ 25% mc

**Expected maximum tariff:** 18.00 £/MWh

**Expected maximum Operation & Maintenance rate:** £2,750/annum to include for attendances

The above tariffs are purely estimates, and are yet to be ratified in the relevant Wood Heat Supply Agreement.

### Boiler Maintenance Schedule

Interval	Task	Action
Daily	Daily visual inspection and check of key parameters recommended but not essential	NO
Weekly	Check motors for oil leaks; empty ash boxes (3 no); check system pressure	NO
Monthly	Check and clean grate and combustion chamber with vacuum	YES
Quarterly	Clean flue gas sensor and lambda probe	YES
6-monthly	Check ash and fuel feed drives, air flap servo motors and door switch; check and clean heat exchanger	YES
Annual	Annual inspection and service	YES
Allowance for call-out within fixed price	Six times per annum	YES

### Facts and figures

Boiler output	500kW
Size of fuel store	112.5 metres <sup>3</sup>
Fuel use	235 tonnes p/a
CO <sub>2</sub> savings	194 tonnes p/a
Capital costs	£205,089
Grant aid	£150,527



### Raw Material

Must be composed of clean, untreated wood products and co-products from the agricultural, forestry and timber processing sectors, and be free of contamination. Expert advice must be sought before using material from other sources.

### Particle Size

Chipped woodfuel should be provided according to the G50 grade as set out in the table below:

Parameter	Measurement	G50
Max cross sectional area	cm <sup>2</sup>	5
Max length (long thin material)	cm	12
Coarse material (max 20%)	Retained by sieve mesh width (mm)	31.5
Main material (60 – 100%)	Retained by sieve mesh width (mm)	5.6
Fine material (no dust max 20%)	Retained by sieve mesh width (mm)	1
Dust (max 4%)	Passing sieve mesh width (mm)	1