

## CASE STUDY

### Gilfach Orfydd Farm Stay Vale of Glamorgan



Gilfach Orfydd Farm chose an 80kW Hargassner wood chip boiler to provide heat for their farm and self catering accommodation

**The wood chip boiler will be fuelled with locally sourced woodchip and will help to reduce carbon emissions and heating oil costs.**

motors used to drive the fuel store augers for boilers of this size. Wood Energy installed a single to three phase converter to allow the boiler to operate from a standard single phase supply.



The 80kW boiler is designed for fully automatic operation including automatic start up, shut down and de-ashing. The heat exchanger is fitted with an automatic mechanical cleaning system, because a clean heat exchanger ensures high efficiency operation.

For the biomass fuel, seasoned wood is chipped into the fuel storage room adjacent to the boiler room. The wood chips are then transported to the boiler automatically by the unique Hargassner rotary extraction system.

Gilfach Orfydd Farm Stay is set within a 235 acre sheep and cattle farm in the beautiful village of Glynogwr, just outside of Blackmill, Bridgend. The farm stay offers a range of bed and breakfast and self catering accommodation and caters for visitors coming to enjoy outdoor pursuits such as mountain biking, hiking, horse riding, bird watching or even rock climbing.

The 80kW Hargassner woodchip boiler was installed into a farm building on the site and now provides heat for the indoor swimming pool, Jacuzzi and sauna on site. The boiler is connected to an accumulator tank to ensure minimum fuel consumption and maximum efficiency.

Like many rural properties the site does not have access to a three phase power supply, usually needed for operating the powerful

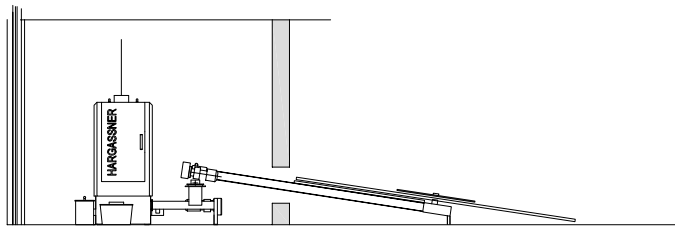
Name of project	Gilfach Orfydd Farm Stay
Location	Vale of Glamorgan
Boiler type	Hargassner
Maximum rated output	80kW
Maximum Moisture	35%(W35)
Wood fuel specification	Wood Chip
Fuel storage volume	Approximately 30m <sup>3</sup>
Maximum particle size	G30
Commissioned	April 2010

**Hargassner make around 6000 boilers per year and are the leading manufacturer of wood chip boilers in Austria.**

Wood chip boilers are a great way of providing heating.

Because of the large fuel storage space available in this existing building the installation required minimal civil works. As equipment was available locally to move wood chips around it was not necessary to use a subterranean fuel store and tipped deliveries.

This type of system is ideally suited to sites where existing buildings can be converted to act as a fuel store and boiler house.



SECTION A-A

