Vigas Boilers Information Sheet

Fuel for Vigas Boilers

Vigas boilers are designed to burn dry wood material from sawdust to logs. Differing moisture content and size of fuels will affect efficiency heat output and the length of burning time. During gasification the quantity of released gas depends on the size and surface area of the fuel. The greater the surface area, the bigger the volume of gas produced.

Hardwoods are gasified more slowly than softwoods and generally will burn for a greater length of time. It is possible to gasify all kinds of wood in Vigas boilers, however the optimum moisture content should not exceed fifteen to twenty percent. The Vigas 29UD is designed not only to burn wood and wood waste, but also brown coal.

As rule of thumb in the UK for logs is ½ tonne/kW/pa, therefore a 25kW boiler would require approximately 10-15tonnes pa

The AK 2000 electronic control system for the Vigas Boilers

The AK 2000 unit has a programme which allows you to set a constant heat for the accumulator.

The AK 2000 will indicate when fuel is low or when the boiler has closed down. Should a malfunction occur the AK 2000 unit is able to carry out a self- analysis fault programme displaying the relevant problem. The electronic control of the AK 2000 monitors a change of temperature and will increase or decrease the speed of the air induction fan continuously during the process of gasification or combustion.

Technical description of Vigas Boilers

Vigas boilers are constructed from special boiler steel sheet of four and six millimetre thickness. All areas of the boiler directly in contact with fuel or combustion products are constructed of six-millimetre sheet, whilst all other parts of the boilers are constructed of four-millimetre sheet. The heat exchanger section of the boiler is constructed of welded steel pipe. The floor of the log magazine is constructed of refractory concrete material. Replaceable fireclay moulded bricks are used to line the combustion chamber. The boiler is insulated from the outer casing by an insulating material (Nobasil).

Logs

Wood Chip

General Information

1. A boiler may only be connected to a central heating system whose thermal capacity corresponds to the boiler output.

2. When an electrically pumped circulation system is used and there is a mains electric failure, both the boiler and pump will cease to operate. In this event the central heating system must be designed to ensure that the minimum boiler output of 5kW (Vigas 25s); 8kW (Vigas 40s); 15kW (Vigas 60s) and 25kW (Vigas8os) has either a primary gravity system which will dissipate this amount of heat, or that a Honeywell TS 130 safety valve is fitted into a cooling loop circuit. (The Honeywell TS 130 valve is not supplied as standard but can be ordered in addition to the boiler if required).

3. The Vigas boiler must be connected correctly and as closely to the flue as possible. Other appliances must not be connected to the same flue. Should extra draught be required for the flue, an exhaust fan may be ordered separately.

4. For non-vented systems we would recommend an indirect water supply to the boiler as mains pressure (via a direct mains supply) may unexpectedly increase pressure in the boiler if the valve is not tightly sealed.

5. The room in which the boiler is situated must be frost free and well ventilated to comply with Building Regulations.

6. The Vigas boiler installation must be carried out by qualified companies.

7. Vigas boilers must be commissioned by a heating specialist.

8. The minimum temperature of water returning to the Vigas boiler must be 60°C or more.

9. Health and Safety at Work Regulations, in addition to Local Building Regulations must be strictly adhered to when installing Vigas boilers in different parts of the UK.

The Vigas 29UD

A combined boiler for the combustion of wood and coal. The Vigas 29UD belongs to the category of central heating boilers where complete pyrolythic combustion is effected by both burning and after-burning of the fuel used.

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