

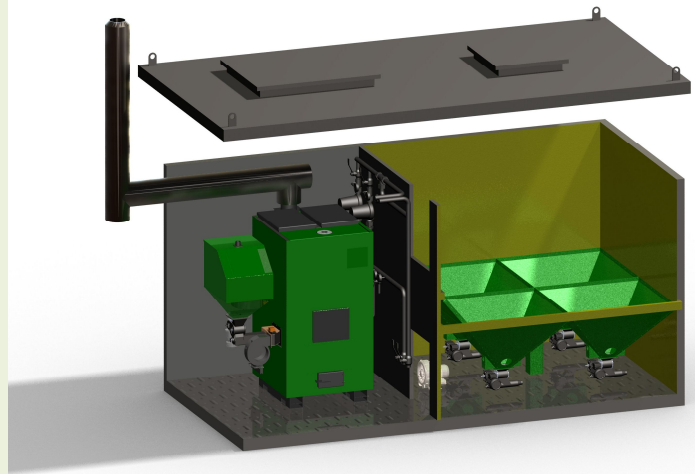
Biomass Boiler House



TECHNICAL DATA SHEET

General

- Boiler sizes 100kW, 200kW, 300kW
- Hot water to 90 Celsius
- Space heater sizes 40kW, 70kW, 100kW.
- Hot air to 150 Celsius
- Dimensions 6m L x 2.9m W x 3.1m H
- 12 mt pellet container included
- Pipes, pumps, heat exchangers, flue, built in
- Automatic boiler cleaning
- Fully programmable systems
- 90% + boiler efficiencies



Advantages of biomass space heating

- uses a non-freezable heat carrier - no water = no risk of burst pipes;
- can quickly heat up a room by mixing the air within it;
- heats up large spaces evenly;
- is a Plug&Play system, which does not require any additional heating system installed;
- can be easily transported across multiple locations, etc.

Hot air size calculation: $1\text{kW} = 30\text{m}^3$

40 kW unit heats 1200 m³

70 kW unit heats 2100 m³

100 kW unit heats 3000 m³

To calculate number of units - example:

Warehouse floor space 2000m² x 6m high is 12,000m³.

$12000/30 = 400$ kW heating requirement so this warehouse would need 4 x 100 kW hot air units.

Wood Pellets as a fuel source

1 m³ of pellets = about 650 kg

1000 kg of pellets = about 1,5 m³

Heat value: ~ 3000 kWh/m³

1kg pellets ~ 4.6 kWh

~0.23 kg pellets / kWh

All data given for information purposes only.
You should check specifications with your fuel supplier.

Full technical information on boilers and space heaters is available on request.

Boiler Design: The firebox and heat exchange pipes as well as the hull of the boiler itself are positioned vertically in order to ensure more prolonged maintenance-free operation of the heating device. This is also good for self-cleaning because ash remaining in the firebox can, due to its own weight, settle in the specifically designed ash compartment in the lower section of the boiler. This is an advantage relative to heating devices of horizontal construction, where the ash settles in the horizontal heat exchange pipes and planes, thereby reducing the circulation of flue gases and acting as heat insulation on heat exchange surfaces, which considerably limits the efficiency of the boiler and its whole operation in general.

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