KOSTRZEWA®
Experts in heating

established in 1978

Mini Bio

The smallest pellet boiler in Poland

Thanks to automatic Fuzzy Logic 2nd generation[1] modulation, burner combusts at least 20% less fuel.

- MINImal size – the smallest pellet boiler in Poland
- MINImal maintenance
- MINImal fuel consumption
- MINImal electricity consumption
- MINImal amount of pollution emitted to atmosphere
- MINImal price – thanks to EU support

ecospalanie

models [kW]

10 | 20

Mini Bio Boilers meet the requirements of PN - EN 303-5:2002 standard

fuels


pellets


pellets / oats 50 / 50

7/24	P265 GH	H25N20S2	>92.8%	5 lat
factory service	boiler steel	heat-resistant steel	boiler efficiency	5-year warranty + 2 years extension (optional)

Boiler description

The only work you have to do at Mini Bio boiler is to pour fuel into the main tank (capacity: 230l) every 3 – 14[2] days and picking up ash from burner and boiler.

Fired by pellet and oats[3] Mini Bio boiler provides a new perspective in Poland and in Europe for automatic combustion of solid fuel – pellet with a diameter of 6-8 mm, or alternatively oats[3], while keeping low emission parameters meeting environmental standards of the European Union.

It is an optimal device to install in residential buildings where boiler rooms take up very little space or they are absent. The areas of heated residential buildings may range between 50 and 300 sqm[2]. The main advantages of the burner are its small overall dimensions and simple operation, i.e. pouring fuel into the main tank and pressing START button. The messages appear on big graphic display.

In a few minutes the device will automatically light up, select operation parameters and then it will tend to keep constant temperature in room and constant temperature of hot tap water.

The device is made up of four sections. The whole boiler is in the shape of cuboid with following dimensions:

- 10 kW – 600 x 600 x 1600 mm
- 20 kW – 700 x 700 x 1650 mm

The first part is a round steel highly efficient flue exchanger. Thanks to application of the 3T technique at the design stage the exchanger has a very small overall dimensions. It is made o high quality boiler steel P265GH, thickness 4- 5 mm.
Second part is Platinum Bio burner[4] kwhich can combust pellets and, as an additional option, oats[2]. Structural elements of the burner are made of heat resistant steel H25N20S2, able to resist temperature of up to 1150°C. Thanks to the application of second generation Fuzzy Logic adjustment method, as well as energy saving elements, the burner during its operation consumes much less energy than other burners available on the market in Poland.

The third part is a tank (capacity: 230l), which is located on the boiler exchanger.
The tank is equipped (as a standard), with water protection, which protects against flame backflow.

The fourth part is an operation controller of the whole heating system of a building. It was designed taking into account people who appreciate easy operation and clear menu and at the same time high level of constructional and technological advancement.

1. fuel tank cover
2. fuel tank
3. flexible pipe supplying fuel
4. hearth door
5. Platinum Bio burner
   the device is almost self-operated, operation control has been maximally simplified to ensure the highest operation comfort possible
6. round steel boiler exchanger
7. flue
8. cleaning hatch of the exchanger

Mini Bio

- delivery to your home or to the construction site
- guarantee and post-guarantee service
- 5-year guarantee with the option to prolong it for 2 years
- network of authorized service staff all around Poland
- distribution network for devices and spare parts all around Poland

First in Poland automatic modulation of burner power

based on Fuzzy Logic second generation[1] technology – reducing the amount of combusted fuel to 20%, and reducing electricity consumption

- flame control by means of a photocell
- low thermal inertia during start and stop

- low electricity consumption
- 3 phases of fuel lighting up eliminate gas explosions during lighting up
- air division into primary and secondary - reduces CO_2 emission to the level of emission from gas and oil burners
- oats[3] - burner construction enables corn (oats) combustion - option

Burner's operation and its comfort may be compared to oil burner operation

1. 2nd generation Pellet Fuzzy Logic method saves up to 20% fuel
2. Depending on thermal requirements of building
3. The option must be considered when ordering boiler - recommended pellet/oats mix to be kept in 50/50 proportion
4. Burner may be assembled to every new or used boiler fired by solid, liquid or gas fuel without interfering in the construction of the device. The assembly is done by means of an adapter, which is made available upon the order from KOSTRZEWA sp.j.

Platinum Bio burner[4]

Burner's components are made of heat-resistant steel H25N20S2, resisting the temperature of up to 1150°C. Pellets Fuzzy Logic II generation adjustment method and two-section menu allow to reduce amount of combusted fuel by 20%.

The device is envisaged for pellet and oats combustion. Biomass combustion does not cause the emission of harmful gases to atmosphere, as opposed to combustion of coal or oil. By selecting renewable fuel every one may contribute to the fight against climate changes.

The device is made of high quality materials and additionally covered by 3-year warranty, which lowers the cost of operation and increases confidence in new technology. 2 generation Fuzzy Logic adjustment method reduces the amount of fuel combusted as well as reduces wear of subassemblies, as compared with burners made by competition.

The main advantage of the burner is its simple operation based on pouring fuel into the main tank and pressing START. In a few minutes the device will automatically light up and it will tend to keep constant temperature in rooms and constant temperature of hot tap water.
Fuel tank is made of galvanised sheet – zinc coating of the sheet limits the corrosion of fuel tank.
If you want to combust wood – it is enough to set the wood option in the menu in central heating boiler with a fan – burner will automatically switch off, and fan will start operation.

Platinum Bio automatics with Fuzzy Logic 2nd generation modulation

The heart of the boiler is its controller. Specialized electronic circuit, which is responsible not only for maintaining fixed boiler temperature through proper fuel and air dosing, but also for controlling the functioning of the whole heating system of building including: heat buffer, solar system and up to 16 additional heating circuits.

- Automatic start of burner
- possibility to control up to 16 heating circuits (heaters and floor heating or hot tap water) - option

- control of the burner's working temperature – ensures security on the highest level.
- AUTOSTART function after blackouts – remembering last settings
- auto-cleaning function, automatically removes deposit from burner grid - function is not present in gravitational burners
- You don't have to remember the date of the next service inspection – the message will show up on a display (option),
- Statistics – the function allows, for instance, the review of minimum, maximum and average power of a burner, minimum and maximum, as well as average fuel consumption,
- Temperature parameters are presented as digits and graphs on a big graphic display, and many more useful functions - (option).

The automatics control:
- feeder of fuel from tank
- fuel feeder
- pressure fan
- igniter
- central heating pump
- hot tap water pump
- mixing valve - optional

CE

Detailed technical data of the device are available from the manufacturer or distributor.
The manufacturer reserves the right to construction changes of the boiler, which improve the device functioning.
Selection of power to the device was made for 4th climate zone of Poland (max. temperature: 24 °C).

TYPE	MB 10	MB 20
building area [m²]	50 - 200	100 - 300
nominal power [kW]	10	20
depth [mm] (with burner)	745 (1240)	868 (1340)
width [mm]	602	752
height[mm]	1660	1640
fuel tank capacity [L]	230	240
stack diameter [mm]	135	160

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