

Pellet boilers

BIOPEL MINI 100 - 200 kW

OPOP
partner for your heating

Pellet boilers BIOPEL MINI 100 - 200 boilers are intended for comfortable, economical and ecological heating of especially larger buildings such as schools, kindergartens, hospitals, corporate and agricultural buildings.

Remote monitoring of the heating and remote control of the boiler will be ensured by the mobile application that is included. Installed compressor cleaning extends the interval between boiler and burner cleaning.

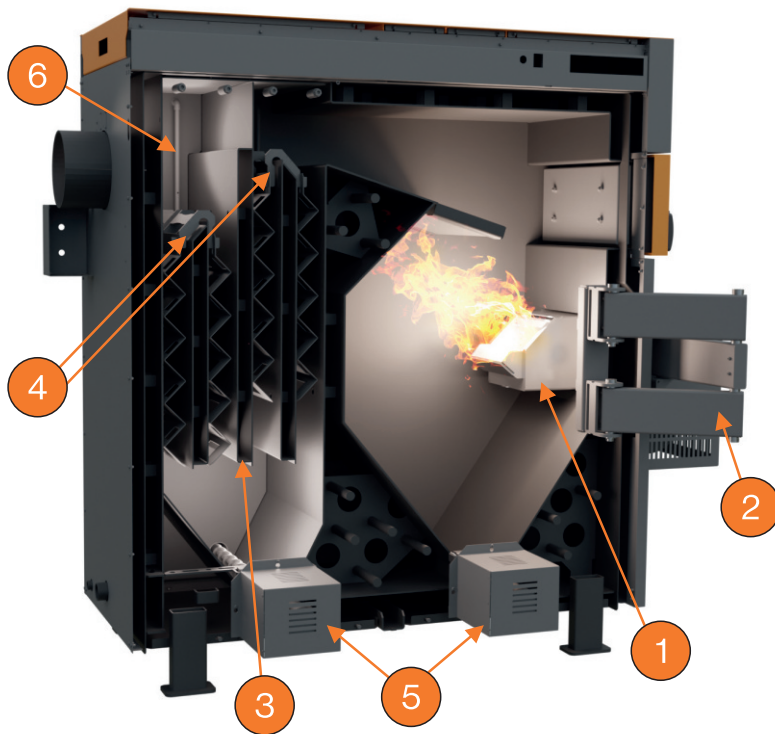
The installed automatic ash removal extends the interval between ash removal and complete cleaning.



A+

ECO
DESIGN

5-YEAR
WARRANTY



1. **Stainless steel** pellet burner.
2. **Shoulder torch holder** for easy handling and cleaning.
3. **Plate heat exchanger**
4. **Flue gas turbulator** increasing boiler efficiency.
5. **Automatic ash removal** extends the interval between ash removal.
6. **Compressor cleaning of the boiler and burner** exchanger extends the cleaning interval.

Power: 100, 150, 200 kW

Fuel: wood pellets with a diameter of 6 - 8 mm

Easy operation

- **Online control in the basic equipment** - Internet connection in the basic equipment allows the customer to control the boiler remotely and saves costs for servicing the boiler. The service company can remotely check the parameters and settings of the boiler.
- **Automatic ignition and extinguishing** – the boilers are capable of igniting the pellets in the burner and thus starting the operation of the boiler, they can also let the pellets in the burner extinguish themselves.
- **Easy maintenance and cleaning of the boiler**, which is done automatically by the compressor. Dirt falls into the boiler ashtray, which is cleaned by automatic ash removal using a screw feeder. He stuffs all the ash into the ashtray part of the boiler into a special container.
- **Outdoor sensor** - allows you to set the water temperature control in the boiler heating system according to the outdoor temperature and thus save heating costs.
- **The boiler control unit enables:**
 - Control of 2 mixing valves
 - Connection of 2 room thermostats to control 2 independent heating circuits.
 - Connection of 5 pumps – DHW pump, CH pump, valve 1 pump, valve 2 pump, separately configurable pump.
 - Time control of boiler output temperature – programmable weekly mode of operation.
 - Storage tank heating using 2 temperature sensors
 - Online control of all boiler functions and heating circuits using the OPOP internet interface.
 - Mobile application for phones with iOS and Android operating systems enabling remote management of the boiler.
 - Updating the firmware of the control unit will help the USB interface to get new functions.
 - Works with solar panels and other heat sources.

Economical and ecological operation

- **High efficiency of up to 91,8%** ensures optimal use of fuel energy.
- **Low consumption of pellets and electricity** will ensure low heating costs.
- **Low emissions** (belongs to the 5th emission class, meets EKODESIGN).
- **Modulation** in the power range from 30% to 100%.

Long life

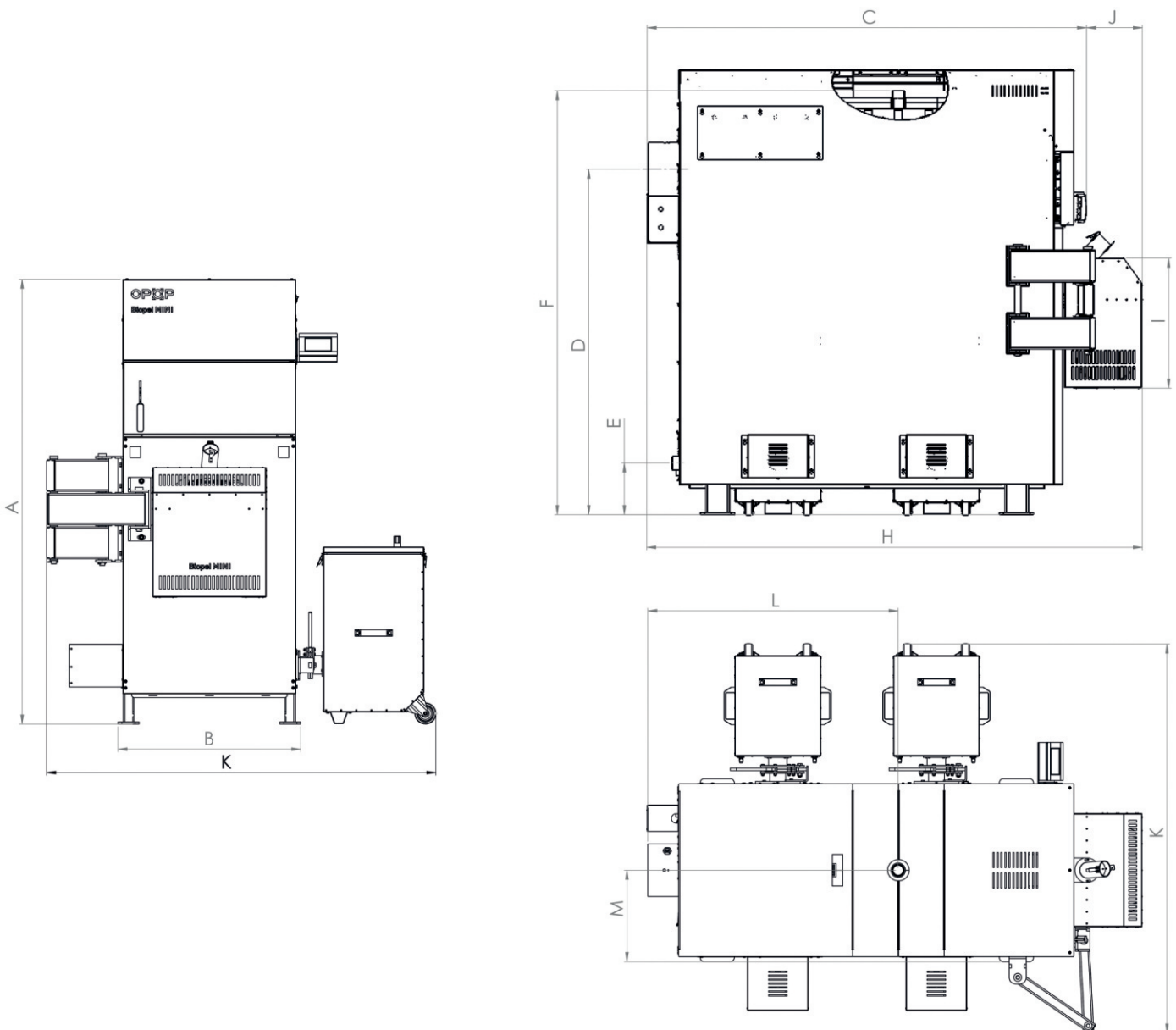
- **The burner is made of stainless heat-resistant steel** that can withstand high temperatures.
- **5-year warranty on the boiler heat exchanger** if you have it installed by a trained company according to the instructions.

Space saving compatibility

- Space-saving boiler in relation to output.
- **Compatibility** - when shipping a pellet boiler, they are delivered separately packed - boiler, burner, feeder, ash removal, compressor or external pellet hopper.
- **Bunkers in variants** - we offer a wide range of bunkers sizes up to 9 tons of pellet content.
- **The possibility of connecting a vacuum feeder** that automatically transports pellets from the external storage tank to the tank close to boiler up to a distance of 8 meters.
- Opening of the door, placing of automatic ash removal ash trays and bunkers can be on left or right side thus adapt the arrangement of the set to the possibilities of the boiler room.
- Possibility of cascading up to 4 boilers to obtain a total output of up to 800 kW.
- Elegant attachment of the burner on a mobile pantograph, which ensures easy handling and access to the burner during complete cleaning.

Technical parameters		Biopel Mini 100	Biopel Mini 150	Biopel Mini 200
Nominal output	kW	100	150	100
Minimum output	kW	29	45	56,8
Warranty fuel		Wooden pellets 6-8 mm EN A1		
Fuel consumption (at nominal/minimum power)	kg/h	22,56 / 6,71	34 / 9,9	46,1 / 13
Electrical input (max/min.)	W	128 / 61	180 / 84	220 / 100
Maximum electrical input	W	580		
Standby power consumption	W	4	4	4
Emission class*		5 / Ekodesign		
Efficiency nominal/minimum power*	%	91,2 / 90,3	91,8 / 91,9	91,8 / 91,9
Water volume	l	388	1042	1042
Chimney operating draft (at nominal/minimum output)	Pa	9 / 9,4	10	10
Maximum working water pressure	Bar		2	
Test overpressure of heating water	Bar		4	
Heating water temperature range	°C		55 - 85	
Minimum return water temperature	°C		55	
Flue gas temperature (at rated/minimum power)	°C	138,5 / 92,2	115,5 / 67,2	125,2 / 77,7
Flue gas mass flow rate (at rated/minimum power)	Kg/s	0,0604 / 0,0295		
Weight	kg	848	1600	1600
Connection voltage	V/Hz		230V/50Hz ±10%	
Boiler noise/Compressor cleaning noise	dB	62,6 / 93	62,6 / 93	62,6 / 93
Electrical cover			IP21	
Hydraulic loss at DT = 20/10 K	mbar	12,2 / 51,5		

* Emission values and classes are given by tests in test institutes, subject to the standard EN 303-5.



Dimensions		BioPel Mini 100	BioPel Mini 150	BioPel Mini 200
Boiler height [A]	mm	1691	1704	1704
Boiler width [B]	mm	695	1095	1095
Boiler depth [C]	mm	1671	2360	2360
Flue diameter	mm	200	200	200
Location of the center of the flue from the ground [D]	mm	1313	1413	1413
Location of inlet water nozzle from the ground [E]	mm	196	196	196
Location of outlet water nozzle from the ground [F]	mm	1611	1611	1611
Boiler depth incl. burner cover [H]	mm	1885	2661	2661
Burner cover height [I]	mm	495	495	495
Burner cover depth [J]	mm	212	300	300
Boiler width including accessories [K]	mm	1480	1794	1794
Location of the outlet water nozzle from the flue [L]	mm	952	1646	1646
Location of the outlet water nozzle from the side of the boiler [M]	mm	347,5 (B/2)	548 (B/2)	548 (B/2)
Connection nozzles for inlet and outlet water	"	G 1 1/4" (inside thread)	G 1 1/4" (inside thread)	G 1 1/4" (inside thread)
Connection for draining and filling	"	G1/2" (inside thread)	G1/2" (inside thread)	G1/2" (inside thread)
Boiler body wall thickness (water/flame)	mm	5	5	5
Boiler body wall thickness (water)	mm	3	3	3
Heat exchange surface	m ²	8,1	17,5	17,5