

BIOPEL MINI V12

BIOPEL MINI PLUS CA V12

V12 New generation of regulation

Pellet Boilers



Compact pellet boilers with maximum comfort

The Biopel MINI series of pellet boilers simplifies heating and saves costs. It offers high comfort, fully automatic operation, and exceptionally simple control. Thanks to the modern V12 control unit, users benefit from advanced control with maximum automation, an intuitive touchscreen 5" display, and a clear graphical interface.

Both the boilers and hoppers are designed with a focus on minimal dimensions, so they can be installed even in very small boiler rooms.

The BIOPEL MINI PLUS CA comes standard with automatic cleaning of the burner and heat exchanger, as well as automatic ash removal—minimum effort, maximum comfort.



Biopel MINI Kompakt CA

1. Hopper
1a.) Compact hopper available in 225-kg or 150-kg pellet versions
1b.) Tower hopper for 40-kg or 60-kg pellets
2. New-generation V12 electronic control unit.
3. Burner made of highly durable heat-resistant steel for maximum service life.
4. Automatic boiler ash removal extends the interval between ash removal.
5. Hydraulic kit for quick and easy connection of the boiler to the system.
6. PVC hose through which pellets fall into the burner.
7. Automatic cleaning of the boiler heat exchanger and burner.



Biopel MINI Tower CA

Output: 11-40 kW

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

The new-generation V12 smart control unit allows for comprehensive control of the boiler and all components of the heating system.

- Automatic ignition and shutdown – the boiler operates similarly to a gas boiler.
- Provides control of hot water heating, storage tanks, and floor heating
- Control of 2 mixing valves.
- Connection of 2 room thermostats for controlling 2 independent heating circuits.
- Connection of 5 pumps.
- Equithermal control based on outdoor temperature.
- Weekly operation scheduling.
- Storage tank heating using 2 temperature sensors.
- Wi-Fi connectivity is part of the boiler.
- Can also be controlled via a mobile app.
- Firmware updates via USB.
- Compatible with solar panels and other heat sources.
- Integrated control of heating system components saves on boiler room installation costs.
- Feeder calibration – a feature that adapts the boiler to burn various types of high-quality pellets.
- Support for communication with smart home systems via the sinum module.



Economical and eco-friendly operation.

- Efficiency of up to 93.7% for maximum fuel savings.
- Minimal electricity consumption.
- Smooth output modulation ranging from 10 % to 100% for optimal performance and savings.
- Complies with Ecodesign as well as strict German standards and Emission Class 5
- Pellet boilers only need to be serviced approximately once a week—you simply refill the fuel and perform basic maintenance.
- Compared to manually fed boilers, this saves you tens of minutes to hours per week.
- Cleaning and operating the boiler are very simple, convenient, and time-efficient.
- You'll need to remove the ash approximately once every 4 weeks.

It will last for years. It works without compromise.

- Burner made of highly durable, heat-resistant stainless steel – maximum service life even under demanding conditions.
- The boilers are designed for maximum service life and reliability. Every detail reflects decades of experience in development and manufacturing, ensuring long-term, trouble-free operation.
- 5-year warranty on the welded unit – a guarantee you can rely on (with professional installation).

A flexible solution for every boiler room.

- Upon shipment, the individual components are delivered separately: the boiler, burner, hopper, and, if applicable, the feeder.
- This system allows for easy installation of the boiler in the boiler room—all components fit through a 60 cm wide door.
- The hopper can be placed on the right or left side of the boiler or on the boiler.
- The layout of the system can be adapted to the boiler room's layout.

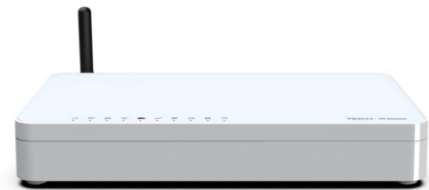
Hopper options

- Several types of hoppers can be connected to Biopel MINI boilers: Kompakt 150, Kompakt 225, Tower, or an external tank (allowing connection to an adjacent room).
- Do you have limited space in your boiler room? Choose a small, compact hopper that, together with the boiler, takes up only 85 to 98 cm in width. Or a tower with a width starting at 35.2 cm.
- Do you have a larger boiler room? Choose a larger hopper holding up to 350 kg of pellets for maximum convenience. This way, your pellets will last longer than a week without refilling.
- Hopper capacities range from 40 to 350 kg of pellets.

Accessories

- **Sinum module – smart home**

- Support for communication with smart home systems.
- Integration of boiler operation with other technologies in the home.



- **Fuel level monitoring – pellet level sensors**

- Intelligent monitoring of pellet levels in the hopper.
- Notifications when refilling is needed.



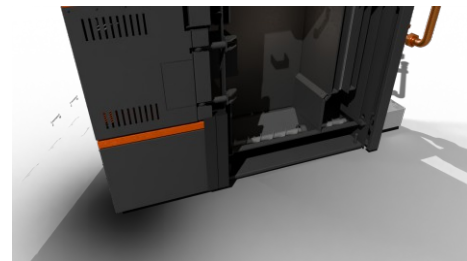
- **Automatic cleaning of the boiler heat exchanger and burner**

- The interval between manual boiler cleanings can be extended to up to six months.
- No moving parts in the boiler – no risk of mechanical failure.



- **Automatic ash removal**

- Extends the interval between ash removal to several months.

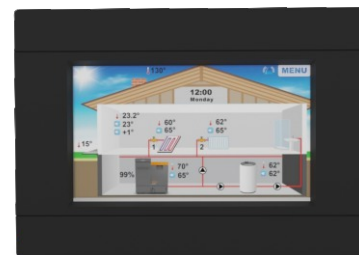


- **Lambda probe for smart combustion**

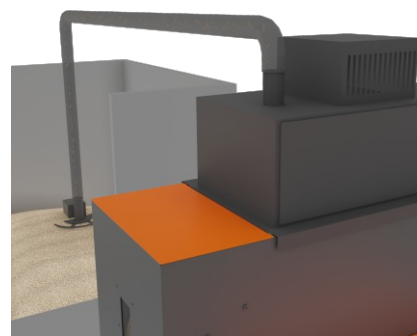
- The lambda probe controls combustion based on the oxygen content in the flue gases.
- Cleaner operation and lower emissions without the need for intervention.



- **RT 10 room thermostat for comfortable temperature control in your home**
 - Designed to control and monitor room temperature, central heating temperature, and domestic hot water temperature.
 - Includes a weekly heating schedule and operates with four mixing valves.



- **Vacuum feeder – pellet transport over longer distances**
 - Automatically moves pellets from the silo to the boiler hopper over a distance of up to 8 meters.
 - Allows the boiler to operate without manually refilling the hopper.



- **Hydraulic kit for quick installation**
 - Hydraulic kit with a thermostatic valve, pump, and safety group for easy and quick connection of the boiler to the heating system.
 - A compact solution that saves space behind the boiler.



- **Exhaust Fan**
 - The exhaust fan's speed is adjusted directly by the control unit based on the current load.
 - It is suitable for use in conditions of low chimney draft.



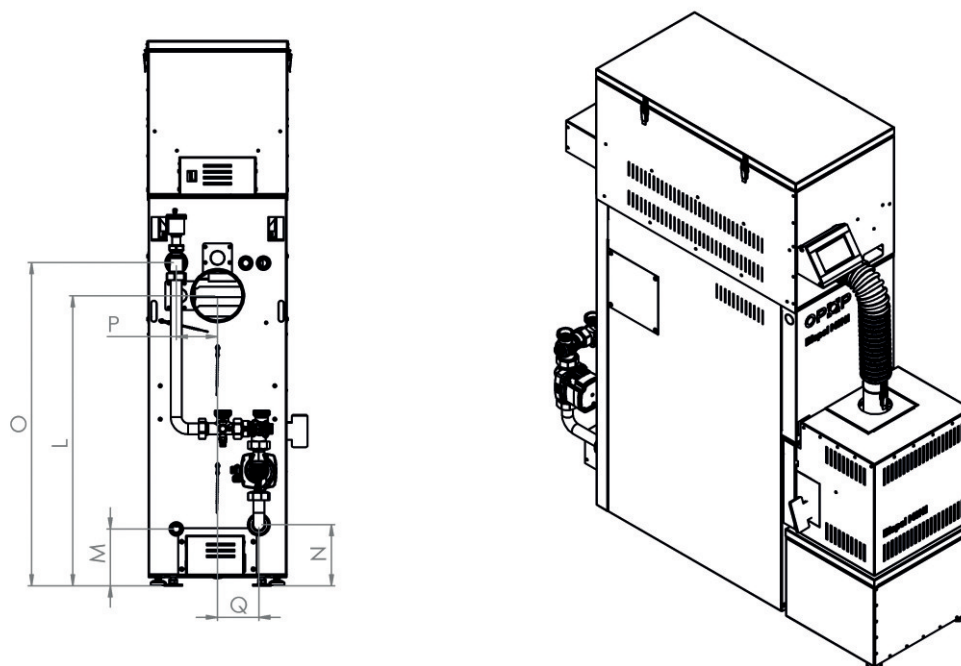
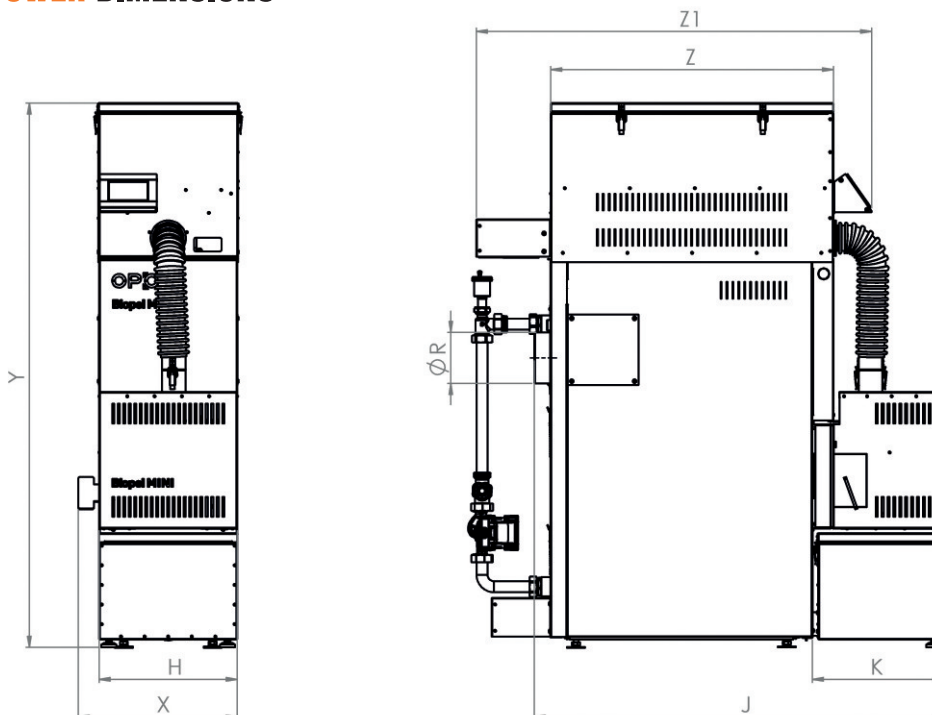
Načtením QR kódu
uvidíte všechny typy
peletových kotlů
v naší nabídce



Načtením QR kódu
získáte kompletní ceník
produktů OPOP

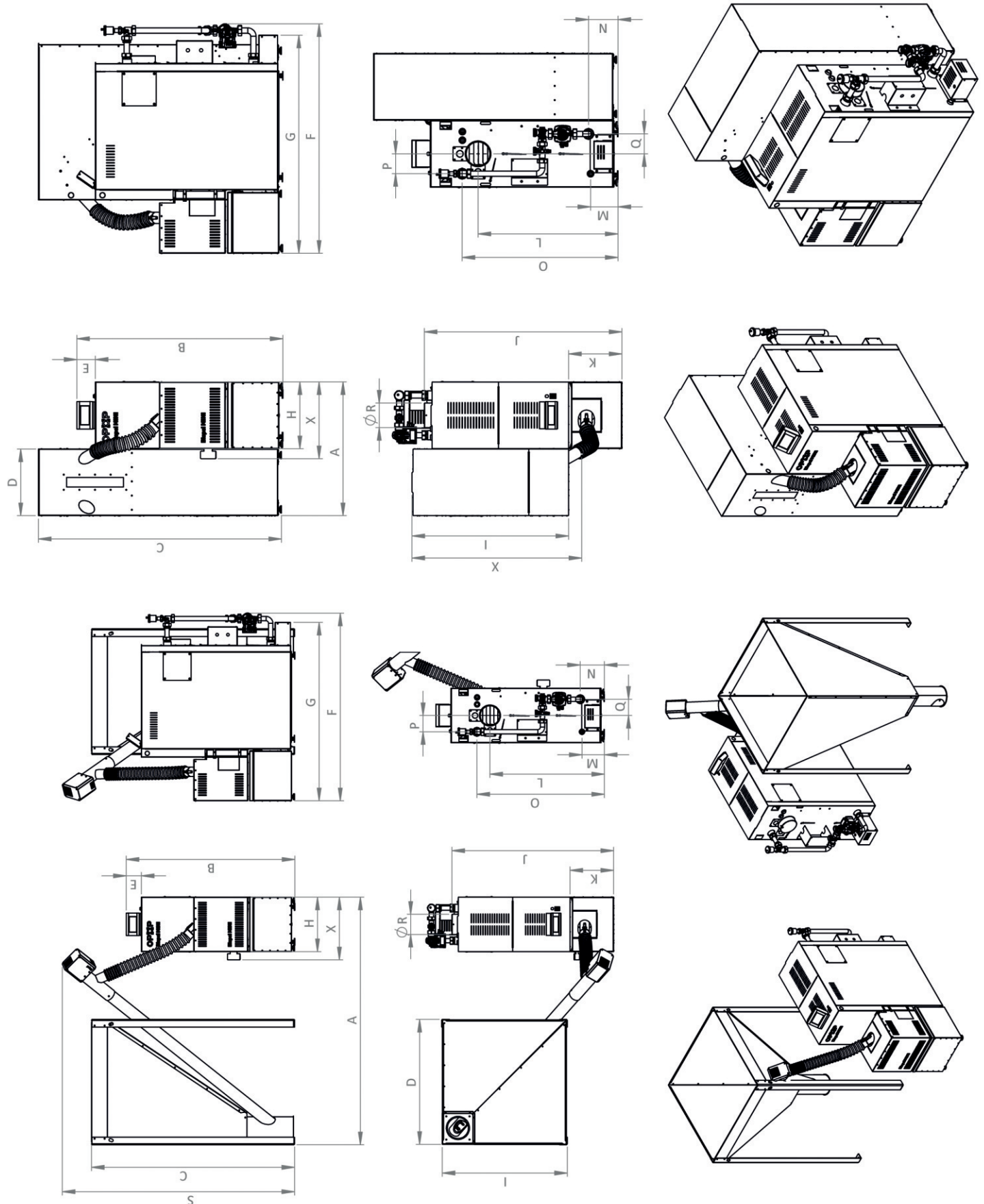


BIOPEL MINI TOWER DIMENSIONS



Dimensions with compact TOWER hopper			
Y - total boiler height including the container type: TOWER 40	[mm]	1386	-
Y - total boiler height including the container type: TOWER 60	[mm]	-	1556
Z - depth of compact container type: TOWER 40	[mm]	720	-
Z - depth of compact container type: TOWER 60	[mm]	-	820
Z1 - depth compact container incl. accessories type: TOWER 40	[mm]	1010	-
Z1 - depth compact container incl. accessories type: TOWER 60	[mm]	-	1110
container volume type: TOWER 40 (pellets 6mm) / weight	[kg/kg]		40 / 16
container volume type: TOWER 60 (pellets 6mm) / weight	[kg/kg]		60 / 19

BIOPEL MINI TOWER DIMENSIONS



BOILER MODEL		BIOPEL MINI 11	BIOPEL MINI 15	BIOPEL MINI 21	BIOPEL MINI 30	BIOPEL MINI 40
Dimensions						
Funnel type: Output / Inlet (inner thread)	Js	G 1 1/4"				
Connection for draining and filling (inner thread)	Js	G 1/2"				
B - Boiler height	(mm)	1088			1257	
H - Boiler width	(mm)	352			482	
J - Boiler depth including burner cover	(mm)	1043			1170	
K - Burner cover depth	(mm)	281			308	
E - Display height	(mm)	98				
G - Total depth with automatic ash removal	(mm)	1162			1277	
F - Total depth with hydraulic set	(mm)	1212			1338	
O - Outlet water funnel position from the ground	(mm)	822			992	
L - Flue position from the ground	(mm)	739			898	
N - Inlet water funnel position from the ground	(mm)	156				
M - Water drain funnel position from the ground	(mm)	145				
P - Outlet water funnel position from the flue	(mm)	106			155	
Q - Inlet water funnel position from the flue	(mm)	106			155	
R - Flue diameter	(mm)	130			150	
X - Boiler width incl. handle	(mm)	406			538	
Dimensions with external container						
A - total boiler width including container (flexible dimension)	(mm)	1600			1730	
S - total boiler width including feeder (flexible dimension)	(mm)	1500				
Container 60x60 - (D - width / 1 - depth)	(mm)	600 / 600				
Container 80x80 - (D - width / 1 - depth)	(mm)	815 / 815				
Container 100x100 - (D - width / 1 - depth)	(mm)	1000 / 1000				
Extended container 60x60 - (L width / M depth)	(mm)	815 / 1420				
C - Hopper height	(mm)	1300				
Container capacity 60x60 (pellets 6mm) / weight	(kg)	110 / 25				
Container capacity 80x80 (pellets 6mm) / weight	(kg)	220 / 29				
Container capacity 100x100 (pellets 6mm) / weight	(kg)	300 / 35				
Container capacity 81.5x142 (pellets 6mm) / weight	(kg)	350 / 38				
Dimensions with a compact container						
A - Total boiler width including container type: KOMPAKT 150	(mm)	708			838	
A - Total boiler width including container type: KOMPAKT 225	(mm)	838			968	
C - Total KOMPAKT container height (150/225)	(mm)	1283				
C - Total KOMPAKT container width (150/225)	(mm)	354 / 484				
I - Compact container width (150/225)	(mm)	827				
X - Compact container width incl. feeder (150/225)	(mm)	891				
container volume type: KOMPAKT 150 (pellets 6mm) / weight	(kg)	150 / 39				
container capacity type: KOMPAKT 225 (pellets 6mm) / weight	(kg)	225 / 45				

Technical parameters:		BIOPEL MINI 11	BIOPEL MINI 15	BIOPEL MINI 21	BIOPEL MINI 30	BIOPEL MINI 40
Nominal output	kW	11	15	21	30	40
Minimal output	kW	3,3	4,7	6	8,9	11,8
Guaranteed fuel		wood pellets 6-8mm				
Fuel consumption (at boiler nominal output)	kg/h	2,36	3,36	4,68	6,52	8,42
Fuel consumption (at boiler minimal output)	kg/h	0,77	1,01	1,38	1,96	2,64
Emission class *1		5 / Ecodesign				
Efficiency *1	%	93,6	93,7	92,9	93,5	93,6
Water volume	L	32			54	
Operational chimney draught	Pa	5,5	7,5	8	11	11
Maximum operating water pressure	Bar	2				
Maximum heated water temperature	°C	80				
Minimum return water temperature	°C	55				
Flue gas temperature (at boiler nominal output)	°C	85	101	102	107	117
Weight	kg	160			240	
Connecting voltage	V/Hz	230 V / 50 Hz ± 10%				