

BioTec-C (25 / 35 / 45 kW)



BioTec-C steel hot water boilers (with nominal heat output of 25 to 45 kW) are designed for wood log fuel firing for the heating of small and middle sized premises.

The wood gasification principle enables a complete fuel burning. Logs up to 550 mm long can be inserted into the large combustion chamber. The burning period for a single fill of logs is at least 4 hours at the rated output and can be extended to a whole day if the need for heating is less.

The boiler can keep the glow even 8 hours, which means that in this period it is not necessary to fire up the boiler in order to keep the heating process. Boiler operation is managed with inbuilt boiler control unit using the boiler temperature sensor and changing the rpm's of underpressure fan on flue gases outlet from boiler. Boiler is connected to the central heating system through a 3-way thermostat valve accumulation (buffer) tank (like CAS, CAS B, CAS S, CAS BS).

The boiler is tested and certified according to the European standard EN 303-5:2012 and meets class 5. It is manufactured in compliance with ISO 9001/2008 and ISO 14001/2004 standard and meet the requirements for ECO design (commission (EU) 2015/1189).

PRODUCT CHARACTERISTICS



ECONOMICAL

Pyrolytic combustion makes it possible to use more than 85%, which saves considerably compared to classic wood boilers.



THE BUILT-IN BOILER CONTROL

The built-in boiler control with the 4 buttons manages the boiler operation using the boiler temperature sensor and changing the rpms of underpressure fan on the flue gases outlet from the boiler.



ONE CHARGE PER DAY

The duration of a single charge is at least 4 hours full power with the possibility of prolonging the entire day if the need for heating is reduced.



LARGE SIZE WOOD

Large firebox allows wood to burn up to half a meter long.

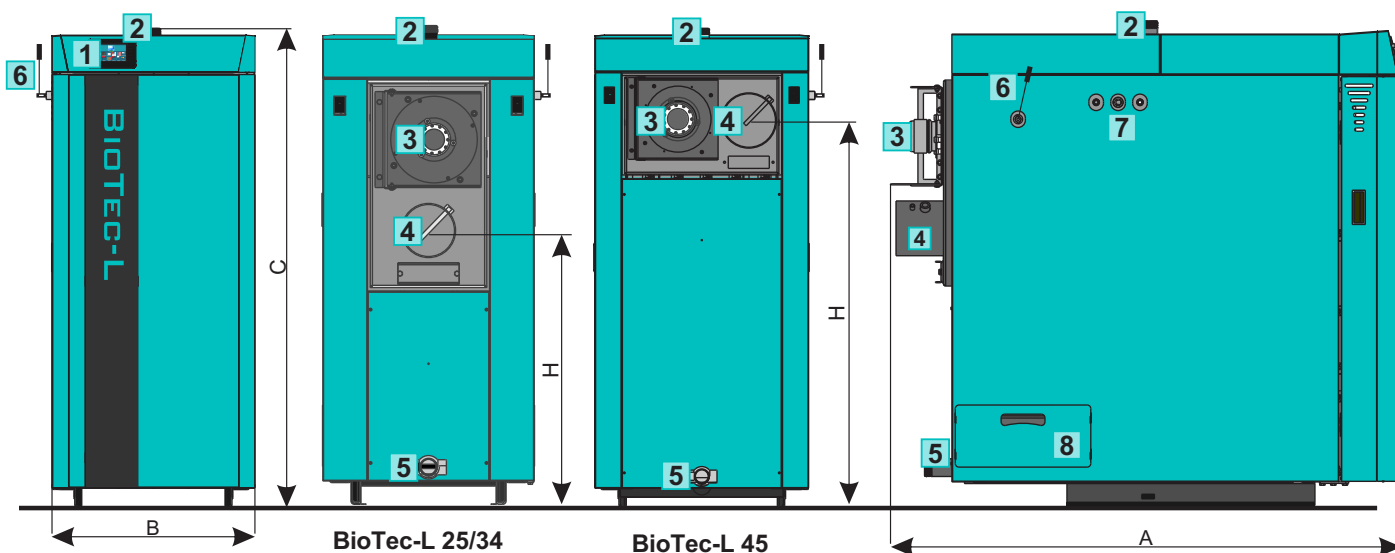


- Boiler Class 5.
- Meet the requirements for ECO design (COMMISSION (EU) 2015/1189).
- Hot water boiler for central heating systems is engineered for wood log firing of the moisture content under 25% (min 1 year long air dried wood).
- The wood gasification principle enables total burning of the fuel, reducing the cleaning of the boiler to minimum (depends on wood quality and nominal boiler load).
- The design and construction, including the wood gasification principle of complete burning assures high efficiency and makes the boiler extremely economical.
- It is environmentally friendly because of extremely low concentration of harmful components in flue gases.
- Three doors and the combustion chamber enable loading with large logs as well as very simple cleaning and maintenance.
- It is engineered for installation in open or closed central heating systems only through accumulation tanks (CAS), volume min. 50l/kW and a 3-way thermal valve at 60°C.

- It is delivered pre-wired with the built-in boiler control unit to control the boiler.
- The built-in boiler control with the 4 buttons manages the boiler operation using the boiler temperature sensor and changing the rpms of underpressure fan on the flue gases outlet from the boiler.
- In addition to the operation of the boiler, the boiler pump and the return flow (through the 3-way mixing valve and the return sensor), the control unit can manage the filling of the accumulation tank and heating of the domestic hot water tank (DHW sensor) (sensor + pump).
- Easy transportation and leveling by 4 adjustable legs of the boiler.
- The boiler is tested and certified according to EN 303-5: 2012 and meets Class 5. It is manufactured in accordance with ISO 9001 and ISO 14001 standard.

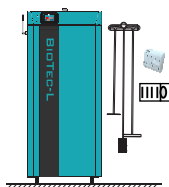
BASIC DIMENSIONS:

- 1 Boiler regulation;
- 2 Boiler water inlet;
- 3 Fan with electric motor;
- 4 Flue gas exhaust;
- 5 Boiler water outlet;
- 6 Lever for cleaning flue gas tubes;
- 7 Place for mounting the thermal valve;
- 8 Side opening for cleaning the smoke chamber.



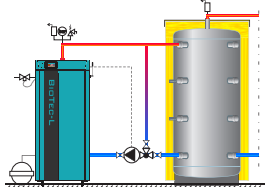
BioTec-L 25-45kW		25	34	45
Nominal heat output	kW	25	34	45
*Chimney diameter/height	Ø(mm)	150/775	160/800	180/1270
Boiler water inlet	R	6/4"	6/4"	6/4"
Boiler water outlet	R	6/4"	6/4"	6/4"
Filling/Draining	R	3/4"	3/4"	3/4"
Flue gases temperature	°C	130	130	130
Max. operating temperature	°C	90	90	90
Max. operating pressure	bar	2,5	2,5	2,5
Boiler dimensions (A*B*H)	mm	1400*1330*585	1370*1370*700	1385*1565*700
Total boiler depth (H)	mm	775	800	1270
Max. wood piece length	mm	450-550	450-550	450-550
Wood storage	lit.	90	144	176
Boiler water content	lit.	115	130	150
Boiler mass	kg	519	606	677

DELIVERY, ADDITIONAL EQUIPMENT:



Delivery:

> Boiler with casing, wired, with 4 additional sensors, external temperature sensor, room corrector and cleaning accessories (2 x scraper, brush, cleaning accessories holder).



Obligatory: Connection to CAS accumulation tank:

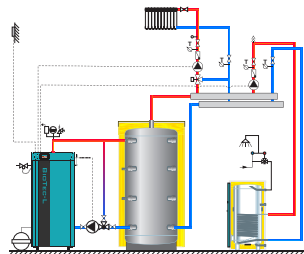
> CAS accumulation tank, 3-way thermostatic valve LTC, VTC.... (60°C); or 3-way mixing valve with a motor actuator

Closed heating system

> thermal safety valve, safety-air vent group (2.5 bar) and expansion vessel;

Open heating system

> open expansion vessel



Connection to the system with one direct heating circle and DHW preparation:

> CAS accumulation tank, 3-way thermostatic valve LTC, VTC.... (60°C);

> 3-way mixing valve with a motor actuator DHW tank (TB, STEB)

Closed heating system

> thermal safety valve, safety-air vent group (2.5 bar) and expansion vessel;

Open heating system

> open expansion vessel



GSM alarm module for mobile network // CAL

> notification of the boiler status through the mobile network text message or call (errors, warning...)

> request for the boiler status phase of work, boiler temperature, through an SMS message in the selected language

CAL set alarm (speaker / light)

> module for error notification by sound or light signal or warning about the boiler operation.



CM2K-B module for steering 2 heating circuits// CSK

> allows steering of up to 2 heating circuits to the outside temp. (up to 2 mixing valves and up to 2 heating pumps).

> possible connection to 4 CM2K-B modules (up to 8 heating circuits).

> possible connection to 2 CSK room correctors per module.

CSK

> room corrector

Obligatory additional equipment:

- accumulation tank for heating system (CAS (minimum 30 lit/kw boiler power)), 3-way thermostat valve, like ESBE LTC 141; (closed heating system) – thermal safety valve, safety-airvent group (2,5 bar) and expansion vessel; (open heating system)
- open expansion vessel.



Akumulacijski spremnik grijanja CAS



ESBE LTC 141