

WOOD FIRING BOILER

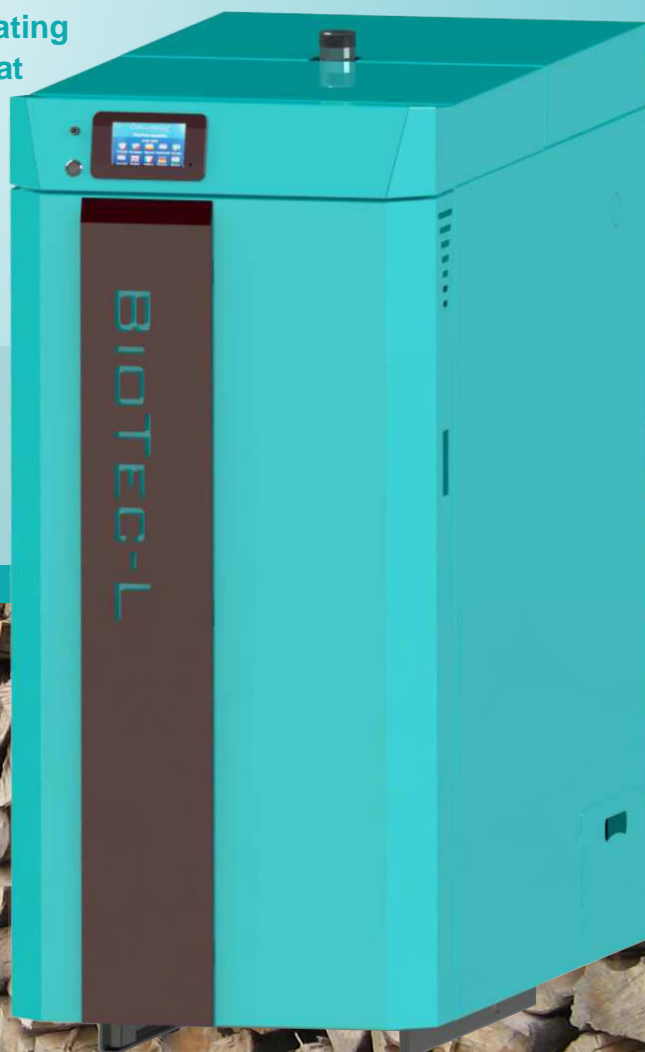
WOOD GASIFICATION

BioTec-L

25, 34 i 45 kW

HEATING TECHNIQUE

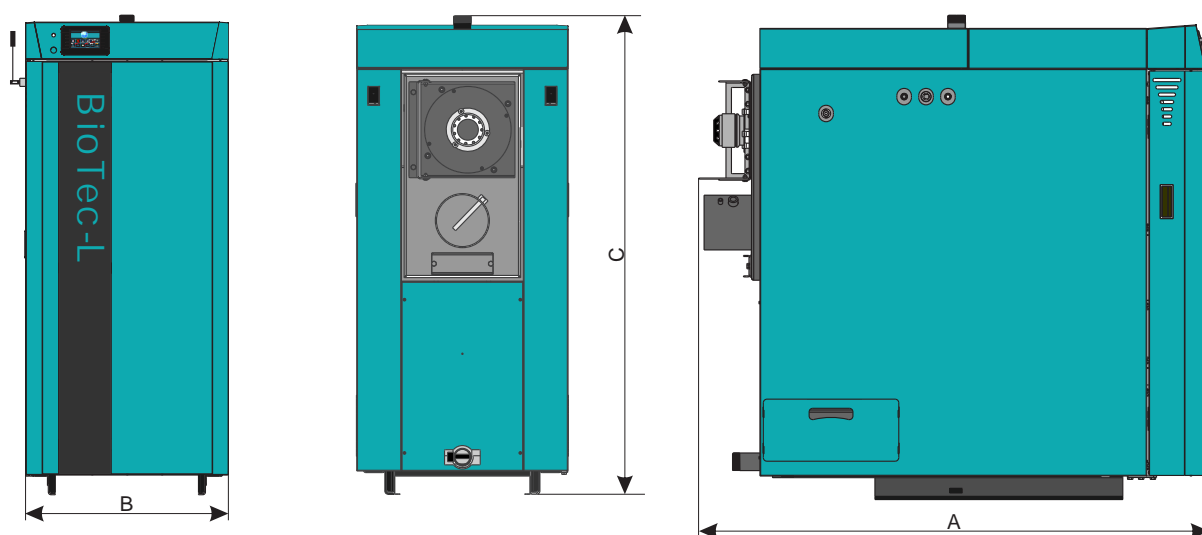
BioTec-L steel hot water boilers (with nominal heat output of 25 to 45 kW) are designed for wood log fuel firing for the heating of small and middle sized premises. The wood gasification principle enables a complete fuel burning. Logs up to 550 mm long can be inserted into the large combustion chamber. 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 12 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 lambda probe, using actuators for management primary and secondary air intake 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 (like ESBE LTC) and a CAS 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.





- Hot water boiler for central heating systems suitable for wood log firing (moisture content less than 25%).
- The wood gasification principle enables total burning of the fuel. Therefore cleaning is necessary in minimum amount (depend on wood quality and boiler load).
- The design and construction, including the wood gasification principle of complete burning assures high efficiency and makes the boiler extremely economical.
- Ecologically acceptable because of extremely low concentration of harmful components in the flue gases.
- Three big doors on the boiler enables simple cleaning and maintainance, as well as ease of filling with large logs..
- These boilers are aimed to be connected to open or closed central heating systems only through accumulation (buffer) tank (CAS).
- Boiler operation is managed with inbuilt boiler control unit using the lambda probe, using the motors for managment primary and secondary air intake and changing the rpm's of underpressure fan on flue gases outlet from boiler.
- Delivery includes a pre-wired control system, with touch screen boiler controller which steers the boiler.
- Sensors included in basic delivery: 2 buffer tank sensors, 1 outhter temp.sensor, 1 main flow sensor, 1 DHW sensor.
- Additional equipment of the boiler: analog room control unit (CSK), alarm box (CAL), module for 2 heating circuits running with outhter temp.sensor (CM2K) with sensors, GSM and network module, room thermostat.

DIMENSIONS:



BioTec-L		25	34	45
Nominal heat output	(kW)	25	34	45
Flue gas exhaust diameter *	f (mm)	150	160	180
Boiler inlet	(R)	6/4"	6/4"	6/4"
Boiler outlet	(R)	6/4"	6/4"	6/4"
Filling/drainage	(R)	3/4"	3/4"	3/4"
Flue gas temp.	(°C)	130	130	130
Max. Operating temp.	(°C)	90	90	90
Max. Operating pressure	(bar)	2,5	2,5	2,5
Total boiler depth (A)	(mm)	1400	1385	1385
Total boiler height (C)	(mm)	1330	1370	1565
Total boiler width (B)	(mm)	585	700	700
Max. Wood piece length	(mm)	550	550	550
Wood storage volume	(lit.)	103	148	176
Water amount in boiler	(lit.)	115	130	150
Total mass	(kg)	519	606	677

* - chimney inside diameter has to be determined according to the boiler rated thermal output, height of the chimney and almost always it has to be bigger then the flue gas exhaust tube diameter.