

TESLA ECO SYSTEMS

PRODUCT FEATURES



The BD has a built-in heating system. This heating system will be adjusted to the climate zone. The temperature of the digester's interior should be about 40°C. External insulation of the BD is not included but can easily be arranged locally and is a must for good biogas results, even in hot climates.



The manhole in the BD's top is the access to its interior. This biogas-tight cover usually does not need to be opened. The cover's window with built-in wiper allows a view at the digester's interior while in operation. The mixer's actions can be monitored also. The substrate input pipe is submerged in the substrate to avoid biogas from escaping.



A view of the BD's interior. The reinforced and stiffened construction allows to fill up the BD with 50-60 m³/tons of biomass. The interior is completely protected against corrosion.



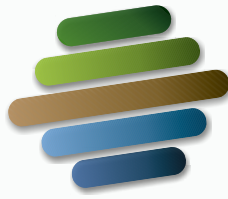
This image shows the BD's output and overflow exit hole. The hoses and pipes are included in the package price. The smaller hole is an emergency outlet, in case one wants to empty the BD.



The outlet for the biogas bag, which serves as the external bio gas storage room, is integrated in the BD's top.



An external mixer is to be connected to this flange to regularly mix the substrates. Usually the mixer runs every hour for about 3-5 minutes or can be programmed individually, depending on the substrates.



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The flanges for the heating system are located left of the flange for the mixer. The heating system is connected to the CHP and keeps the temperature at about 40°C, even in a hot climate or harsh winters with minus temperatures.



Flanges for taking substrate samples. A temperature sensor controls the BD's interior temperature.

MAJOR COMPONENTS OF BERT MOBILE

- ✓ 40' DB including heating system and temperature sensor
- ✓ 20' TC housing the CHP and all other equipment needed to operate the Bert Mobile
- ✓ Mixer (3,5 - 5.0 HP)
- ✓ Biogas storage balloon ($\approx 33\text{m}^3$)
- ✓ Biogas flowmeter – optional
- ✓ CHP with heat recovery system of min. 15 kW/h
- ✓ Shredder (food waste etc.) 2.2 kW, 400 KG/h capacity - optional
- ✓ Slurry feed in pump $2.5\text{m}^3/\text{h}$ (3HP)
- ✓ Blower for H_2S removal
- ✓ Electric panel for automatic operation of the Bert Mobile system
- ✓ Interconnecting pipes and valves: choose from 2 pipe length packages: normal or extra long

Optional secondary equipment like H_2S sensors, web-control, flair, etc. are available upon request.

NOT INCLUDED

- All civil work
- Incoming power and power export facilities
- All insulation
- All piping, cabling etc. beyond the termination points e.g. heat connection to the home or other heat users
- Plant lighting and lighting protection
- Initial powering up
- All local permits, digestate storage, security, etc.

NOTE

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