

BIOREACTOR TO ANAEROBIC FERMENTATION WITH BIOGAS ANALYSER



This kind of bioreactor is used to laboratory tests of methane fermentation process as biological method of organic waste utilization.

CONSTRUCTION

- reactor with agitator and electrical heaters, pH probe and sensor of temperature,
- measurements of temperature, pH and mixing intensity,
- biogas container,
- meter of flow rate,
- biogas analyser.

PRINCIPLE OF OPERATION:

It is bioreactor with periodic duty. It is made of glass with dished head. In dished head are built-in electrical heaters. Regulation of temperature is possible by heaters. The reactor is located on metal stand and it has upper cover which is made of stainless steel. In cover there is a wire by which biogas is carried away. Gas is carried away to glass container and from this container is directed to second container. In measurement time of CO₂ and CH₄ concentration gas is directed to flow rate meter and then to analyser of CO₂ and CH₄.