

The invention relates to plants for biomethane production in the biogas composition and can be used in different branches of agriculture and processing industry.

The combined anaerobic reactor for the production of biomethane consists of a bioreactor (2) with a cylindrical body (1) with conical bottom, connected to a sludge removal nipple (3). In the bioreactor (2) is placed a load (4) for the attachment of microflora and a level gauge (5). In the upper part of the bioreactor (2) is placed a reservoir (10), provided with a level gauge (6) and a flap (9) with a float (8). On the reservoir (10) is placed an electromagnetic mixer (11), containing metallic particles (14), a generator (15) of rotating electromagnetic field, a liquid supply nipple (12) and a valve (13) for liquid drainage in the reservoir (10). In the lower part of the bioreactor (2) is mounted a receiver (17), provided with an automatic level gauge (18), connected to a control unit (19), coupled with a pump (20), equipped with a liquid-methane ejector (21), which, through a bio-methane extraction conduit (24), communicates with the upper part of the bioreactor (2). The ejector (21) is connected to a sprayer (25) and an aspirator (23). In the lower part of the receiver (17) is coupled a nipple (26) with a regulating valve (27) and a recirculation conduit (28), connected to a pump (29), which is coupled with the control unit (19) and connected to a liquid ejector (30), connected to an electric generator (31) with hydrogen diaphragm and a perforated distributor (33). In the upper part of the receiver (17) is mounted a hose (34), connected through a siphon (35) to a suction chamber (36), filled with activated coal (37), attached to the body (1) and provided with a driving device (38) with vibration and a methane drainage nipple (39) with a valve (40).

Claims: 1

Fig.: 1

