

The invention relates to installations for anaerobic production of biohydrogen and can be used in different branches of agriculture and processing industry for biogas production.

The installation for anaerobic production of biohydrogen includes a bioreactor (2) with a thermostated cylindrical body (1) and a conical bottom, connected to a sediment removal pipeline (3). Inside the bioreactor (2) is placed a load for the fixation of microflora (4), a vacuum gauge (5) and a level gauge (6). In the upper part of the bioreactor (2) is placed a reservoir (10) with liquid under treatment, which is fitted with a level gauge (11) and a liquid inlet branch pipe (12). In the zone for liquid admission from the reservoir (10) into the bioreactor (2) is installed a valve (9) with a float (8). In the lower part of the bioreactor (2) is installed a sealed receiver (14), equipped with an automatic level gauge (15), connected to a control unit (16), and a biomass removal branch pipe (29), at the same time the receiver (14) communicates by means of a pipeline (18) with perforated distributor (19) and of a recirculation pump (17) with the bioreactor (2) and vice versa, the bioreactor (2) by means of a pump (20) with ejector (21) and of a pipeline (23) communicates with the receiver (14), and the pump (20) with ejector (21) through a pipeline (22) for hydrogen vacuumization and aspiration from the bioreactor communicates with the upper part of the bioreactor (2). In the upper part the receiver (14) is provided with a nozzle (24) with hydraulic lock (25), a gas dryer (26) and a hydrogen removal nozzle (27).

Claims: 1

Fig.: 1

