SiGa-Tech
Sludge & biogas systems

Gas dome

Type UB and UB/DP

- **gas dome mounted directly on the digestrion chamber;**
- **biogas pretreatment (sludge particles removal);**
- **scum auto detection system with bed flashing nozzles;**
- **emergency blow-out chimney;**
- **polypropylene rings bed.**

Structure:
Gas domes produced as flow trough device, whole made of stainless steel. Assembled on digester/ anaerobic reactor connection flange. Supporting grid for polypropylene bed is located at the bottom of dome. PP rings are used for biogas pretreatment and scum stop during emergency situations.
Inspection manhole is placed on the top of dome - if access to measuring devices or to bed material is necessary.
Element of gas dome is also chimney, which can be used for biogas emergency blow-out as well as flange connection to the network.

Process:
Biogas produced in digesters/ anaerobic reactors has high relative humidity (100%). Very often, small particles of digesting sludge are taken with biogas to the network. Localization of PP material bed above digesting sludge is optimal solution which allow condesate outdropoing on big process surface directly to digester.
Flash water with settled particles are removed back to digester. For heating purposes warm biogas from digestion process is used.

Basic equipment:
- main dome structure, top access manhole, blow-out chimney with cut-off valve, network flanged connection, PP cleaning bed, bed grid, sprinkling nozzle, scum detection, ball valves, manometer, two measuring pipes connectors.

Optional equipment:
- pressure sensor;
- electrovalve at water inlet for sprinkling;
- gas dome heating cables;
- additional nozzle under bed.

	Dome model	Diameter of dome/ network connection
Gas domes type of series:	UB-400/125	DN 400 / DN 125
	UB-400/150	DN 400 / DN 150
	UB-400/200	DN 400 / DN 200
	UB/DP-400/125	DN 400 / DN 125
	UB/DP-400/150	DN 400 / DN 150
	UB/DP-400/200	DN 400 / DN 200

Devices designation:
UB - gas dome without cleaning bed,
UB/DP - gas dome with cleaning bed,
400/200 - dome diameter/ network connection diameter.

More options are available on request