

Type SLX

Structure:

Siloxane removal stations are produced as filters set which can be installed into insulated container or on skid frame to be placed outdoor or into room (filters operated outside are insulated).
For filters production, stainless steel is used.
Bottom of filter is special frame which allow easy transportation, lifting or lowering thanks to fork-lift devices.

Process:

Before siloxanes removal process biogas is dried (cooled down and then heated up).
Thanks to drying biogas has lower relative humidity.
Dried biogas is flowing through siloxanes filters, filled with bitumic activated carbon. Carbon type, particle size and parameters are matched to achieve highest removal of silicon compounds.
Representative group of compounds is analysed, which stands for >99% of siloxanes concentration in biogas.
All parameters essential for correct removal process are controlled.
Carbon bed is exchanged after it is fully saturated.
Minimum bed lifetime is 1 year.

Basic equipment:

- filters with activated carbon bed.

For filters with blocked drying station:

- insulated multi-stream heat exchangers with piping system;
- cut-off valves;
- safety system for container version (inflow cut-off, leakage detection, ATEX mechanical axial fan);
- by-pass;
- temperature measurement after drying;
- glycol solution cooling system;
- biogas heating system;
- local electrical box.

Optional equipment:

- pressure measurement;
- siloxane concentration measurement.

- compact installation into container or on the skid;
- siloxanes removal on filters with activated carbon;
- often blocked with drying station;
- safety set with leakage detection and biogas inlet auto switch off



Models:

Type	Number of filters	Biogas flow m3/h
SLX-m	1	< 100
SLX-d	1	<300
SLX-dd	1	<750
SLX-dd	2	<1500

More options are available on request