

Gas Desulphurisation

with UgnCleanPellets® S 3.5



UGN
UMWELTTECHNIK



THE UGN®-PROCESSES FOR GAS DESULPHURISATION

Increase your earnings and profits with a cost and energy optimised gas desulphurisation.

Make use of our innovative filtering material UgnCleanPellets® S 3.5.

FOR GAS DESULPHURISATION OF

- Biogenic fuel gas → Including biogas, fermentation gas, landfill gas, pyrolysis gas, sewer gas
- Geogenic gas → Geothermics, deep drilling, mining
- Gas from industrial production processes → Exhaust air from production, oil mills, pyrolysis, coking plants, blast furnaces
- Energetic gas → Including natural gas, accompanying gases of petroleum, lean gas, sour gas, synthesis gas, gas from petrochemical applications

BRIEFING DESCRIPTION

The UGN® systems are made for external biological-chemical final desulphurisation of undried biogas. Over many years, this method has been proven to reduce high hydrogen sulphide loads down to <1 ppm at a reasonable price.

The biological efficiency of these systems is adapted to the microbiological properties (H₂S concentration, humidity, temperature).

The desulphurisation system is set up outside the digester to facilitate regulating and maintenance without interfering with the processes running inside the digester.

Another advantage: The biogas does not have to be dried before being fed into the desulphurisation system, which cuts down on operating costs. Furthermore, the filtering material has a structure that allows perfect pouring, thereby doing away with extra compressors.

PROFIT FROM

- Low operating costs (no drying of gas, no compressor needed)
- Targeted and complete removal of H₂S concentrations
- Guaranteed desulphurisation of process-related H₂S peaks
- No corrosion
- No chemicals handling and involves no elements that are hazardous to water
- Amortisation within 2 - 3 years compared with other desulphurisation methods

INDIVIDUAL AND CUSTOMIZED TO YOUR REQUIREMENTS

- MEASUREMENT AND ANALYSIS → Biogas measurement (CH₄, CO₂, O₂, NH₃, H₂, H₂S) prior to designing a desulphurisation system, Analysis of the biogas formation process, Data analysis
- DESIGNING & ENGINEERING → Customized design and sizing of desulphurisation systems, Control concept, Economic feasibility study, Construction, Choice and customisation of filtering material, Creation of explosion protection documents
- GAS DESULPHURISATION → Plant construction, Process control, Commissioning
- SERVICE & OPTIMISATION → Construction surveillance, transport and in-situ assembly, Operator and staff training, Maintenance, Filtering material exchange, Process monitoring, Plant optimisation