



# **<AB** Cover

Durable cover and gasholder



### Gastight cover

The Air Blown Cover is an innovative double cover with a relatively large, variable gas-storage volume, for biogas installations and other purposes. Its shape and membrane pressure mean that weather influences have little effect on the AB Cover.



2



OVER/UNDER-PRESSURE VALVE



CONSTRUCTION WITH SILO ISOLATION AND OUTSIDE LINING

### **Durable cover and gasholder**

THANKS TO THE HIGH CHEMICAL RESISTANCE AND MECHANICAL STRENGTH OF THE FOILS, THE AB COVER SATISFIES THE HIGHEST QUALITY STANDARDS. NEW CUTTING AND WELDING PROCEDURES ENABLE THE COVERS TO BETTER ABSORB THE BIAXIAL FORCES EXERTED ON THEM, AND THE HEMISPHERICAL CONSTRUCTION ENSURES LOW SILO WALL LOADING.

The AB Cover is a double membrane cover, in which the outer cover is always pressurised. As a result, rain, snow and wind have little impact on it.

The AB Cover has a huge advantage over silo roofs due to its widely variable gas storage capacity and its ability to function as a cover for a digester or secondary digester, to temporarily collect gas. Of course the AB Cover conforms to all local and European environmental legislation.





#### **Customisation for every situation**

Each AB Cover is customised to accommodate the client's wishes and external factors. The cover consists of separately installed upper and lower membranes, which are manufactured from biaxial reinforced fabrics with a high-grade, chemically resistant PVC coating.

#### Maximally variable gas storage capacity

AB Covers have an enormous gas storage capacity and are available for silos up to a diameter of approximately 40 metres. Operational pressures varying from 0 to 5 mbar and an under-pressure situation up to -1.5 mbar are no problem. Higher pressure can be accommodated on request. The tension straps and net support the upper and lower membranes against under-pressure situations and supports sulphur component flare-outs.

#### **Installation of the AB Cover**

The AB Cover is delivered to the building site prefabricated. The support straps (tractive force of 2500 kg and the safety and desulphurisation net (net strength of 400 kg/m2) are installed at an angle. Service openings can also be incorporated as an option. A layer of wooden beams is unnecessary, which saves a considerable amount of money.

#### Maintenance and lifespan

The AB Cover must be visually inspected at regular intervals. The glycol level and glycol freezing point must be checked in the over/ under-pressure valve. Wiefferink provides a 5-year warranty for the AB Cover on material and production defects.

#### **AB Cover**

THE STANDARD VERSION OF THE AB COVER INCLUDES:

- <sup>1</sup> AN OUTER MEMBRANE OF UV-RESISTANT BIAXIAL WOVEN FOIL
- <sup>2</sup> AN INNER MEMBRANE OF CHEMICALLY RESISTANT BIAXIAL WOVEN FOIL
- <sup>3</sup> A BLOWER (OR BLOWERS) TO MAINTAIN THE PRESSURE ON THE OUTER MEMBRANE
- 4 COMPRESSED AIR CONNECTIONS
- <sup>5</sup> AN OVER/UNDER-PRESSURE VALVE
- <sup>6</sup> A MANUAL HEIGHT GAUGE, TO MEASURE THE GAS VOLUME

#### **Available options**

- <sup>1</sup> ATEX FANS
- <sup>2</sup> ONE OR MORE INSPECTION OPENINGS AND A VIEWING WINDOW
- <sup>3</sup> SPECIAL EDGE FINISHES AND A HEIGHT GAUGE (WINTER EDITION)
- <sup>4</sup> AN ULTRASONIC HEIGHT GAUGE
- <sup>5</sup> A GAS-TIGHTNESS TEST

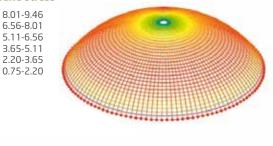
#### **Advantages**

- <sup>1</sup> GAS STORAGE VOLUME AT Ø 25M IS ABOUT 230% LARGER THAN IN CONVENTIONAL DESIGNS
- <sup>2</sup> LOWER MEMBRANE FOIL HAS 35% LOWER GAS PERMEABILITY
- <sup>3</sup> EASY ACCESSIBILITY FOR MAINTENANCE AND OVERHAUL ACTIVITIES
- <sup>4</sup> LOWER SILO LOAD DUE TO HEMISPHERICAL CONSTRUCTION
  <sup>5</sup> LOW WIND SENSITIVITY AND LOWER CHANCE OF SNOW
- ACCUMULATION DUE TO STABLE CONSTRUCTION NO CONDENSED, CORROSIVE LIQUID ON THE SILO WALLS

#### **Applications**

- > COVER AND GAS COLLECTION IN BIOGAS INSTALLATIONS.
- > COVER AND GAS COLLECTION IN WATER TREATMENT INSTALLATIONS.







AB COVER WITH AND WITHOUT SILO ISOLATION

LASHING STRAP

MEASURING DEVICE

7000

THE WIEFFERINK GROUP WORKS WITH FLEXIBLE FOIL AND SUPPLIES PRODUCTS AND SERVICES RELATING TO STORAGE AND COVERING SOLUTIONS. WE ARE WIDELY ACTIVE IN THE ENVIRONMENTAL AND BIOGAS BRANCHES.

## **The Wiefferink Group**

Thanks to more than 50 years experience working with flexible foils, we have acquired unprecedented know-how of complex storage and covering issues. That is why our products, techniques and processes are so reliable.

#### **Highest quality**

We strive for top quality in everything we do. Wiefferink is a modern, industrial foil processor with KIWA, KOMO, VCA and ISO 9001:2008 certifications. We have the most advanced production methods at our disposal; modern thermal and high-frequency welding equipment, CNC cutting technology, our own laboratory, testing facilities and quality protocols ensure the high quality standard of our products. We deliver that top quality together with the unrivalled enthusiasm of our specialised employees.

#### **Continuous development**

Wiefferink applies the most modern production technologies and continuously develops its products. With the input of our clients, the newest techniques and innovations, we raise our products to an ever higher standard of quality.



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