

Genap

waterproof solutions

the specialist

for waterproof solutions



Genatop silo cover

a household name in

roof-covering structures

Genap is a reliable partner in roof-covering structures to combat odour emissions, rain penetration or to achieve a higher storage capacity.

Operating from 's-Heerenberg (situated in the Dutch province of Gelderland), we provide customisation in the field of foil structures and rely on more than 60 years of experience to realise your *waterproof* solution. We have in-house engineers at our disposal. In addition, we manufacture and install silo coverings under our own management. We only use high-quality materials for the production of our silo covers. This applies to both the **Genatex® foils** and the supporting materials. Our foils offer the best possible properties in terms of physical values, fertilizer resistance and UV resistance. As a rule, the welding seams are welded using high-frequency (HF) equipment.

Roof-covering structures can be applied to any preferable type of tank, ranging from small to large, auto-revolving, circular, square or rectangular. By opting for **Genatex® foils**, you benefit from an effective solution against odour emissions and protection against weather conditions. The foil is highly flexible, issue-reinforced, durable and easy to process. Depending on your requirements, we suggest a type of foil. This will be the most suitable foil for the application, i.e. customisation! For example, as a principle, only KIWA-certified foils are used for fertilizer storage. Another principle is that in the drinking water industry only foils are used that have been drinking water-certified. Our silo covers are perfectly suited for roofing over manure silos, sewage purification systems owned by water boards, wastewater purification plants and sewage treatment plants, as well as in food-processing and for industrial applications.

An overview of some of the advantages of silo covers:

- Professional appearance and odour-reducing roof-covering
- Lightweight roof structure
- Easy to assemble and disassemble if necessary
- Any design realised according to preference
- Safety provided by using foil cover in the event of excessive pressure and explosion
- Thanks to the self-supporting sub-structure, well-suited to install as a revolving cover on existing tanks and silos
- Strong and solid structure
- Trailing lines for adverse weather conditions
- Multiple manholes possible

Application areas:

- Roof-covering structures for new and existing sewage treatment construction projects
- Industrial applications
- Tensioned structures
- Fertilizer storage
- Biogas roof-covering structures
- Food-processing industry
- Etc.

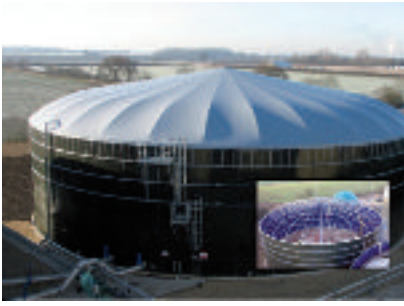
Genatop

For our silo covers that are fitted with a sub-structure, we opt for stainless steel 316, as the steel often needs to be H₂S-resistant. H₂S is a hazardous gas that is converted into sulphuric acid (H₂SO₄) and emits an unpleasant smell (rotten eggs). The smell can be detected quickly, under 0.1 PPM and the MAC value is also very low at 1.6 PPM.



Our Genatop!

Silo covers supported by a steel structure



A fully closed roof-covering structure prevents odour nuisance for local residents and protects your own staff against exposure to H₂S gas.

This type of cover can be used in combination with both new and existing silos and can either be static or auto-revolving.

In this roof structure, the stainless steel 316 trusses convert the silo cover into a self-supporting structure. The trusses provide increased stability in more extreme situations too, such as strong winds and snow loads combined with rain, glazed frost and when thaw sets in. This roof structure is flame-free should the roof succumb or come loose. This roof

structure makes it possible to realise a connection with other steel structures, such as platforms and bridges. Access to the silo can be achieved in a variety of ways.

A random selection from our references:

- Sewage Treatment Plant Tiel ø 38m
 - Sewage Treatment Plant Eerbeek ø 36m
 - Sewage Treatment Plant ø 35m
 - Sewage Treatment Plant Elburg ø 28.5m
 - Sewage Treatment Plant Meppel ø 35m
 - Sewage Treatment Plant Harderwijk ø 35m
- 50 wastewater purification plant roof-covering structures
 - 150 covers in the fertilization sector.

Our Airhat!

Air-supported silo covers without physical support

The **Airhat** is a cover made from high-quality, waterproof, reinforced, KIWA-certified PVC foil. This foil is high temperature and UV-resistant.

The cover is connected to a steel ring which is mounted at the top of the silo. Once the Airhat is mounted, it is inflated by means of a small ventilator that consumes power comparable to a 150W light bulb. Once fully pressurised, the Airhat forms a spherical cover that offers perfect protection against precipitation.

- Increased storage capacity
- Prevents mixing with rainwater
- Reduces the loss of ammonia
- Reduces odour nuisance
- Maximum diameter of 26 metres
- And most important of all, the Airhat fits every existing steel or concrete fertilizer silo without modifying the silo.



Our GenaSpan!

Silo covers in the form of a tensioned structure with a centre column



A tensioned structure is an excellent method for covering silos. This cover can be used for steel, concrete and wooden silos. The materials used are resistant to fertilizer, clean and contaminated water, sludge etc. The standard colour is grey, but the tensile structure is also available in green upon request. Tensile structures are made of high-quality, reinforced, KIWA-certified PVC foil of 850 gr/m².

The centre column is made of hardwood or on request of concrete steel. The ratchets used to tension the structure are stainless steel. The flounce tube has been galvanized. The tensile cover benefits from a KIWA suitability certificate for manure basins; number K55382.

The tensile cover is produced and installed in accordance with the BRM and Euro-standard guidelines.

Innovation: Genap foil structures offer numerous, invisible options

In addition to the roof-covering structures, we supply foil structures for a wide range of applications. We supply comprehensive storage systems, both basins and fully closed systems, for water storage, fertilizer and other liquids. Various, waterproof foil structures are applied in the groundwork, road and hydraulic engineering sectors and the environmental sector.

Thanks to our Research & Development department, we are able to develop new applications. Working with the customer, searching for creative solutions and providing customised solutions are both a must and a challenge to us.

Quality management:

Genap B.V. has a quality management system that complies with KIWA, NEN-EN-ISO 9001:2008. All our engineers are SCC-certified.

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