Flexible tanks

Our strengths = Your Guarantee

Extra customer support

Bio-energy & construction

Product Highlights

Biogas containers

Manure containment

Food

Stables construction & fences

Heavy duty (machine) protection

Oilbooms
WELCOME TO THE WORLD OF AGRICULTURE AND FOOD
Sioen developed a range of technical membranes which are excellently suited for use in both the agricultural and food industry. State-of-the-art production technology hand in hand with the most stringent quality control results in a top quality product with an extremely long lifespan. We have over 50 years of experience in technical textiles for:

- Biogas containers
- Manure containment
- Flexible tanks for water, wine, oil, grease, liquid fertilizer,…
- Heavy duty machine protection
- Oil booms
- Stables construction
OUR STRENGTHS = YOUR GUARANTEE

Our technical know-how

Our intensive R&D and expertise

Our team

The multilingual Sioen staff is known for its hands-on mentality. Besides being fast and cost-conscious, they always strive for a customized solution in a helpful and friendly way. Our customers always come in first place.
Our large product portfolio

We offer a large range of products, colours and widths.

Our state of the art production plants

Our financial health

We are part of a strong international stock quoted group, Sioen Industries nv. The solid structures and sound financial basis make us a reliable partner.
Our service

Speed, performance, diligence, dedication

Our focus on solutions

Finding your tailor made solution is the result of interaction between our customers, our suppliers and our R&D team. Providing you with answers is the first step towards a solution.

Our product quality

- We stand for a high quality level.
- We continuously invest in new machines and equipment which gives us a competitive edge over the competition.
- Your feedback is an active source to further fine tune our qualities.
Our 50 years of experience
We provide concepts and solutions

For every request we try to find the right solution. Together with our engineers, product managers, market specialists and researchers, we put a lot of effort in finding and producing the right product that fits your needs. The sales team is available from Monday until Friday from 8 until 18 hours.
Tel: 0032 51/740.900 - e-mail: sioline@sioen.be

We offer support in product/ market development

Please feel free to contact us in case you wish to further explore new markets or develop new products. info@sioen.be

We offer marketing support

In the separate leaflet ‘SUPPORT’, you will find the complete overview of our sales support items: extra training, brochures and displays.

We provide training

At our Ardooie headquarters, we boast a 8.000 m² showroom. It is the place to see new products, to get to meet the team and to make you more familiarised with the technicity of our products.
Apart from meeting again with your designated sales manager and appropriate sales assistant, it gives you the opportunity to become more acquainted with the Sioen people behind the scenes (quality, R&D, logistics, marketing,...).
Sioen developed a range of technical membranes which are excellently suited for use in both the agricultural and food industry. State-of-the-art production technology hand in hand with the most stringent quality control results in a top quality product with an extremely long lifespan. We have over 50 years of experience in technical textiles for:

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Sioen developed a range of technical membranes for silos containing non-greasy biomass and greasy waste (like slaughter waste, dung, orange scraps, peanut scraps, corn ...).

Our technical membrane is the ideal shelter for an aerobic fermentation and is resistant to methane, water, hydrogen, carbon monoxide, carbon dioxide, mercaptanes, sulphides and ammonia.

Sioen offers you a wide range of different membranes in various widths and strengths according to the engineering parameters of your specific project and the type of biomass.
Biogas installations

A biogas installation is an installation where ‘biogas’ is generated and transformed into energy and heat.

Biogas typically refers to a (biofuel) gas produced by the anaerobic digestion or fermentation of organic matter including manure, sewage sludge, municipal solid waste, biodegradable waste or any other biodegradable feedstock. Biogas is comprised primarily of methane and carbon dioxide.

The gas produced is then burnt in a gas turbine by which electricity and heat are created.

In most biogas installations the digestion tanks are covered with two gas tight membranes. Depending on the nature of the feedstock, SIOEN makes a distinction between:

- Membranes suitable for greasy feedstocks as slaughter waste, soy bean scraps etc.
- Membranes with an excellent hydrolytic resistance for all kinds of wastes, even acid or alkaline.

One of the concepts of such a biogas installation is schematically shown in the diagram below:

1. Fermentation tank for all kinds of waste such as pig manure, slaughter waste, sewage sludge, vegetable feedstocks...
2. Buffer tank for gas storage
3. Compressor
4. Filter
5. Gas turbine
6. Electrical energy
7. Cold water
8. Hot water
“WORKING TOGETHER TO UNLOCK THE POTENTIAL OF ALGAE BASED FUEL”
General characteristics of our biogas range

<table>
<thead>
<tr>
<th>Excellent hydrolytic resistance</th>
<th>Excellent chemical resistance</th>
<th>Fabric reinforcement protection thanks to custom designed coatings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suitable for flexitanks and digestion tanks</td>
<td>Excellent weathering resistance</td>
<td>Flexibility guaranteed even after extreme long contact with aggressive chemicals</td>
</tr>
<tr>
<td>High weld strength</td>
<td>Extremely long lifespan, UV stability of up to 10 years and longer</td>
<td>Extreme tear proof both in weft and warp</td>
</tr>
<tr>
<td>Resistant to acids and other chemicals, rot-proof and fungus-free</td>
<td>Reliable in windy conditions</td>
<td>Different colors</td>
</tr>
</tbody>
</table>
Types of Biogas installations:

SINGLE MEMBRANE

1. Fermentation tank/reactor
2. Membrane
3. Fermentation

DOUBLE MEMBRANE

1. Fermentation tank/reactor
2. Fixed outer membrane
3. Inner membrane (the “lung”)
4. Fermentation

It is recommended to always work with qualified structural engineers.
Membranes for Biogas containers

SIOEN SOLUTIONS

Sioen offers you a wide range of different membranes in various widths and strengths according to the engineering parameters of your specific project and the type of biomass.

Overview

<table>
<thead>
<tr>
<th></th>
<th>TYPE I</th>
<th>TYPE II</th>
<th>TYPE III</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>non flame retardant</td>
<td>flame retardant</td>
<td>non flame retardant</td>
</tr>
<tr>
<td>hydrolytic resistant</td>
<td>B9070</td>
<td>B9160</td>
<td>B6070 B6061(^\text{New})</td>
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<tr>
<td></td>
<td>900 g/m²</td>
<td>900 g/m²</td>
<td>1150 g/m²</td>
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<tr>
<td>grease resistant</td>
<td>B9899</td>
<td>B9189</td>
<td>B6899 B6199</td>
</tr>
<tr>
<td></td>
<td>900 g/m²</td>
<td>900 g/m²</td>
<td>1150 g/m²</td>
</tr>
</tbody>
</table>

All types are dull lacquered to ensure a weldable, dirt repellent and chemical resistant fabric.
Sioen manure membranes will help you with all of our manure storage needs. Since many years we have been producing manure storage membranes for livestock and dairy farmers. Sioen stands for high quality products and an efficient production process and has an international reputation when it comes to reliability and technical know how.
**Liners**

**ABOVE AND IN THE GROUND STORAGE:**
Kiwa certified B6060

1. Reservoir
2. Sioen liner
3. Manure

**STABILIZED IN THE GROUND:**
Kiwa certified B6060

1. Sioen liner
2. Manure
3. Stabiliser

**IN GROUND LINER:**
Kiwa certified B6060

**Covers**

**FLOATING COVERS:**
Kiwa certified B6060

1. Floats
2. Sioen cover

**SUPPORTED COVERS**

1. Supporting pole
2. Sioen cover

**TENSIONED**
- Kiwa certified B6060
- S6000 with special grease resistant formula

**BRACED**
- Kiwa certified B9060

**Bags**

**BAG**
Kiwa certified B6060

1. Sioen manure bag
2. Manure
Sioen produces durable technical textiles for various kinds of liquid storage and transportation. Different materials are food approved and comply to the most stringent standards and regulations (see certificates per quality). The solid seam strength of the fabric is the result of excellent welding properties.

For any application we have a solution:

- Grease and oil resistant
- Water
- Non harmful substances
- Food
- Liquid artificial fertilizer
- wine residues
- milk washing residues
- dunger
Overview

Flexitanks offer a versatile and economical way of temporary and permanent storage of many sorts of liquids. As contents compatibility is of the utmost importance, the PVC formulation needs to be both very resistant and geared towards the content of the tank. That is exactly what Sioen membranes offer.

<table>
<thead>
<tr>
<th>QUALITY</th>
<th>COLOR</th>
<th>WIDTH</th>
<th>APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1550</td>
<td>7259</td>
<td>250</td>
<td>NS -Min. 3500 lm</td>
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<tr>
<td>B6300</td>
<td>1695</td>
<td>265</td>
<td>S</td>
</tr>
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<td>7291</td>
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<td>B6306</td>
<td>1695</td>
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<td>7264</td>
<td>300</td>
<td>S</td>
</tr>
<tr>
<td>B6061</td>
<td>7264</td>
<td>300</td>
<td>S</td>
</tr>
</tbody>
</table>

Produced with Sioen Siofil yarns and provide the highest resistance

Ultra-modern in-house weaving technology

Coated with the best polymers

High tear proof, both in weft and in warp

Extremely long lifespan, UV stability of up to 10 years and longer

Resistant to acids and other chemicals, rot-proof and fungus-free
We have developed a range of technical textiles that can be used for the packaging and covering of aqueous foods having a pH > 4.5. The food spectrum is very wide: from dry food such as vegetables and whole fruits to drinking water and non-alcoholic beverages.

Our experience and expertise of over half a century enables us to create the best solution for any type of packaging, covering and transportation of food and liquids.

Please also check the “FLEXIBLE CONTAINERS” section of this catalogue (p.22) and ask for our separate sample book. The sample book will guide you through a vast range of flexitank technical textiles for both temporary and permanent liquid storage.
Sioen offers a range of security heavy duty membranes for machine protection. The heavy duty fabric is used as a protection against knives, cutter bars, blades and debris thrown by rotating disks and prevents operator or bystanders from being injured.
Another example of our recent developments is our technical textile collection for fencing, construction of stables and facade cover. The facade cover market being a typical made-to-order market, we show some samples of recent projects. Our R&D and sales team however, is at your entire disposal for turning your personal ideas into your customized facade cover.

Our mesh quality is an open and solid woven scrim fabric dip coated just when it comes off the weaving loom. This same mesh, coated with a transparent PVC on either side, has become the reference when it comes to fabrics for the construction of stables.
Our range of technical textiles also includes products for oil dams, rigs and booms. Our intensive R&D efforts have resulted in a solid, oil and grease resistant fabric with a high tear strength, easily to convert.

For high end applications such as the permanent protection of oil rigs and platforms, we have developed a PVC/PU coated polyester high tenacity fabric (E1200).
For further information, please contact our sales team.