# FLEXXOLUTIONS

FLEXXOMAT N



ABOUT US
MILESTONES
MISSION
OUR FOCUS
MARKET - GOAL - PASSION
CALCULATE & SIMULATE
QUALITY & TESTS
FLEXXOMAT

MARKETS & APPLICATIONS .....

MAT FOR INTERNAL TRANSPORT	8
CHARACTERISTICS	9
MAT FOR PERSONS	10
CHARACTERISTICS	11
COMPLETE UNBURDENING CLEANING & ACCESSORIES	12 13
DOSING PUMPS	14
PROJECTS & FLEXIBLE SOLUTIONS	15

#### A BRIEF HISTORY OF FLEXXOLUTIONS

The following is a brief description of how Flexxolutions has grown over the years. The most important milestones can be found here.

### KIWA-CERTIFICATES

Since 2013 we have KIWA-KOMO certificates for silo roofs and manure bags and a KIWA process certificate for PVC foil.



#### ISO 9001

Flexxolutions receives the ISO 9001:2015 quality certificate. The international standard for quality management systems.

2016

#### SOLAR PANELS

With an increased focus on sustainability and the environment, 382 solar panels were installed on the rooftop of the office in Oldenzaal.

2019

#### FLEXXOLUTIONS IN BRIEF

2

3

Flexxolutions has many years of experience in innovative and customer-specific engineering, production and assembly of cover and storage systems for gases, liquids and solids and disinfection solutions made of technical textiles. We are driven by our passion for innovation and want to deliver the best quality.



#### **SALES**

Our own experienced sales managers advise you on the best solution to a problem or challenge. Our agents know the local market well on site. Together we know how to translate customer-specific requirements and wishes into a high-quality product.



#### **ENGINEERING**

Our engineering department uses high-quality 3D CAD design programs such as SolidWorks to efficiently engineer our products to customer specifications. The products are custom made and designed according to the wishes of the customer, which makes each project unique.



#### **PRODUCTION**

We have all the necessary production techniques in terms of manufacturing (CADCAM - CNC cutting) and welding (high frequency, thermal and ultrasonic) in-house. As we have all these disciplines in-house, we can guarantee the quality delivered and develop and produce your system in the shortest possible time. We are also certified as a KIWA, ISO and WHG-specialised company.



#### **ASSEMBLY**

Flexxolutions has its own assembly teams with specially trained mechanics who have many years of experience. In order to keep abreast of the latest assembly techniques and safety measures, our mechanics are educated and trained annually. We only work with our own teams in order to guarantee the best guality.

2012

#### FOUNDATION

The four founders of Flexxolutions came together in 2012 with the passion to create an innovative company in technical textiles.



2013

### 2014

#### TECHNOLOGY-AWAF

The ultimate winner!
The jury found that we have developed the best platform technology, which we successfully apply in various products and markets.

### 2016

#### MOV

Due to growth and success, the production facility moves to a new, sustainable hall with more capacity in Bad Bentheim, Germany and the office moves to a more spacious premises in Oldenzaal.



To be the **best** and most **innovative** supplier of **technical textiles** products for customers in **Europe**!







**OUR FOCUS OUALITY & TESTS** 



#### MARKET

Our technical textile products are used in many markets. We offer amongst others the agricultural industry solutions like cover and storage systems. Furthermore, we are also socially involved. We have set up a WASH-program for drinking water, sanitation and hygiene solutions in for instance refugee camps.



GOAL

We want to deliver the best product to the customer. We believe that the quality of the product is optimally guaranteed by keeping the entire business chain under our own management. Only the best materials are used in our products and processes, from purchase to delivery. This enables us to deliver the best quality in the shortest possible time!



Innovation is our passion! Every day we develope new products and improve our current products. All products are part of the 'Flexxofamily'. The name of a product always starts with 'Flexxo', this way the innovative products of Flexxolutions are easily recognisable everywhere!

In order to provide our **market** with the right solutions, achieve our goal and to innovate with passion, we test a lot. And that results in the best possible quality!



PASSION

ENTRY CONTROL

All foils are subjected to a

quality test. Several tensile

tests are carried out to

ensure that the film has the

correct strenath.

to the quality standard ISO 9001:2015. We are also certified as a WHG specialist company.

When welding foil, it is crucial that the coating of both layers adheres well. Test welds are carried out for each new project.

#### CHEMICAL TEST

We have over 50 jars with different types of foil and components that are tested for chemical resistance.

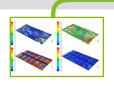
#### TENSILE TESTING

In addition to the tensile testing machine in our laboratory, we have two other tensile testing machines. The largest tensile tester is pictured here and is used for testing full size components.

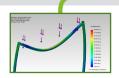




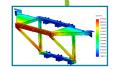




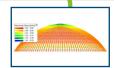
**MIXING SIMULATIONS** For the Flexxobag



BENDING **SIMULATIONS** For the Flexxosilo



FORCE CALCULATIONS ON INNOVATIONS At the design stage



FORCE CALCULATI-ONS COVER For the Flexxodomer

#### **CALCULATE & SIMULATE**

In order to achieve the best quality, we calculate, simulate and test all materials, products and production and assembly methods. First and foremost, all products and new developments are subjected to simulations. This so we can see whether a product is capable of distributing certain forces correctly. Partly thanks to these extensive simulations, we know where extra protection or reinforcement is needed. Extra protection is applied to these areas in order to extend and ensure it's life span as long as possible.



TEST FLEXXOVALVE Our four types of over-/ underpressure valves were also extensively tested on a self-built test

bench for set pressures and realised flow rates.



THE BEST PRODUCTS For us, quality is the common thread that runs through our entire company. Flexxolutions strives to be the best supplier by delivering the best quality technical textile products. After the calculation and simulation phase, all our materials, products and production and assembly methods are regularly tested to ensure the best quality. Through these tests we ensure that our incoming materials meet the requirements, new developments are well

designed and our assembly methods meet the desired quality. Every morning we start with test welds in production

and regularly we set up test rigs to test new or existing products. Why? To ensure that we can deliver the best

quality. With good reason it therefor is, that one of our technicians' favourite sayings internally is; 'Measurement is

knowledge!' For the production of textile systems, we are certified by KIWA according to K73883 and also according

#### TEST OPERATING OPENING

After a new, theoretical design is finished and simulated, we build the design in full size. Then various tests are carried out, such as tensile tests or long-term tests. Often together with students from the Saxion Hogeschool or the University of Twente.



ASSEMBLY TEST

Outside, near the factory, there are some test benches where we can simulate real situations and test our methods well.

#### SUITABLE FOR MANY MARKETS & APPLICATIONS

The Flexxomat is very well suited for various markets. In the food industry, the Flexxomat can contribute to better food safety, in (greenhouse) horticulture or livestock farming, the mat is excellent for disinfecting (internal) means of transport and in laboratories and hospitals, the mat is very suitable for disinfecting the soles of employees' shoes. In short, the Flexxomat offers protection against the introduction of pathogenic microorganisms and their possible consequences in risk and high-care zones in various organisations.

FOOD INDUSTRY



HORTICULTURE



**LABORATORIES** 



HOSPITALS



PERSONS



**INTERNAL TRANSPORT** 

#### **FUNCTIONING**

**FLEXXOMAT** 

Our Flexxomat disinfection mat is the practical solution against the spread of dangerous microorganisms in places where crops grow and food is produced or packaged. The mat disinfects everything that comes into contact with it, from forklift and trolley wheels to the soles of employees' shoes. The unique, patented design ensures easy installation and the ability to move the mat when needed. The stainless steel used in the disinfection mat ensures that the mat stays in the desired position. The

Through an internal liquid distribution tunnel, the absorbent filling can be supplied with disinfectant. This agent then leaks out through the upper deck when it comes into contact with soles or wheels. The tunnel can also be used to clean the mat from the inside!



Flexxomat is available in both standard and custom sizes.

#### COMPLETE LINELIDDENING

Depending on requirements, the Flexxomat can be filled fully automatically because of sensors in the mat and a sensor controlled pump.



#### HYGIEN

Better protection against the introduction of microorganisms and their possible consequences in high-risk and high-care areas.



#### IN POSITION!

The patented design keeps the mat in place without the need for drilling or securing.

- √ Ideal for ensuring excellent hygiene;
- ✓ The absorbent liquid core and the semi-permeable upper deck ensure the least possible evaporation of the expensive disinfectant;
- √ The quality of the Flexxomat is guaranteed by in-house design and production;
- ✓ Almost any non-aggressive disinfectant is suitable for the Flexxomat.

### **CHARACTERISTICS**



#### UNIQUE CHARACTERISTICS

- √ Suitable for various types of internal transport;
- √Can be filled manually, semi-automatically or automatically;
- √ The absorbent liquid core and semi-permeable top deck ensureS minimal evaporation of expensive disinfectant;
  - √ Never again a dry mat;
  - √ Virtually insensitive to curling due to internal stabilising plates;
    - ✓ Stays in place, but also can be easily moved;
  - ✓ Guaranteed quality through in-house design and production;
  - ✓ Available in standard sizes 221 \* 100 / 221 \* 200 and 221 \* 300 cm.



Ideal for ensuring exquisite hygiene



Protects against the risk of entry of pathogenic microorganisms

#### FLEXXOMAT T

The Flexxomat T is the practical solution against the spread of dangerous microorganisms and their possible consequences for people and transport in medicine, the food industry and agriculture. This disinfection mat disinfects everything that comes into contact with it, from forklift and trolley wheels to the soles of employees' shoes. In places where many people gather, such as hospitals, events, trade fairs and airports, the mat can be used very effectively. For example, the disinfection mat has been placed at the visitors' entrance and at the entrance to the emergency room of a hospital. The mat is suitable for people (footwear), wheelchairs, beds and other portables and must therefore not be too thick. With its 8 mm thickness, the Flexxomat T completely fulfils this requirement.

#### **FFFECTIVE & FFFICIENT**

The Flexxomat T is unique and can be used for various types of (internal) transport, whereby the mat does not need to be fixed to the floor due to its innovative design and reinforcements (patented). For effective and disinfectant-efficient use, but also for good cleaning, the Flexxomat T can be equipped with an internal liquid distribution tunnel. The mat can then be connected to a dosing pump via an external hose connection (to supply disinfectant or to clean with water). This ensures that the disinfectant liquid in the mat always remains at the correct level.



DESINIFE

ς,

MAT FOR PERSONS CHARACTERISTICS



The Flexxomat P disinfection mat is the preventive hygiene solution for personal traffic in the food industry, greenhouse horticulture, agriculture and laboratories. Within the framework of quality management systems such as HACCP, IFS, BRC, GSPP ISO 22000 etc., high-risk and high-care areas of production facilities can be better protected against the entry of micro-organisms and their consequences. For good cleaning and effective, efficient use, the Flexxomat P can be equipped with an internal liquid distribution tunnel. This is the PT variant. The mat can be connected via an external hose connection to a dosing pump for automatic filling with disinfectant or for cleaning the mat. A dry mat at unwanted moments is thus a thing of the past and effective use is guaranteed.

The Flexxomat is available in both standardised and customised dimensions. In addition, various accessories are available that make the Flexxomat even easier to use. For example, the Flexxomat can be extended with the Flexxotrolley. This is a plug & play mobile filling station, equipped with a perristaltic pump, a venturi pump or a Dosatron, a dosing container for deinfectant solution and a hand-desinfection can holder. Together with the Flexxomat, a very compatible hygiene station is created.





MANUAL

SEMI-AUTOMATIC

#### UNIQUE CHARACTERISTICS

- ✓ Can be filled manually or semi-automatically;
- ✓ The absorbent liquid core and the semi-permeable top deck ensure the least possible evaporation of valuable disinfectant. The automatic filling ensures efficient use of the disinfectant. The function of the mat is guaranteed. No more dry mat;
- ✓ The mat is resistant to the most common disinfectants. This means that you can usually use your own disinfectant;
- ✓ The quality of the Flexxomat is guaranteed by in-house design and production;

√ Available in standard sizes 90 \* 90 / 90 \* 180 and 180 \* 180 cm

- ✓ In combination with some accessories, the Flexxomat can be operated fully automatically. These accessories ensure that the disinfection mat is refilled constantly without you having to think about it;
- ✓ Our many years of experience in the production of the Flexxomat ensure that we know all the special features and can advise you optimally in your particular situation;



HIGHENE





#### MANUAL

The Flexxomat has several refill options. Basically, the mat is manually refilled with disinfectant.



#### SEMI AUTOMATIC

The Flexxomat has a liquid distribution tunnel and a pump that refills the disinfectant at set intervals.



#### **AUTOMATIC**

The fully automatic version takes care of everything. With the help of sensors, the mat is refilled with disinfectant at the right moment.

For a good hygiene result, it is important to clean the disinfection mats regularly. If there is a lot of dirt on the mat, the mat may not come into contact with the surfaces that needs to be disinfected. Or the desinfectant's effectiveness may be compromised by contact with organic dirt. One of the reasons why the Flexxomat has so many satisfied users is that it is easy to clean. The liquid tunnel in the Flexxomat can be connected to a water connection or a disinfection tank with pump, which rinses the mat with water or disinfectant that comes back up through the top deck. Afterwards, the water and dirt can simply be removed from the mat with a floor mop.

#### COMPLETE CARE

Would you like to do something against the spread of dangerous microorganisms and do you want the filling of the disinfection mat to be guaranteed and ensured at all times? Then we have the solution for you! The Flexxomat TT-C works fully automatically and is equipped with an internal liquid distribution tunnel and unique conductivity sensors. In combination with the monitoring Flexxopomp, the mat is filled fully automatically. The fully automatic filling of the mat guarantees uninterrupted operation and prevents the waste of expensive disinfectant. The internal liquid distribution tunnel also offers the possibility to effectively clean the disinfection mat from the inside (pump-controlled rinsing with clean water or disinfectant).



### FLEXXOTROLLEY

Various accessories are available for even more easy use of the Flexxomat. For example, you can expand the Flexxomat with a mobile unit. This unit has a stainless steel dosing plate to which a Flexxopomp or Flexxoturi can be connected, a container for (diluted) disinfectant and a soap holder with which a complete disinfection station can be created. The Flexxotrolley is a mobile disinfection device that can be used in combination with the Flexxomat.

- ✓ Optional: holder for hand disinfection dispenser;
- Easily movable for cleaning the workplace;
- ✓ Large loading area for liquid container with stable lashing strap attachment;
- ✓ Dimensions +/- H 1300 x W 550 x D 750 mm (with attached dispensing container);
- ✓ Plug & Play! Only a power and water connection or a water connection is required;
- ✓ Flexible use. Ideal for knowledge institutes & seed growers with small growing areas, open days and growing rounds or for mechanical work in the greenhouse.

DOSING PUMPS DID YOU KNOW...?

#### ACCOMPANYING DOSING PUMPS



# FLEXXOTURI WITH WATER TIMER

The Flexxoturi is a waterpowered venturi pump that draws the correct ratio (set %) of disinfectant concentrate from the Flexxocontainer along with the water and pumps the diluted disinfectant onto the mat.



## FLEXXOTRON WITH WATER TIMER

The Flexxotron is a waterpowered Dosatron pump that draws the correct ratio of disinfectant concentrate from the Flexxocontainer with the water and pumps the diluted disinfectant to the mat.



#### FLEXXOPOMP WITH TIMER

The Flexxopomp is an electric pump that pumps diluted disinfectant from the Flexxocontainer into the mat through peristaltic movements of the hose. This pump is controlled by a timer.



# FLEXXOPOMP C FOR THE FLEXXOMAT TT-C.

The Flexxopomp C is especially designed for the Flexxomat TT-C and ensures sensor-controlled filling. Sensors in the mat detect when disinfectant fluid is to be administered by the Flexxopump.



#### **OUR PROJECTS**

The map above shows where Flexxolutions has left its footprint and there are many! Not only in Europe, but also worldwide we realise beautiful and special projects.



This is what we and our name stand for; the flexibility with which we deliver our solutions. For us, the customer's requirements come first, and for each project we adapt our basic designs, production and assembly optimally to meet these requirements. This flexibility is characteristic for us and is therefore reflected in our logo and name. The characteristic symbol with a double XX between two arches can be found on our Flexxo-products. The arch above the XX symbolises our covers and roofs. The arch below the XX symbolises the disinfection mat. The combination of the upper and lower arches stands for our innovative storage products.

# DESINIBULK CTION

According to the BLVK, the German Federal Association of Food Inspectors, the Flexxomat T-range of disinfection mats can offer a major contribution to optimising basic hygiene and food safety.









For detailed specifications or questions, please visit our website or call one of our sales managers!