

FLEXIBLE STORAGE EFFLUENTS



Storage of cattle slurry after phase separation • 800 m³ • FRANCE

Looking for a proven solution to manage your effluents quickly and with complete peace of mind?

Choose a Labaronne-Citaf flexible tank!

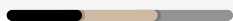
In order to store your effluents so as to be able to reuse them at the right time and in the right place, you need to choose a storage solution that complies with the regulations in force.

To protect the environment, the reuse of effluents is also subject to certain rules.

In Europe, the Nitrates Directive establishes the framework of **obligations concerning effluent storage**, setting out minimum storage periods and other obligations, such as covering slurry pits.

In the rest of the world, countries are becoming increasingly aware of the need to protect environment and are gradually adopting **new measures** concerning the storage of these liquids.

For more than 60 years, Labaronne-Citaf - the inventor of the flexible tank - has been manufacturing and marketing storage solutions **for agricultural or industrial effluents**, in order to help you comply with the regulations in force and **bring your farm or facility into line** with applicable standards.





FLEXIBLE TANK EFFLUENTS

Store your effluent
in a reliable
and secure way.



BENEFITS

› A technical fabric dedicated to effluent storage

For the manufacture of our flexible effluent tanks, we have selected **a fabric specifically developed** to last over time and resist the aggressive and fermentable characteristics of effluents.

This fabric has many technical features:

- **KIWA certification**, issued by an independent laboratory, certifying that our technical fabric is compatible with effluent storage.
- **High mechanical resistance** for long-term storage of effluents.
- **Anti-fungal treatment**, protecting the technical fabric against the development of micro-organisms on the surface.
- **Reinforced two-sided UV treatment** to protect the fabric from the aggression of UV rays, which alter the resistance of the technical fabric.
- **Double-sided lacquering**, an additional treatment that protects:
 - from all contact aggressions between the coating and the stored liquid,
 - from discolouration and degradation caused by UV rays on the fabric.
- **Perfect sealing**, with impermeability that avoids the risk of leakage and reducing odour nuisance.

› Technical support for your project

Rely on our **technical sales department** and our **design office** to advise you on your storage capacities or stirring techniques.

Each year, **200 farms benefit from their experience** to carry out their effluent storage projects **in the long term**.

› Safe & economical storage

Choose flexible storage, a solution that is **six times less expensive than a rigid tank**.

The flexible tank **limits odour nuisance**, insect proliferation, **contamination or dilution of the stored liquid** and no risk of falling into the tank.

In addition, our flexible tanks **meet the legal requirements** for the **protection of the environment**.



A RECOGNISED BRAND THAT MAKES THE DIFFERENCE!

15,000+
flexible
effluents tanks
sold worldwide

LIFE SPAN
of our tanks
equal to
15 YEARS
on average

25
YEARS'
experience
on this application





STORAGE

In order to store your effluent in the best possible conditions, it must be **screened, degreased and pumpable**. Make sure you remove as many dry particles and as much fat as you can, so that the effluent is as liquid as possible and easy to pump.

TYPES OF EFFLUENT THAT CAN BE STORED IN LABARONNE-CITAF FLEXIBLE TANKS

	STORABLE	NOT STORABLE	SUBJECT TO APPROVAL*
Farm effluents (dryness ≤ 6%) <i>Slurry, liquid manure, green waters, brown waters, vineyard and wine-production effluents</i>	✓		
Silage juices			✓
Digestates (dryness ≤ 6%)	✓		
Olive residues		✓	
Vegetable oils		✓	
Organic fertiliser			✓
Leachates			✓
Sewage sludge	✓		
Waste water	✓		
Fire extinction water			✓
Whey			✓
Stillage, molasses			✓

* Our design office must first analyse the specific characteristics of your effluent in order to advise you.



Expert Advice



Can you store greasy effluents in a flexible tank?

Some effluents, such as whey or water from dairy facilities, may be naturally greasier than other types of effluents that are stored in our tanks. It is therefore important to ask the design office for advice about storing these types of liquid, as **this type of fat can cause the tank to deteriorate** over time by attacking the technical fabric.

To maximise the life-span of your flexible tank, **we also recommend that you install hatches** on the top of the tank to collect and remove the fat that is in contact with the fabric.

Please contact our experts for more information about greasy effluent storage.



EQUIPMENT

Our standard equipment kits* have been designed to **meet the different needs** our customers may have and thereby **facilitating the operation** of their effluent tanks. Choose your kit according to the type of inlet system you prefer and the required volume, then tailor it to your specific project needs with our optional equipment.

All our tanks are supplied with a **repair kit** and **detailed instructions** on how to install and assemble the equipment.

** Equipment kits available with symmetrical, Storz or Camlock couplings.

DID YOU KNOW?

Gravity filling:

the tank is installed at a lower level and the liquid flows into it without needing to use a pump.

Pump filling:

the tank is installed at ground level or on a raised area and the liquid is injected inside with a pump.

Industrial effluents

Volume ≤ 500 m³

STANDARD EQUIPMENT**

On the top

- 3 Degassing overflows DN80

On sides

- 1 stainless steel Inlet DN100 with valve + symmetrical coupling
- 1 stainless steel Outlet DN100 with antivortex + valve + symmetrical coupling



Volume > 500 m³

STANDARD EQUIPMENT**

On the top

- 5 Degassing overflows DN80

On sides

- 3 stainless steel Inlets DN100 symmetrical with valve + symmetrical coupling
- 1 stainless steel Outlet DN100 with antivortex + valve + symmetrical coupling



Farm effluents

Volume ≤ 500 m³

Gravity filling

STANDARD EQUIPMENT**

On the top

- 3 Degassing overflows DN80

On sides

- 1 stainless steel Inlet DN100 with valve + symmetrical coupling
- 1 stainless steel Outlet DN100 with antivortex, valve support + spherical coupling DN150



Pump filling

STANDARD EQUIPMENT**

On the top

- 3 Degassing overflows DN80

On sides

- 1 polypropylene Inlet DN50 with valve + non-return flap valve
- 1 stainless steel Outlet DN100 with antivortex, valve support + spherical coupling DN150



Volume > 500 m³

Gravity or Pump filling

STANDARD EQUIPMENT**

On the top

- 5 Degassing overflows DN80

On sides

- 1 polypropylene Inlet DN50 with valve + non-return flap valve
- 2 stainless steel Inlets DN100 with valve + symmetrical coupling
- 1 stainless steel Outlet DN100 with antivortex, valve support + spherical coupling DN150



Our recommendations for emptying and stirring

As a preventive measure, when emptying your tank or to homogenise the fertiliser, you will need to stir your effluents to avoid matter being deposited in your tank.

Since each installation is unique, we suggest two methods of emptying:

emptying and stirring via the sides:

- easy and quick to install;
- optimum liquid circulation during stirring.

emptying via the bottom and stirring via the sides:

- best method for large-volume tanks where stirring and emptying are less easy;
- avoids material being deposited on the tank bottom.

Corner hatches are available as an option to facilitate stirring or emptying, or to remove any greasy deposits; re-injection elbows can also be fitted as an option on the top of the tank.



OPTIONAL EQUIPMENT

Customize your tank according to your needs

Our standard equipment meets most of the needs that our services have been asked to deal with over the last 60 years and more.

However, to fine-tune the use of your flexible tank or to meet the specific characteristics of your project, you can complete or modify our standard systems with optional equipment.

MANAGE YOUR SUCTION FLOWS AND CONNECTIONS, AND HOMOGENISE YOUR EFFLUENTS



Inspection and sampling Hatch DN120 mm
Polypropylene - Available in DN250 mm and DN500 mm



Degasser DN80
with anti-odour filter



Overflow DN80
with stainless steel Flap gate

Stirring unit for volumes < 200 m³
including flexible hoses DN80 (2x8m)



Inlet / Outlet DN160
with stainless steel antivortex + sleeve



Inlet / Outlet DN200
with stainless steel antivortex + sleeve



Flexible hose DN50 with two aluminum symmetrical coupling* DN50 (8m) - Available in 25m



Stainless steel Draining Outlet DN150 with antivortex,
lever valve + valve support + spherical coupling

PROTECT YOUR VALVES



Adjustable valve support



Insulating thermal valve protection

MANAGE PLATFORM VARIATIONS OVER THE LONG TERM



Geotextile



Ground sheet - Coated fabric 600g/m²



Weed protection sheet (according to size)

CONTAIN ODOURS



Anti-odour cover (according to size)

* Storz and camlock couplings are also available.

Still have questions about storing your effluent in a flexible tank?

Check our FAQs, available on our website by scanning this QR code:



Expert Advice

How to deal with odor nuisance?

The storage of effluents requires the management of odour nuisances. Despite our specific technical fabric, the organic nature of the effluents and their rise in temperature may cause odour pollution.

We propose two solutions to overcome this problem:

- **the activated carbon filter**, to be mounted on the degassers in order to filter directly the gases at the outlet.
- **the containment cover**, which covers the whole tank and allows to capture and treat the smelly gases that escape through the fabric.

Ask us for more information about these two products: our sales team will be happy to assist you!



INSTALLATION

How can you be sure that your installation will be 100% compliant?



Recovery of industrial food processing water for machine cleaning, then return to the WWTP for treatment • 2 x 2000 m³ • FRANCE

Our flexible tanks are very easy to install. They do not require any special maintenance or upkeep. In order to assist our customers, we offer a **“Turnkey” service** for the installation of our products (excluding civil engineering).

Recommendations for installation

• The platform

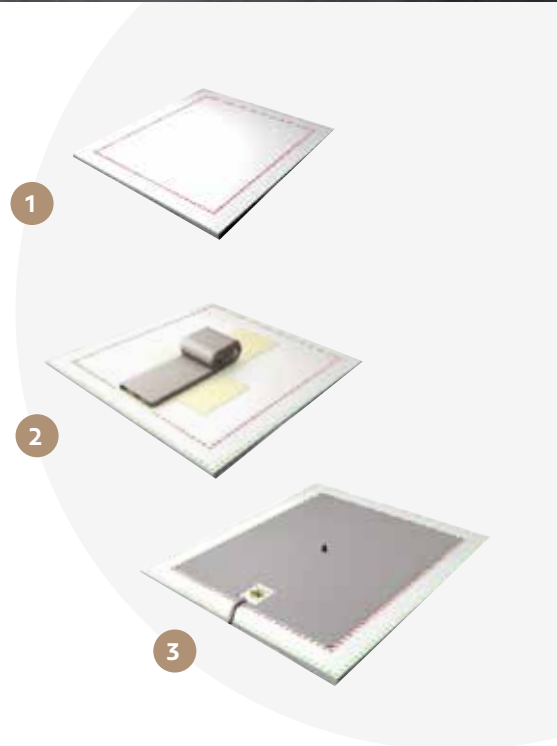
The installation of flexible tanks requires a perfectly **flat, horizontal, clean and stable surface**, without perforating elements, to the empty dimensions of the tank + 2.00 m in length and width. It must be able to support the weight of the full tank without collapsing (+ / - 2.1 tonnes per m²), or eroding. Any **above ground connection** to a flexible tank must be made by flexible piping (corrugated hose).

• The maintenance-free protection

In addition to our flexible tanks, a **ground sheet** or a **weed protection sheet** can be installed to secure the surroundings of your tank and avoid maintenance incidents. *Specific documentation is available on request.*

• The retention

Depending on the type of project, a retention may be required by regulation. *Contact us for more information.*



The external intervention service

Thanks to a dedicated team and qualified partners, our external intervention service comes into play on request to guarantee a **100% compliant installation**.

Calling on our outside intervention service is to ensure the overall management of your order and thus **guarantee** the **conformity and safety** of your installation (excluding civil engineering).



INVENTOR OF THE FLEXIBLE TANK

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