
STAINLESS STEEL TANKS USER GUIDE

You have just purchased a Lejeune tank, and we thank you for your confidence in us. We devote the greatest care and concern in the design and building of our products. We hope that you will be completely satisfied with it for the many years to come and, to ensure this, you will find hereafter some useful advice.

PRECAUTIONS

Before using it, carefully read all the recommendations in this guide. Give this guide to the various managers and users and make sure they read and understand its contents. Wherever possible, keep it in a readily available spot where it can be consulted by employees occasionally using it.

REMINDER : STAINLESS STEEL POLLUTION CASES

Certain products adhere, stain or oxidize stainless steel irreversibly. You will find hereafter a non-exhaustive list :

- All products containing hydrochloric acid are prohibited in the presence of stainless steel. In particular, they are used to remove excess cement from new tiles. They cause irreversible alterations when sprayed directly on the tank walls or when vapors condense on the tank walls. New tiles must be cleaned before the tanks are installed,
- Chlorine vapors during the cleaning of floors,
- Oxygenated water used as a disinfectant is a powerful oxidizing agent on stainless steel when the water contains acetic acid or paracetic acid. Check the product's exact composition before using it,
- Run-outs of SO₂ during the overflow of the hydraulic bowl (to be cleaned immediately with lots of water),
- The environment of SO₂ present particularly in large barrel storage areas,
- Scratches made with metal objects creating inclusions (forks, shovels, etc.),
- Ferruginous running water used to cool the tanks,
- Acid rains (tanks installed outside),
- Cement dusts,
- New sponges contain chemicals which irreversibly stain stainless steel. Rinse extensively the sponge with a detergent before use.

COOLING RINGS WATER SUPPLY

- Do not use water with a highly iron or chlorine (superior to 20 mg/liter) content or soften salted water to fill in the water network
- In case of using demineralized or distilled water or water resulting from reverse osmosis, add a corrosion inhibitor or glycol.
- Also use an inhibitor for the open circuit facilities (oxygenation)
- Do not include iron piping or a cast-iron boiler in the water network

An anticorrosion additive in any type of water supply is highly recommended.

Note: Cooling ring service pressure: 3 kg

Laser welded dimple jacket service pressure: 6 Bars

TANKS GROUND FAULT PROTECTION

The tanks should be provided a ground fault protection for the employee's security and so as to avoid any electrolytic corrosion phenomenon.

TANK SERVICE PRESSURE

The allowable tank pressure range is from - 5 mbars to + 50 mbars. That is, they must not under any circumstances be sealed, emptied or filled up. They are sold with a safety valve located on the plug tap, allowing the interior/exterior pressures to be equilibrated during the fermentation. It must not be replaced under any circumstances by a solid plug or by another object (tennis ball, paper sheet, etc.).

ADVICE ON HOW NOT TO PRESSURIZE NOR DEPRESSURIZE THE TANK

Before emptying or filling the tank, be sure to open the upper trap door to allow air to enter or exit.

To preserve a "full tank" wine, we recommend using a hydraulic or aseptic plug. They allow absorbing the variations in volume due to temperature changes and guarantee the security on pressure and depression phases.

If the tanks are "scavenged by nitrogen", the original safety valve must be replaced by another safety valve guaranteeing the tank's tightness under the inerting pressure (approximately 20 mbars). It also protects the tank from the risks of pressurization and depressurization.

ADVICE ON HOW TO USE "SHUTTER" FILTERS

When you fill the tank during the wine harvesting season, do not connect the pump directly to the valve protected by the filter (decant valve on bottom of the cylindrical body), because it may cause a very rapid clogging along with an uncontrolled depressurization, resulting in a degradation of the filter and the tank wall. In fact, a too rapid drawing off will not leave enough time for the unfermented wine to drain into the mass.

As a result, make your initial fillings by using a container without completely opening the valve because even if this container readily "feeds", too great a flow will accelerate clogging and will require frequent "discharges" on the filter. By opening the "taster" (provided the taster and the filter are connected), the extent of the interior depressurization can be estimated.

If you do not want to "air" the unfermented wine, prevent a "pressure drop" effect by feeding the container with the bottom valve or by adding an elbow extension valve and, if necessary, cover the container.

P.S. : Our rotary sprayers contribute to degassing. You should estimate this phenomenon and take it into consideration in the control of the fermentation process.

INITIAL USAGE

Before using the tank for the first time, you have to perform the customary cleaning and disinfecting operations.

These operations allow eliminating dusts and contaminations which may have been deposited during transport and installation. They will guarantee you optimum hygienic conditions.



ANNUAL SERVICING OF THE ACCESSORIES

Door

All parts subject to wear, and in particular gudgeon and handwheel threadings, must be regularly checked, cleaned and lubricated. If necessary, replace worn parts.

The seals must also be inspected whenever the door is opened and changed every 2 to 3 years. The seal must be stored in an area sheltered from light and must not be suspended. Never leave the doors closed and sealed when your tanks are empty (risk of seal seizing on the frame).



Taster

Remove the piston (loosen the screw under the taster and unscrew the piston). Remove deposits from seal path and check it for condition.



Decanter

Check the seal for condition. To improve the seal lifetime of a tank stored outdoors, remove the seal when the tank is empty and store it in an area sheltered from light.

Pump unit of a compressed air floating cap

When the tank is new and after a few uses retighten the 2 hose clamps. Dismount the pump and lubricate the piston. Loosen the flywheel and check the seal for condition. Replace worn parts. Tight up without forcing so as to ensure a perfect sealing. If you over-tight, the teflon pastille will deteriorate faster.

Air chamber

Check for condition. It will deteriorate over time and can become porous. If necessary, replace it. The inflating pressure must be adjusted so that the air chamber takes up the wall / floater play.

Ball valve

Remove the front flange, clean deposits from ball and teflon packings (if they are scratched, replace them). Reinstall the valve after lightly lubricating the ball with food grease. Do not mix parts with those of another valve because they are "paired" in the factory.



Butterfly valve

Clean once a year with a little brush the axis and slightly grease the joint.

Dipstick valve

Remove the spout and piston. Clean deposits from seal paths and check them for condition.



THE CLEANING OF THE TANK'S OUTSIDE SURFACES

Experience has proven that it is absolutely necessary to clean stainless steel surfaces to preserve their chemical stability and "good aspect" qualities.

The cleaning of stainless steel surfaces must respond to the following requirements :

- Eliminate deposits (due to ambient pollution and/or "normal" usage) ;
- Maintain the initial passivation level.

The applied cleaning products must be proven and free of chlorine or sulfur to prevent (in the event of insufficient rinsing) the formation of acid chlorides or corrosive sulfurous deposits for the metal. This is translated by the appearance of rusty colored spots.

If an effective treatment is not quickly carried out, irreversible intergranular corrosion marks will subsist.

In case of very dirty equipment we advise washing the largest dirt spots away using a pressurized cold water spray.

For the cleaning and outside maintenance of your tanks we recommend:

INNOSOFT B570

- Easy to use
- Get rid of the calcareous and rust stains
- 100% organic, harmless for humans and eco friendly

Instructions for use :

- Shake the bottle before use
- Apply the **non-diluted** product with a slightly wet sponge
- Rub horizontally the oxidized areas
- Leave the product for a couple of minutes (up to 30 minutes depending on the importance of the stain)
- Rinse carefully and abundantly so as to get rid of the entire product

We recommend to wear gloves and goggles while using the product

You may can use (product that is delicate to use and can provoke stain on concrete soils) :

FINOX DH

- Quick application by spraying
- Get rid of oxidation stains
- Be careful: this product whitens the plastic and concrete then damage the galvanizing
- Highly corrosive, it is mandatory to wear anti-acidic clothes, goggles, gloves and boots

Instructions for use :

- Product ready to use, spray from the **bottom to the top** on dry tanks
- Leave to product for 1h (light stains) up to 12h (oxidation)

Before use protect the plastic accessories and wet the floor (water protection). While the excess of product flows down, rince the floor abundantly. Finish up the cleaning with cold water under pressure.

Nota: - Do not spray on warm tanks or exposed to the sun. The product musn't dry on the tanks.

- This product whitens the concrete. Protect the floor with constant running water and avoid spraying on the walls or near-by machinery.