

RETENTION TANKS

TECHNICAL PROBLEMS

Storage tanks for chemical products are always equipped with a collection basin. These have the same capacity as the volume of the liquids stored so they can collect any liquid which escapes from the tank due to a hole or accidental emptying. The concrete used must be protected from the chemicals of the products stored.

TRADITIONAL SOLUTION

- **anticorrosion paint:** insufficient protection, too limited in time and requires frequent maintenance.
- **reinforced resin coating:** reinforced polyester or epoxy resin. Difficult to apply, with successive layers reinforced with a glass mat.

Difficult to repair. If the concrete structure is degraded, the coating can either crack or disbond.

It cannot offer satisfactory protection in the event of provoked cracks. There is a risk of chalking for outdoor applications.

SOUPLETHANE TECHNIQUE

- SOUPLETHANE remains **adherent to concrete**, even if the support is cracked (up to 2mm crack width). It provides both an **effective seal** and **corrosion protection** for the concrete. It adheres well to both concrete and metal, guaranteeing a perfect seal at the joints in the equipment.

When designing the installation, include a slope in the structure to prevent concentrated corrosive products from stagnating.

- SOUPLETHANE offers good resistant to accidental contact with most chemical products, even concentrated, except pure sulphuric acid (suitable for nitric acid at 60%, phosphoric acid at 100%, etc.).
- For use in collection basins for extremely aggressive concentrated acids, a 5cm layer of stagnant water can be poured onto the bottom of the basin. This will dilute any leaks.

- Easy to maintain: SOUPLETHANE can be easily repaired if it gets damaged.



APPLICATION

Prepare the substrate:

- sandblast the concrete

Apply SOUPLETHANE:

- concrete primer (1 litre per 7 m²)
- apply SOUPLETHANE in a layer ranging from 1.5 mm for mild products to 3mm for extremely aggressive substances.

Application:

- manually with a roller, or using a twin-component airless pump

QUALITY CONTROL

Check the quality of the concrete prior to application: dry, with no major holes or excessive porousness.

- Check SOUPLETHANE: a continuous coat, well polymerised, check that the minimum required thickness has been applied, no holes, pores or blisters. - Check any weak points: ensure an even application on corners or joint bridges.

TESTS AND CERTIFICATIONS

- Seal tests: the Roads and Bridges Laboratory
- Chemical resistance: SGN laboratory, Rhône Poulenc laboratory in Vitry.
- STER 81 qualification.

WORK REFERENCES

- Norsolor
- CDF Chimie
- CEA Valro / Pierrelatte
- COGEMA / The Hague
- CEN Cadarache