

NEUTRALISATION TANKS

TECHNICAL PROBLEMS

Neutralisation tanks are designed to collect acidic run-off from facilities such as water treatment centres.

This water is extremely aggressive towards concrete and cannot be discarded without prior treatment - it poses a major pollution risk for the environment. As such, it is collected in concrete tanks. Here, it can be stored and neutralised before being disposed of.

TRADITIONAL SOLUTION

The concrete is generally protected by an acid-resistant protective resin such as epoxy. In general, epoxy resin can withstand the acidic water being stored, but the protection loses its effectiveness if the concrete cracks. The coating will also crack in these places and the corrosive products will attack the concrete through the cracks, causing the coating to disbond.

If this happens, the entire coating must be removed and reapplied.

SOUPLETHANE TECHNIQUE

SOUPLETHANE is applied directly onto the concrete in a single, continuous layer, without any joints. The product is applied using a twin-component, high-pressure airless pump or manually with the rollers.

The benefits:

- SOUPLETHANE is highly resistant to extremely acidic solutions (the water entering the tank can have a pH level near zero) and to bases (in general, there is no problem with pH levels between 1 and 13).
- SOUPLETHANE also provides an effective seal for concrete tanks: if they begin to crack, SOUPLETHANE can bridge any cracks in concrete up to 2mm width without creating a break in the film seal.
- any weak points are easy to treat, thanks to SOUPLETHANE's strong adhesion to both concrete and steel (water outflow pipes, etc.).



SPECIFICATION

• prepare the substrate:

- grind the concrete
- Pore sealing of concrete for vertical surfaces

• applying SOUPLETHANE

- concrete primer (1 litre per 7m²)
- apply a continuous 1.5 mm thick layer of SOUPLETHANE for normal zones. At the point where the water enters the tank, apply a layer of 2 to 3 mm.

TESTS AND CERTIFICATIONS

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

WORK REFERENCES

- HENKEL in Chalons- sur- Marne
- EDF thermal power station in Le Havre
- PHENIX Marcoule
- MICHELIN - Serbia