



Högreservoar Sävsjö (S) Potable water tank lining

Country	Sweden
Type	Water Tower Rehabilitation
Client	Sävsjö kommun
Main Contractor	GVV (Gatu Och Väg Väst AB, Eleda Group)
Execution of the work	Renesco GmbH
Designer/ Engineering	Njudung Energi, Amphi-tech Service
Construction Period	2022

Project Description

The contract pertains to external and internal renovation measures of "Högreservoar" in Sävsjö. The high reservoir was built in the late 1930s and expanded in the beginning of the 1960s. The reservoir consists of a circular container on rock (original construction) enclosed by an outer annular reservoir (extension) standing on bedrock foundations. The bottom diameter of the outer reservoir is 24.46m and the volume one the capacity amounts to approximately 215m³ distributed on 350+ 1'800m³ inner resp. outer reservoir volume. The total height of the structure from the ground floor to the roof of the tower house amounts to about 8m. On the roof there are two manholes, one for each reservoir volume.

The waterproofing system that are in direct contact with potable water must fulfil stringent requirements regarding hygiene, durability, exposure and stress conditions, construction method and sequence, ease of application and total cost management.

Scope of Service

Structural waterproofing of reservoirs and tanks containing potable waters, sealed with a polyethylene (PE) waterproofing geomembrane/ geo-composite under a water pressure head, fully exposed to the inside water face and fixed via loose-flange stainless-steel construction/ termination to form watertight compartments.

- 1'300m² FPO-PE geomembrane, reinforced and laminated with a 500g/sqm PP geotextile, 1.5mm and 1.8mm, drinking (potable) water certified according to DVGW W 270 (German guideline)
- Fastening via discs/ roundels and hook & loop (Velcro) System
- Drainage mat, Polypropylene, 6mm
- Inlet & outlet pipe connections, Pipe penetration, DN 400, loose-steel flange termination/ clamping
- Wall membrane termination with Stainless steel profile



1. Overview of the high-water tank
2. Inside the tank
3. Inlet pipe connection