



SIKA AT WORK

Drinking water storage tanks, Tripoli, South Greece

Rehabilitation & protection with system Sikagard®-720 EpoCem® & SikaCor®-146 DW

DRINKING WATER STORAGE TANKS, TRIPOLI, GREECE



PROJECT DESCRIPTION

The water that supplies the city of Tripolis comes in its largest quantity from the sources of Mainalo (sources of Pianos, Methidri and Pyrgaki). In the context of the upgrading of the city's water supply network, 27km of new and modern water pipes were constructed during the previous years to meet the needs of both the city and local districts.

The main objective of the project was to replace asbestos networks in the areas and to tackle water leakage due to the weathering of existing networks.

The new polyethylene based pipes will be connected to the rest of the piping network, forming a 90 km of final modern net, made entirely of polyethylene pipes that are thermally welded together and do not leak and do not allow inflows.

The Municipal Water Supply and Sewerage Company of Tripoli is conducting continuous laboratory inspections at its ultra-modern microbiology and chemical laboratory that the company owns since 2000, aiming at the provision of sufficient and high quality drinking water.

PROJECT DEMANDS

As part of the provision of safe, high-quality drinking water and the overall upgrading of the water supply Tripoli network, four new drinking water storage tanks had to be constructed, where drinking water would be stored before being disposed of in the water supply network for large consumption. The total surface of the tanks was 4.000m².

Objective during the construction of the tanks was their final coating with a product that would be certified and proven to be suitable for contact with drinking water. Moreover, due to the very nature of the project, the final protection system should exhibit long-term resistance to permanent water contact, as its maintenance could potentially be time-consuming and costly, as well as causing a nuisance to the city's water supply.



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SIKA SOLUTION

The **Sikagard®-720 EpoCem®** & **SikaCor®-146 DW** system was used as a protective coating for the surface of the tanks. The system consists of the cementitious modified epoxy mortar **Sikagard®-720 EpoCem®** and the especially suitable and certified for contact with drinking water coating **SikaCor®-146 DW**.

APPLICATION PROCEDURE

The 3-component epoxy-modified porous sealing and surface smoothing mortar **Sikagard®-720 EpoCem®** was applied onto the properly prepared concrete substrate. **Sikagard®-720 EpoCem®** offers excellent protection for concrete surfaces in a highly corrosive environment, excellent adhesion to concrete (fresh or hardened), creates a smooth surface and requires minimal waiting time before applying subsequent epoxy coatings.



Sikagard®-720 EpoCem® carries a Declaration of Performance as Concrete protection product – Coating (EN 1504-2) and as PCC Class R4 repair mortar (EN 1504-3).

Secondly, the 2-component, 100% solid content, suitable for drinking water contact, epoxy coating **SikaCor®-146 DW** was applied. **SikaCor®-146 DW** is a hard-elastic coating, resistant to mechanical stress and abrasion, shock and heat resistant, non-solvent containing coating. It is suitable for direct contact with drinking water, foodstuff, chemicals, cleansers and disinfectants and features excellent adhesion to steel, stainless steel, aluminum and mineral substrates. Its top advantage is that it is applied in one layer and no special treatment is required before it is put into use (first tank filling).

PRODUCT SALES IN VOLUMES:

- Micro-porous sealing PCC mortar **Sikagard®-720 EpoCem®**: 4,5 tn
- Epoxy coating for direct contact with drinking water **SikaCor®-146 DW**: 2,0 tn

PROJECT PARTICIPANTS:

Owner: **Tripoli Public Enterprise of Water Supply and Sewerage**
Contractor: **LAKON Technical Company S.A.**
Distributor: **Georgios Papagiannopoulos**





Our most recent General Sales Terms shall apply.
Please consult the most recent Product Data Sheets prior to any use and processing.



Sika Hellas ABEE
15 Protomagias Str.
145 68, Kryoneri
Attica - Greece

Contact
Tel.: +30 210 8160600
Fax: +30 210 8160606
www.sika.gr / sika@gr.sika.com

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