

Case Study

Project/customer name:	Nuclear Power Station
Year of application:	2014
Location/country:	Eurajoki / Finland
Building type:	Power station
Authorized contractor:	Heitkamp Ingenieur und Kraftwerksbau GmbH
Additional project details:	Requirement of a long-lasting solution which could also be implemented easily and quickly.

General view:



Challenge:

- A waste water tank at the nuclear power station on the Finnish peninsula of Olkiluoto had started to leak over the course of time.
- The refurbishment had to be done without interrupting the operation process and carried out as quickly as possible.
- In addition, special safety requirements had to be followed.



Solution:

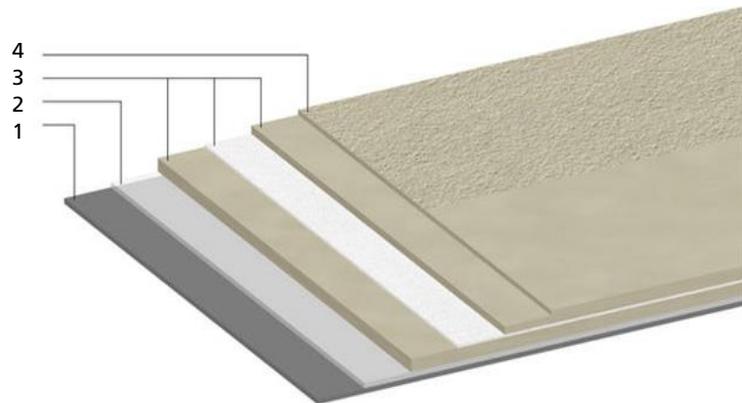
- To prepare for the work, the renovation specialists first removed the facing and the mineral wool and then ground the concrete foundation.
- It was then primed with Triflex Towersafe Primer and the metal tank was sprayed with Triflex Metal Primer.
- Afterwards Triflex Towersafe waterproofing was applied to the complete foundation and to 15 cm vertical on the tank
- An additional wearing layer of Triflex Towersafe with quartz sand dressing on the foundation provides a non-slip surface and ensures protection from mechanical influences.
- The contractors finally applied Triflex Towersafe Finish to improve wear-resistance.



Products used at a glance:

Triflex offers liquid PMMA* based resins (e.g. ProDetail for details or ProTect for areas):

1. Substrate
2. Primer, if necessary
3. Waterproofing layers
 - a) Triflex ProDetail (2kg / sqm)
 - b) Triflex Special Fleece
 - c) Triflex ProDetail (1 kg / sqm)
4. Finish, if wanted



* Polymethyl methacrylate

Continually improved over 40 years in order to become the market leader in Europe.



Main benefits (European Guideline ETAG 005):

- 25 years estimated working life performance
- Fast curing time and rainproof after only 30 minutes
- Application possible till humidity of 99% and withstands surface temperature after application up to 90° C
- A liquid seamless solution that fits to any structure with complex geometry
- Adherence to any surfaces (Aluminum, steel, plastic, glass, bitumen, concrete, ...)
- Solvent free, environmental friendly and with no risk to health
- High resistance to chemicals, roots and rhizome, alkali and hydrolysis
- Cold application with no flame and flame retardant
- Highly UV resistant (1000 MJ/m² = 325 days)
- Easy to impose loads after application (for particular demands as green roofs)