

Project Report/August 2023

## Gubrist Tunnel Switzerland Receives StoPox TU 100 Tunnel Coating

The Gubrist tunnel near Regensdorf in Switzerland is a section of relief road in Switzerland as the northern bypass of Zurich to deal with the increasing volume of traffic within the area. When construction began in 2020, it received a new third tube to ease the traffic load on Autobahn 1 with three additional lanes in the direction of Bern, Basel, Lucerne and Chur. This tube is over 3.2 kilometres long and 16 meters in diameter. This will make it the largest diameter of any tunnel in Switzerland to date.

The client and applicator team chose a product from StoCretec for the coating:

Sto-Pox TU 100 is a rigid, mechanically highly resistant coating for the protection of concrete surfaces, which, among other things, are cleaned intensively on a regular basis. The aqueous epoxy resin also protects the building structure against the ingress of water and pollutants dissolved in water and regulates the water balance of concrete.

The tunnel coating has a very low tendency to become soiled. It ensures safety in the tunnel by long-term preservation of the bright colours and the gloss value of the surfaces. Cleaning that would disrupt the flow of traffic has to be carried out much less frequently. In addition, it can be done in a sustainable and environmentally friendly way without the addition of chemical cleaning agents.

### Properties of **StoPox TU 100**

- Water-based coating, bonded with epoxy resin
- Protection and visual design of tunnel linings, on vertical and sloping concrete areas, which are exposed to regular, intensive cleaning
- Rigid coating on spray and splash areas
- Very low susceptibility to soiling
- Optimised cleaning properties even without an additional cleaning agent

- Anti-Graffiti-System 1 (AGS 1) according to German ZTV-ING, TL/TP AGS Beton (German Federal Highway Research Institute (bast))
- Wet-scrub resistance: class 1 acc. to DIN EN ISO 13300
- Gloss Value according to DIN EN ISO 2813 (measurement angle: 60°): 40 - 60
- High mechanical resistance
- Protection against the ingress of water and pollutants dissolved in water
- Moisture control of the concrete
- Increasing resistivity
- Very good adhesive bond
- Good carbon dioxide impermeability ( $S_d$ -value  $\text{CO}_2 > 50 \text{ m}$ )

## Who & What

|                        |  |                               |
|------------------------|--|-------------------------------|
| Project                | Gubristtunnel, Regensdorf, CH              |                               |
| Investor:              | Federal Roads Office FEDRO, Winterthur, CH |                               |
| Site Management:       | IG Gubrist Plus, Regensdorf, CH            |                               |
| Applicator:            | Trauffer Bautenschutz, Brienz, CH          |                               |
| Realisation:           | 2022                                       |                               |
| StoCretec Competences: | Tunnel Coating<br>Reprofiling<br>Coating   | StoPox WB 50<br>StoPox TU 100 |

(Photos: Daniel Werder, [www.fotowerder.ch](http://www.fotowerder.ch))







