

Magyar Suzuki Waterproofing Repair

Esztergom, Hungary (2017)

PRODUCTS USED:

Krytol Plug™ Krytol Repair Grout™ Krytol T1®

ARCHITECT/ENGINEER/DISTRIBUTOR:

Betonmix Ltd.

CONTRACTOR:

ACIS-TECH Ltd.

APPLICATOR:

Passive Systems Ltd.

BACKGROUND

When builders employ traditional concrete waterproofing, they frequently find that its performance decreases over time. That was the exact scenario that a Magyar Suzuki car manufacturing plant in Esztergom, Hungary, faced when its 25-year-old below grade tunnel began to leak. The plant owner discovered this unfortunate situation when they learned that there was water found at a pipe penetration and a joint that were between the car plant's concrete block wall and slab roof.

Time was of the essence once these leaks were discovered as the tunnel housed expensive and specialized pumps, which transported reactive liquids, such as gasoline, from transport tankers to the factory tank park. Keeping that in mind, the car plant's repair team sought a solution that could be applied easily and efficiently and would protect the leaking areas from water permanently.

SOLUTION

The repair team soon found the perfect solution: Kryton's Krytol® Leak Repair System. With that system, the team only had four simple steps to implement to get permanent protection from water. The first of which meant chiseling a chase into the leaking areas in the concrete. Once they got that done, the team then inserted the Krytol Plug into the chase. As a rapid-setting hydraulic cement product with high-compressive strength, Krytol Plug would be able to stop any level of water from flowing through the leaking areas. It also made it easier for the team to then apply a layer of Krytol T1, which is a cementitious slurry that uses Krytol® technology to react to water and unhydrated cement particles. That reaction creates insoluble needle-shaped crystals that fill up the spaces in capillary pores and micro-cracks in the concrete, blocking the pathways where water might get in.

The end result was a success, ensuring that any water coming into contact with the repaired concrete in the future would initiate crystallization and protect the concrete for the life of the car plant.

