

Manhole Sealing

Manhole sealing using chemical grout injection

Manhole sealing is very effective where pipelines and manholes suffers a high groundwater table giving high quantities of ground water, or sea (saline) infiltration into manholes which can increase hydraulic loadings therefore potentially causing flooding, and the overloading of pumping stations and sewage treatment works (STW's).

Chemical grout injection is very effective to seal up those leaks such as groundwater and sea (saline) infiltration by forming a waterproof barrier. Holes are drilled from within the manhole and using a pump the gel is injected into and behind the structure. When the chemical grout comes into contact with water the chemical grout catalyses creating a waterproof, flexible seal.

Application

The chemical grouts used are a hydrophilic polyurethane pre-polymer liquid for hydrophilic polymer resin type water stopping. It can be injected directly into a leaking crack, fracture, joint or can be injected 1:1 with water.

After injection has taken place the chemical grout will foam to expand and fill the void forming a tight, impermeable elastomeric seal, stopping the water flow (infiltration).

The chemical grout is :-

- Solvent free, non-flammable
- Has excellent adhesion to most surfaces including concrete, brick and mortar
- Resistant to most organic solvents, mild acids and alkalis
- Rapidly forms a highly resilient flexible seal that allows movement to the crack, fracture or joint
- Reacts with sea (saline) or mineral water