News TECHNOLOGY

IGROTAC[®] **ISOTANK**|"WATERTIGHT"



WATERPROOFING

OF REINFORCED CONCRETE

UNDERGROUND CONSTRUCTIONS

Tecnochem assists in : Engineering – Project Assistance – High **Technology – Jobsite Assistance**

WATERTIGHT **** **IGROTAC®** WATERTIGHT CONCRETE VASCA STAGN/ STRUCTURES

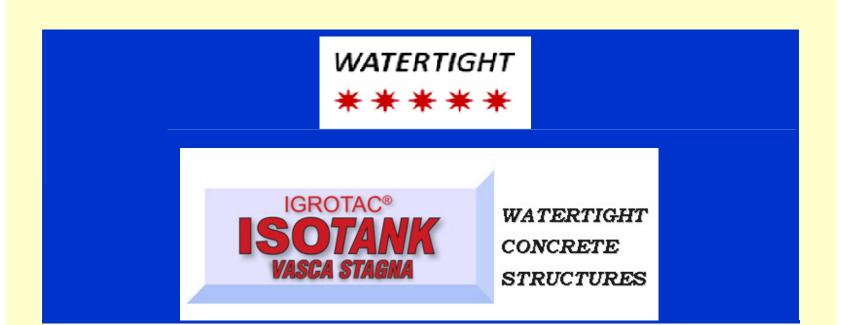
Tecnochem guarantees :

- Reduction in time and cost
- Maximal Saving!
- Guaranteed durability!

Tecnochem programs :

 No delay or interruption of the works for the contractor.

- Reset in the Gannt Diagram for the time requited for the waterproofing!



IGROTAC®

The global Project ISOTANK can be coordinated by our Office for Assistance and Project Promotion in cooperation with the Project Managers and Construction Companies.

IGROTAC[®]



Design of the composition of the concrete according to the specified project requirements and by using the Additives and Technology of Tecnochem Italiana S.p.A.

Pre-qualification in the Ready-mix plant

• Technical Assistance and Quality Control on the Jobsite



- Crack inducing elements
- Channels for day-joints
- Sleeves for passing tubes subsequently injectable with special poly-acrylate formula, hydro-expansive, anti-corrosion.

IGROTAC®

For joints subjected to severe movements and groundwater pressure. Per the closing and sealing of joints



TECNO-INJECT PU : Highly hydro-expansive polyurethane resin

TECNO-INJECT ACRYL :

Hydro-expansive acrylic resin, anti-corrosion, resistant, durable

Waterproof and Durable Underground Structures and Tunnels

Advanced Technology and Engineering in compliance with TECHNICAL STANDARDS FOR CONSTRUCTION - M.D.: 14 January 2008

→ Engineering ad assistance in project specifications

→ Studied additivation for intrinsic waterproof concrete and complying to EN 934-2

Pre-qualification of durable and intrinsic waterproof concretes complying EN 206-1/ EN 12390-8

→ Rules for compactness and compaction on the jobsite

- → Special elements IGROTAC[®] ISOTANK with double functionality, injectable and hydroexpansive.
- → Innovative technology of anti-corrosion injection TECNO-INJECT ACRYL-FLEX / MuCis®
- → Concrete with reduced or zero shrinkage SHRINKO-tec[®]
- → Fire resistant concrete STABIL-tec[®] FIRE
- → Ductile structures for seismic areas HFE-tec[®] / REFOR-tec[®]
- → Structures impermeable to Radon ANTIRAD 2004
- → Formulations for reactive crystallisation: CRYS-teco[®] Tensios (impregnation) CRYS-teco[®] PWD (mortar) CRYS-teco[®] ADMIX (additive)
- → Assistance from Project to Jobsite
- → Systematically maintenance of Planned Design over time.
- → Design and execution of Repair Plans.

LEED[®] Leadership Energy Environmental Design

RAINBOW MAGICLAND – "Terramagica" Integrated Touristic Amusement Parc – Valmontone (Roma

Global Project ISOTANK for the waterproofing of the Underground Structure 22.000 m^2 in the Design and Waterproofing of the Artificial Lakes .





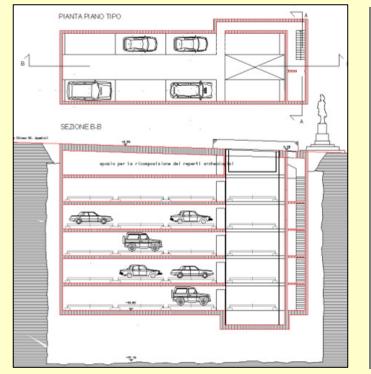






Underground Parking Piazza Ss. Apostoli – VERONA

Realisation of a 5 level underground parking.





Underground Parking Via Belinzaghi - Milano



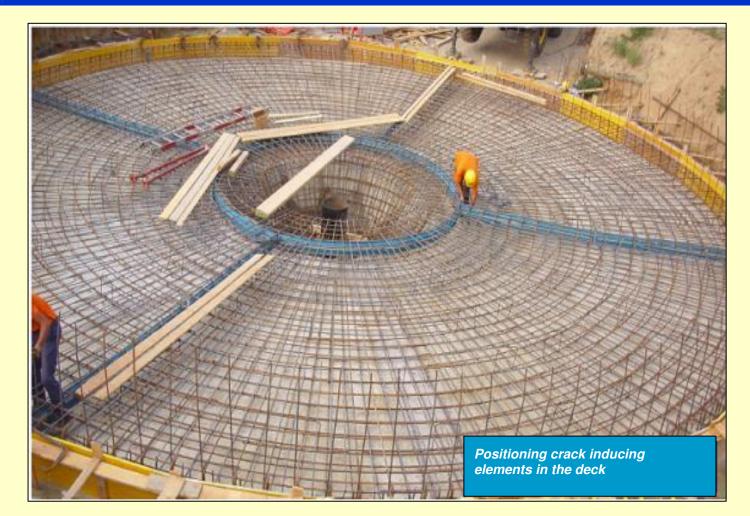
Ex Cinema Marzani – Lodi "TOP DOWN" Technology





Tanks of ENI - SANNAZZARO

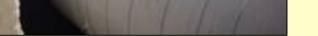
5 tanks for the collection and treatment of waste water in a purification station.













Underground Parking Piazza Cavour - Roma

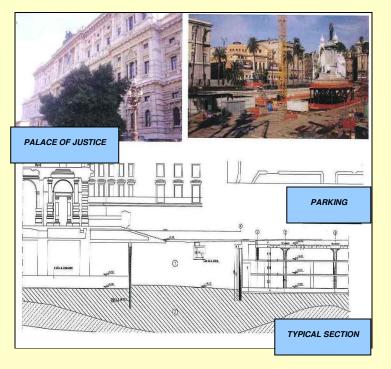
Waterproofing of the Underground Parking in Rome Piazza Cavour with Igrotac® ISOTANK realised in Top Down - 3 levels under groundwater





Manufacturing Techniques: TOP DOWN Problem: temporary loop pillars



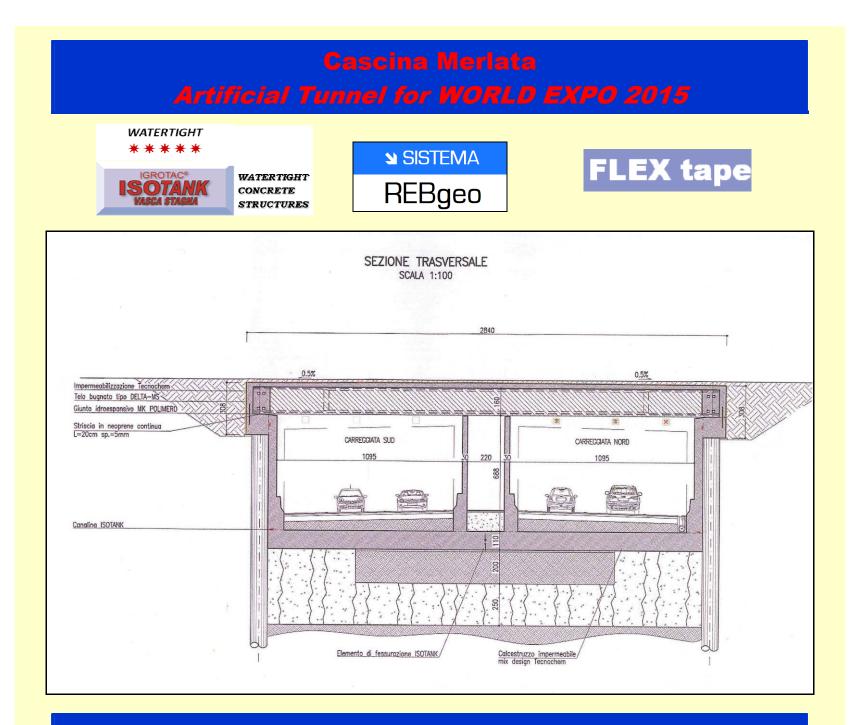


Underground Parking Piazza Gentile da Fabriano – Rome The use of *injectable crack inducing elements ISOTANK* in the deck as lost

formwork, and the installation of **special sleeves** around the columns, allowing the **simplification** of the work and **reduction** in working time.







Waterproofing of the floor slab using the System **REBgeo**

























Applicazione Elasplast in verticale sulla spalla laterale prima del rinterro

FLEX TAPE Dilatation Joints



IGROTAC[®] ISOTANK – Waterproofing of underground structure elements and Casting of the Foundation **Crack inducing**











New Polyfunctional Building Via Manzoni - Rozzano





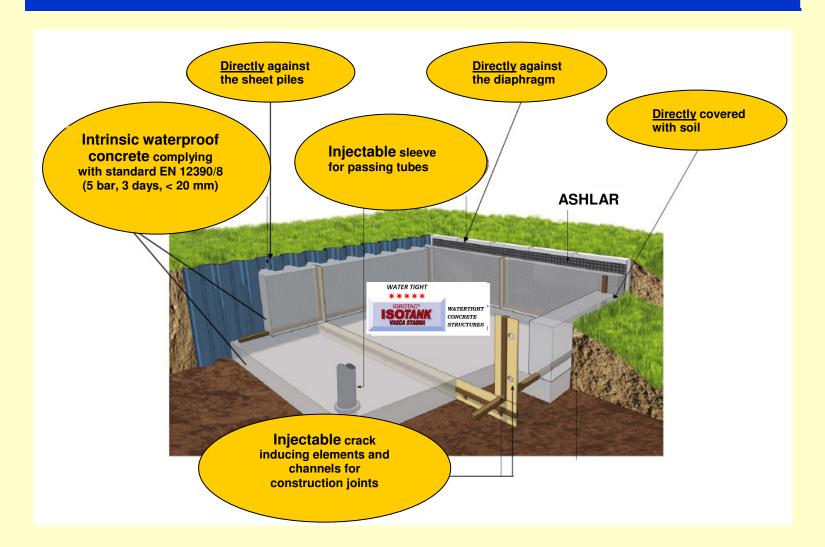








Schema of the Elements "WATERTIGHT" ISOTANK



Crack inducing elements (patent n° MI2012A000469) injectable- Injectable Day joint channels – Injectable sleeves

Against Soil, Against Diaphragm, Against Sheet piles, Against 'Berliners'

Waterproof concrete 5 bar x 3 days, max. depth of penetration \leq 20 mm

<u>Requests for information and/or assistance :</u>

<u>Send e-mail to the 'Office for Project Promotion and Assistance</u> uapp@tecnochem.it





TECNOCHEM ITALIANA SPA - Via Sorte 2/4 - 24030 Barzana (BG) www.tecnochem.it - uapp@tecnochem.it