



DOWNLOAD
PENETRON®
BROCHURE

SUBSCRIBE

[View a 3
minute video
demonstrating
how
Penetron
works](#)

INSIDE THIS ISSUE

[Penetron® news:
SIMONA GALASSI
retains her world
champion title](#)

[Penetron® Feature:
Penetron White Tank
system](#)

[Penetron® Worldwide:
Focus on Chile.](#)

[Casino Antofagasta](#)

[Dental clinic of the
Universidad del
Desarrollo, Santiago](#)

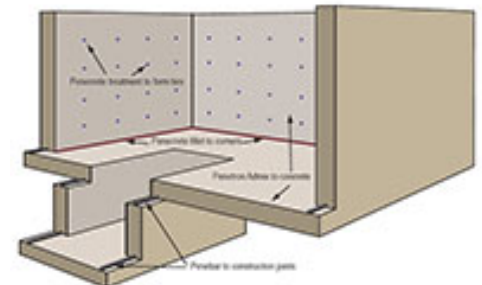
Internal Waterproofing for Concrete

Penetron® Industry Newsletter

March 2009

In recent months, we have certainly seen a lot of ink spent on the negative and hardship aspects of the global finance crunch and it has become increasingly hard to see positive outcomes. Yet, every negative has a positive. One of the positive aspects is that it has been a catalyst for change and has prompted

designers/engineers worldwide to find and embrace more cost effective, cleaner and better technologies. Penetron products are a case in point hence we decided this was the right time to elaborate on the [Penetron White Tank](#) waterproofing system... In short, a white tank is a concrete structure that is waterproofed entirely from inside the concrete, thereby offering substantial benefits to both builder and owner. The system represents a huge improvement on traditional black tanking systems, which relied on environmentally unfriendly bituminous membranes and/or tar products, that used to be fixed to the concrete surface. Further, we celebrate the success of Penetron-sponsored Italian boxer, [Simona Galassi](#), WBC featherweight world champion. In the worldwide section, the focus is on Penetron [projects in Chile!](#)



Penetron® news: SIMONA GALASSI retains her world champion title

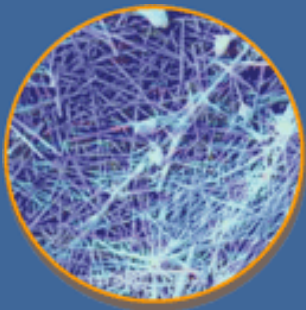
Clínica Las Condes,
Santiago

Russia - Novo-
Sverdlovskaya Power
Station, Yekaterinburg

Spain - Plaza de
España, Santa Cruz
Tenerife

FAST FACTS

The Penetron White Tank allows for substantial cost / time savings and worry-free nights



An intricate web of insoluble crystals forms in the presence of Penetron® and H₂O creating a permanent protective seal



the best of luck!

Simona became WBC featherweight world champion again on March 29, 2008 by defeating Stefania Bianchini in Forli, Italy. She then successfully defended her title in October 2008. Penetron is proud to be her official sponsor.

After a successful career as a kick boxer which culminated in her winning the WPKC Thai boxing word champion title in 2001, Simona shifted to boxing and participated in the Scranton Amateur tournament in December 2001. She came out of that tournament as world champion and has been one of the dominating athletes on the women boxing scene ever since. She is defending her title again at the end of March 2009 and we wish her



Penetron® Feature: Penetron White Tank system

A white tank is a concrete structure that is waterproofed entirely from inside the concrete, thereby offering substantial benefits to both builder and owner. The system represents a huge improvement on the traditional black tanking practice, which relied on environmentally unfriendly bituminous membranes and/or tar products, that used to be fixed to the concrete surface. Whereas other white tank systems rely on high-grade concrete formulations and tedious installation of components, the Penetron White Tank stands out in its simplicity, self-healing capacity and the fact that it allows ordinary concrete to be used.

Main Benefits

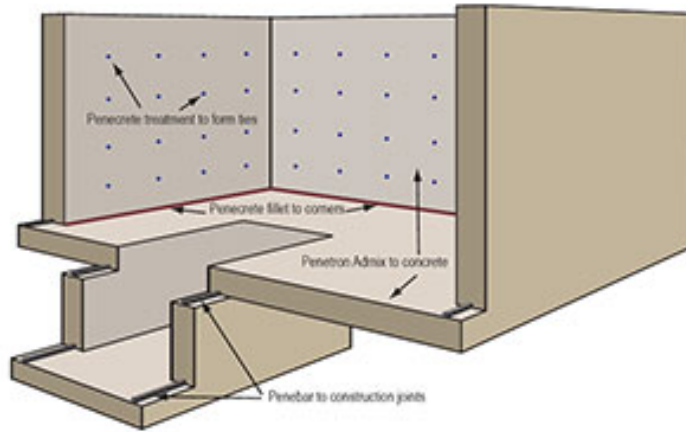
- Substantial time and cost savings as waterproofing is included in concrete placement process
- Waterproofing abilities remain active if surface is damaged
- Self-healing ability for the life of the structure
- Approved for potable water use
- Easy access for repairs if necessary
- No need for high-grade ultra dense concrete to achieve waterproofing



Witness Penetron's crack sealing ability



Send to a friend or colleague.



[click to enlarge](#)

Components

- [Penetron Admix](#) completely waterproofs the concrete body with the world-renowned Penetron crystalline capillary technology ([click here to view a 3 minute video](#)).
- [Penebar](#) is installed at the concrete joints and swells up when it comes in contact with water, thereby preventing any leakage through joints and penetrations.
- [Penecrete Mortar](#) is used to fix form-tie holes as well as honeycombs, penetrations, cracks or bugholes.

Performance and certification

Waterproofing provided by the Penetron White Tank is complete and permanent. No additional treatments or maintenance is required. Penetron technology has a proven track record that spans 31 years and 70 countries and is supported by dozens of approvals and test reports from reputable international testing labs. Further, Penetron Admix is CE certified and carries the German U-sign, which certifies that products fulfill the highest quality standards, meet or exceed stringent application criteria, and comply with stringent German environmental and health regulations.



Area of application



Keeping Water In

- Dams and Reservoirs
- Water Tanks
- Swimming Pools
- Sewers and Pipelines
- Waste Water Treatment Plants

Keeping Water Out

- Basements
- Utility Vaults
- Underground Car Parks
- Transport Tunnels
- Underground Stations and Subways
- Marine Structures

The Penetron White Tank System has been used on countless projects around the world, please contact us at info@penetron.com for further information.



Penetron® Worldwide: Focus on Chile



Casino Antofagasta

Casino Enjoy Antofagasta is owned by Enjoy Group Hotels and Resorts. Construction on this project began in 2007 and the finished complex will host a 5-star hotel and casino facilities including a large underground parking area. The resort is located 700 miles north of Santiago in the port city of Antofagasta – capital of Antofagasta Region.

The project was executed by Salfa Corp and included waterproofing works with Penetron Plus in the foundation slab at a dosage of 0.7kg/m².



Dental clinic of the Universidad del Desarrollo, Santiago

The new dental clinic of the Universidad del Desarrollo in Santiago is currently under construction. In order to effectively waterproof and protect this project, the retaining walls, designed by Gunter Joseph stipulated a treatment with Penetron Admix at a dosage of 2.53kg/m³, thus providing a self-healing concrete further benefiting to the lasting stability of the structure. Bravo Izquierdo is estimated to finish the project in the first half of 2009.



Clínica Las Condes, Santiago

Clínica Las Condes is a well established hospital that continues to showcase high standards of care, organization, and academic excellence, which lie at the heart of its mission.



In 2007, the parking garage at the Clínica Las Condes was built. The waterproofing featured Penetron Admix in the retaining walls and was designed and executed by Gunter Joseph in cooperation with Salfa Corp. Penetron Admix was chosen as the project is located in an area pervaded with canals and rivers originating in the nearby Andes, which made waterproofing of the retaining walls a major issue. Penetron Admix was directly added to the concrete – provided by LaFarge – at site in the mixing truck.

Russia - Novo-Sverdlovskaya Power Station, Yekaterinburg



Novo-Sverdlovskaya Power Station is located near Yekaterinburg. It is the newest and of the highest capacity in the region. The station uses natural gas to produce 1856 billion KWH every year since 1982. It sends 2484 thousand giga calories to consumers every year. Between 1996 and 2004, Penetron materials have been used to waterproof the following areas:

- utility basement
- waterside pump station
- shower stalls
- shelter
- cable floor (S=2500 m²)
- chamber of the cooling tower (4)
- pump station for oil and utility waste



Spain - Plaza de España, Santa Cruz Tenerife

The refurbishment and upgrading of the [Plaza de España](#), with an area of about 36,160 m², located at the top of Castillo de Santa Cruz de Tenerife Street in Santa Cruz de Tenerife, has been one of the most desired in recent years with a final budget of 19 million € and an implementation period of 24 months.



Designed by the prestigious Swiss architects Herzog & De Meuron, Plaza de España in Santa Cruz de Tenerife covers a huge artificial lake and several multipurpose buildings including a tourist information point, shops and exhibition of typical Canarian handicrafts.

One of the objectives of this project was to fill the 2,500m³ large and 90cm deep circular lake in the center of the square with saltwater to re-establish the link between the city of Santa Cruz de Tenerife and the sea. This required the drilling of wells for a pumping system that will handle 650m³ of water an hour and is able to shoot a geyser of water 30 meters in the air.



For the waterproofing of the lake the architects chose PENETRON® Admix. This choice was based on the fact that Penetron provides the concrete with properties that make it impermeable against water ingress even under pressure, reducing the formation of cracks and allowing for seamless and secure batching eliminating any need for waterproofing work afterwards.

In order to further reduce cracking the concrete was poured in several grids, with one week between each pour.



For more information visit the website: www.plaza-esp.com.

www.penetron.com

TOTAL CONCRETE PROTECTION™