

WATER DAM – LOCK CHAMBERS

Gabcikovo, Slovak Republic

Other waterproofing systems had failed to keep water out of the equipment room which was located 21 meters (70 ft.) below the water level of the river. In 1996, the Xypex system was tried. The Xypex treatment was totally successful in stopping all water ingress against strong hydrostatic pressure. Xypex Patch'n Plug was used to repair 835 m of joints and Xypex Concentrate was applied to all interior concrete surfaces of the equipment room, 935 m².



HUAYLACHANCHA DAM

Peru

In 1996, Electroperu, Peru's state owned electric utility carried out the repair of the dam, located in the Lunin area of the high Andes mountain range at an altitude of 4,350 m, under the supervision of the Xypex representative. The first step involved chipping cracks, and honeycombs in cold joints to form grooves and cavities. All cavities were filled with a blend of two parts Xypex Patch'n Plug with one part Xypex Concentrate mixed to a stiff putty consistency. After the repairs, the surface was treated with a two coat application of Xypex Concentrate and Xypex Modified. A total of 2,270 kg of Xypex material was utilized.



IIDA DAM

Kasama, Ibaraki, Japan

Xypex products were used to stop water seepage through construction joints on the downstream face of this dam located in Ibaraki Prefecture. This photograph shows the dam face completely dried after the Xypex application.

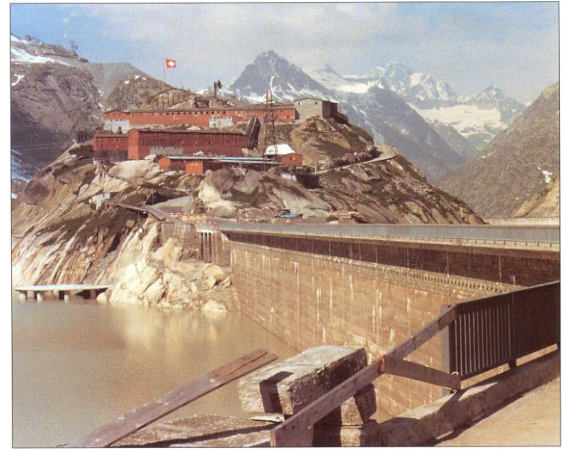
The prime contractor for the project was Toda Gene Co., Ltd. and the Xypex application was completed during 1991.



GRIMSEL DAM SYSTEM

Switzerland

Xypex crystalline waterproofing was used at several dam sites in the Grimsel area of Switzerland. Areas of application included 10 ton cable car station which is built into rock, tunnel sections (concrete and shotcrete), valve house, power house, entrance-way, fresh water reservoir, retaining walls, transformer stations, and machine rooms.



REVELSTOKE CANYON DAM

Revelstoke, B.C., Canada

Xypex is specified by B. C. Hydro & Power Authority for this 440 ft² (134 m.) high concrete dam. This dam is designed to hold 1.5 million acre feet of water. Six - 100 sq. ft. (9.3 m²) shafts were treated with 1 coat of Xypex Concentrate and 1 coat of Xypex Modified. Total area treated was 27,000 ft² (2,500 m²). Project completed in 1981.



CROTTY DAM DEWATERING OUTLET SHAFT

Queenstown, Tasmania, Australia

The Xypex waterproofing system was specified by the Hydro Electricity Commission of Tasmania for use in this deep concrete shaft which comprises part of the King River Power Development Scheme. The shaft is approximately 76 metres (250 ft) deep and is adjacent to the Crotty Dam which is located near Queenstown on the West Coast of Tasmania. Internal surface preparation for the Xypex crystalline treatment included the use of Xypex products for repair of structural defects, patching of tie rod holes, and sealing of high pressure leaks. Prior to these repairs, it was estimated that the shaft was taking in over 400 litres (106 US gallons) of water per minute. Once the repairs were completed, a two coat application of Xypex Concentrate was applied to internal shaft surfaces totaling 1,600 m².



ABIQUIU DAM

Espanola, New Mexico, US.A

Xypex Concentrate and Modified were applied to the power house and gate operator building at this dam on the Rio Grande River in New Mexico. The Xypex products were specified by Tudor Engineering of San Francisco and the application was performed by personnel of Bechtel Construction Co, the prime contractor for the project. Project was completed in 1989.



HYDRO-POWER PLANT

Tirgu Jiu, Romania

Upstream and Down-stream pressure walls (concrete surface between columns) were treated with Xypex.

The area is now totally submerged on the upstream side. Behind these walls is the machine room. A total of 600 m² of concrete wall was treated. This project was completed in 1995.

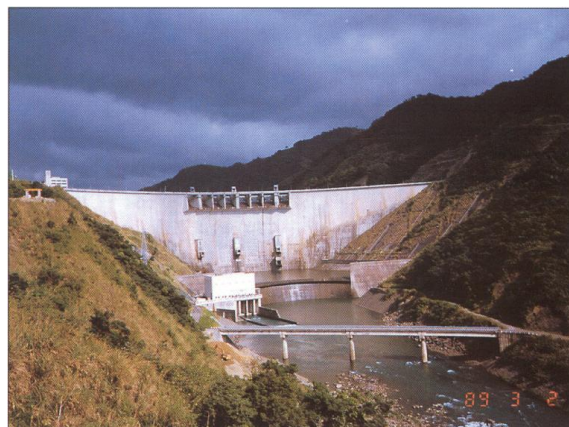


FANY SHA DAM

Hsintien, Taiwan

Xypex Concentrate, Modified and Patch'n Plug were used to repair water seepage through joints in the walls of this dam. The application eliminated all seepage and prevented oxidation of the steel reinforcement.

The dam is operated by the Water Conservation Bureau and the reservoir supplies water for the City of Taipei.



COLIBITA DAM GATEHOUSE

Romania

Xypex products were used to waterproof and protect numerous areas on this Dam's Gatehouse.



MILL DAM

Poland

The gallery walls of this Dam were leaking because of strong hydrostatic pressure. Xypex Patch'n Plug and Xypex Concentrate were applied to prevent any further water infiltration.



CAIRA HYDRO POWER PLANT

Bulgaria

The concrete located 350 meters under the surface of this Electric Power Plant had cracked and was leaking. Xypex Patch'n Plug and Xypex Concentrate were used on a gradual basis until all the leaks were stopped.



ZILINA RIVER DAM

Zilina, Slovakia

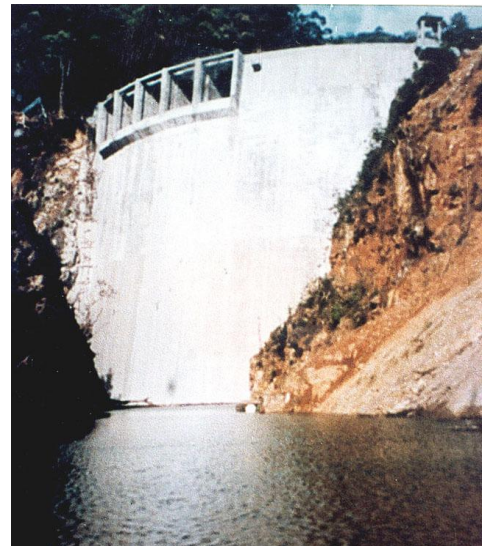
Xypex products were used to seal 1,000 lineal ft. of construction joints and 25,000 sq. ft. of surface in the underwater area around the turbo generators of this dam. This Dam is the second largest in Slovakia.



XIBING HYDROELECTRIC STATION

Fujian, China

This hydroelectric station is a research project of the Hydraulic Department of Tsinghua University. Xypex Concentrate was used to the thin-rolled concrete arch at the dam's surface.



ZAWADA MILL-DAM

Zawada, Poland

Extreme hydrostatic pressure was causing leakage in the concrete of the pipe gallery. Xypex Concentrate was applied on the interior surfaces to prevent further water infiltration.



OGREZENI DAM SPILLWAY

Bucharest, Romania

This structure is located on the Arges River, 25 km west of Bucharest. The reservoir was created to provide added security and quality to the water supply. Xypex Patch'n Plug was used to repair 275 m of cracks and joints on the spillway surface to prevent leakage into the service gallery. A coat of Xypex Concentrate was then applied overall.



ZABUMBAO DAM

Zabumbao, Brazil

Xypex Patch'n Plug was used to repair construction joints followed by a two-coat application of Xypex Concentrate and Modified to the internal walls of the Dam's shafts.



THREE GORGES DAM PROJECT

Yangtze, China

Xypex's concrete durability enhancing technology is used in the construction of the Cofferdam of the Yangtze River. Designed and constructed in accordance with the Chinese Standards for "First Class of Waterproofing" the Second Phase Cofferdam is 140 meters high. After testing, evaluation and, ultimately, acceptance by project engineers and after extensive remedial works in the Muyucau Tunnel, Xypex Concentrate was selected to treat defective concrete throughout the cofferdam structure of this project.



LANGLEY FRESH WATER RESERVOIR

City of Langley, British Columbia, Canada

This 16,000,000 gallon reservoir was waterproofed by Xypex. The slab received a dry shake application of DS-1. All cracks and tie holes were treated with the Xypex system.

A two coat system of Xypex Concentrate and Modified was applied to an area of 9,570 m², completed in February 2000.

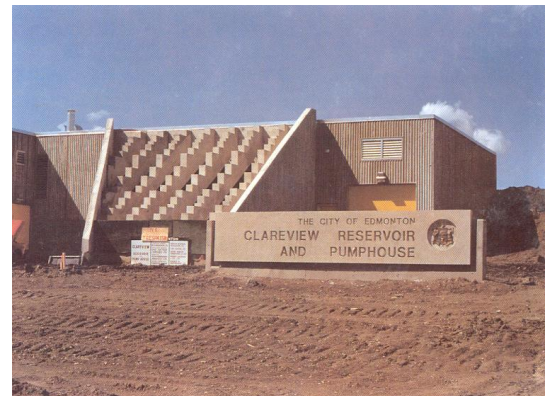


CLAREVIEW RESERVOIR

Edmonton, Alberta, Canada

A coat of Xypex Concentrate followed by a coat of Xypex Modified were applied to interior walls and slabs of this 62.5 million litre (16.5 million gallon) reservoir. Total area treated was 16,000 m² (172,000 ft²).

In addition, 135 support columns were treated with the Xypex system to prevent corrosion of the reinforcing steel.



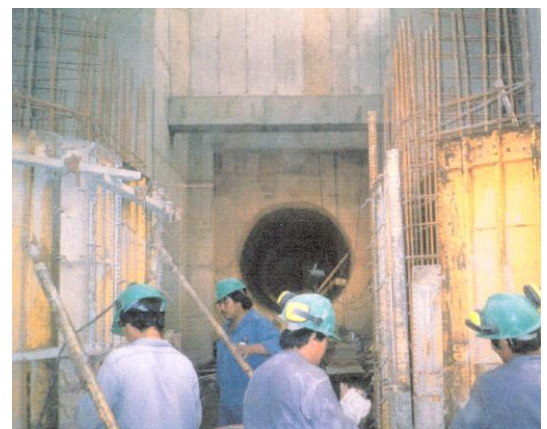
GENERAL ELECTRIC

CENTRAL PUERTO NUEVO DE CICIOS CONVI

Bueno Aires, Argentina

All tunnels & water supply structures, with walls at 0.65 meters thick, were dosed with Xypex Admix C-2000.

Basement structures were treated with Xypex Concentrate. Project completed in 1998.



RESERVORIO BELLA VISTA

Guayaquil, Ecuador

This reservoir, which has a capacity of 25,000 m³, is one of several in Ecuador's Master Plan for the supply of potable water to the city of Guayaquil. During the initial filling of the reservoir, it was found that there was substantial loss of water. This problem was solved by using the Xypex crystalline waterproofing system. Prior to applying the Xypex treatment, interior surfaces of the reservoir were slightly sandblasted and various concrete defects were repaired using Xypex products. Upon completion of the surface preparations, all walls and floor areas were treated with Xypex Concentrate.



DRINKING WATER RESERVOIRS

Parandak, Iran

Over 11,300 kgs (25,000 lbs) of Xypex Concentrate were applied to these two reservoirs being built at Parandak for the Ministry of Urban Housing. Each reservoir has a diameter of 60 meters (197 ft) and height of 4.5 meters (15 ft). The main contractor for the project was Deho Construction Company of Tehran.

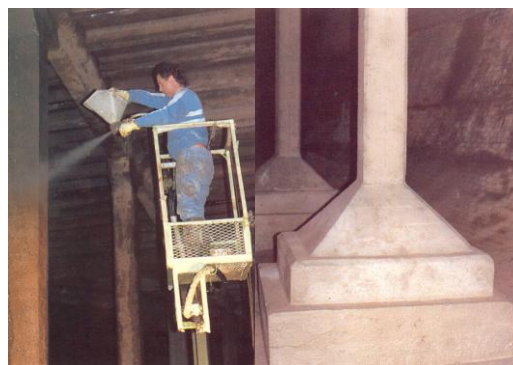
Xypex products were also used to waterproof seven additional reservoirs for the Ministry of Urban Housing at Massed Soleyman. Over 18,600 kgs (41,000 lbs) of Xypex Concentrate were applied to these additional reservoirs.



ERDINGTON WATER RESERVOIR

Birmingham, England, U.K.

A total of 580 columns were treated with Xypex Concentrate and Xypex Modified at this 60 year old potable water reservoir near Birmingham. Each column has a surface area of 12 m² (129 ft²). The photograph on the left shows a spray application of the first coat in progress, while the photograph on the right shows a treated column soon after the Xypex application.



XYPEX *PROJECTS*

**NO
EQUAL**

CHERRYCREST HILL RESERVOIR

Washington, U.S.A.

The picture illustrates finishing of concrete roof of 20 million gal. (76 million litres) reservoir. This structure was a post-tension design and involved 690 cu. yd. (525 cu. m.) of concrete dosed with the Xypex Admix. Xypex Concentrate was used to treat the pour-in-place wall and the Xypex DS-1 was used on the foundation slab of this reservoir. This project would not have been able to utilize the Xypex technology or products without NSF approval. NSF has now been mandated as the sole authority throughout the states of America to determine which products are acceptable. Canada and other countries are in the process of adopting NSF or other such agencies.



HYDRO-TECHNICAL COMPLEX

Russia

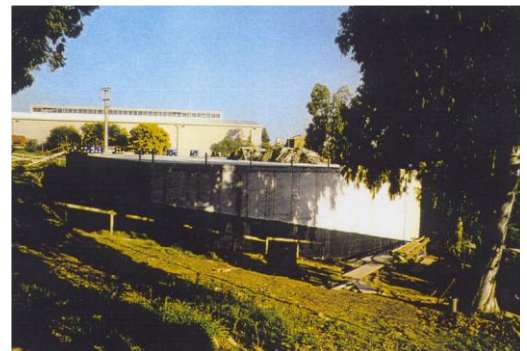
Five separate reservoirs located in foundations of building were treated with Xypex Concentrate and Modified. Joint and cracks were treated with Xypex Patch'n Plug. A total of 30,000 lbs. (14 tonnes) of Xypex materials were utilized. Tanks were 12.5 ft (3.8 m) deep, with significant leakage prior to the treatment.



WATER STORAGE TANK

Nas Singorella, Italy

All interior surfaces of this concrete reservoir were treated with 2 coats of Xypex Concentrate and Xypex Modified. Areas with honeycombing, cracks or construction joints were routed out to remove defective concrete and then Concentrate Dry-Pac was used to seal.



LAKE JUNE PUMP STATION

Dallas, Texas, USA

The double Ts of this reservoir were first sandblasted and then treated with one coat of Xypex Concentrate followed by one coat of Xypex Modified. The Xypex treatment was used to prevent further penetration of chlorinated water which was attacking and corroding the reinforcing steel.



JIM THORPE WATER TANK

Jim Thorpe, Pennsylvania, USA

Xypex Dryshake DS-1 was used in the manufacturing of the pre-stressed post-tensioned panels of this 200,000 gallon water tank.



MAYDENBAUER RESERVOIR

Bellevue, Washington, USA

Xypex products were used to waterproof and protect the interior concrete walls and decks of this reservoir. A total of 35,000 sq. ft. was treated.



U.S. NAVY – MAANOT RESERVOIR

Naval Magazine, Guam

Xypex FCM 40 was used to repair the cracks and joints in the concrete walls and floors of two 500,000 gallon tanks in this Navy reservoir. A two-coat application of Xypex Concentrate and Modified was then applied to waterproof and protect the concrete.



EMPRESA DE ACUEDUCTO DE BOGOTA

Bogota, Colombia

Xypex was specified as the preferred technology for the waterproofing and repair of this potable water tank. Xypex will be used to waterproof an additional 20 such tanks all of which are at least 20 years old.



QUJIANG RESERVOIR

Xi'an, China

Built in 1990, the Qujiang Reservoir was the biggest in Xi'an. Over time, cracks and leaking appeared on the surfaces of the channel leading to the reservoir. Xypex Concentrate, Modified, and Patch'n Plug were used to repair and waterproof the defective areas.



BIGGAR RESERVOIR

Biggar, SK, Canada

Xypex Admix C-1000 was blended into the mix to waterproof and protect the concrete in this reservoir.



FLEETWOOD FRESH WATER PUMP STATION

Surrey, BC, Canada

Xypex Concentrate and Modified were used to waterproof all exterior walls of this pump station.



LITTLE MOUNTAIN RESERVOIR

Vancouver, BC, Canada

Xypex Concentrate was used to waterproof and protect the new 175 million litre reinforced concrete tank in Queen Elizabeth Park. The previous underground reservoir was first demolished and Xypex Patch'n Plug was used to seal the cold joints and tie holes of the new structure.



BELCARRA PARK WATER RESERVOIR

Belcarra, Canada

This 60,000 gallon water reservoir was waterproofed with Xypex products. Xypex Dry-Pac was used on 400 lineal feet followed by a two-coat spray application of Xypex Concentrate and Modified.



D4 – POTABLE WATER RESERVOIR

Dundalk, ON, Canada

The concrete of this 50,000 gallon potable water reservoir with walls measuring 300-450 mm thick, was treated with Xypex Concentrate and Modified to provide waterproofing and protection.



E1 (NORTH) & E3 (SOUTH) POTABLE WATER RESERVOIRS

Elora, ON, Canada

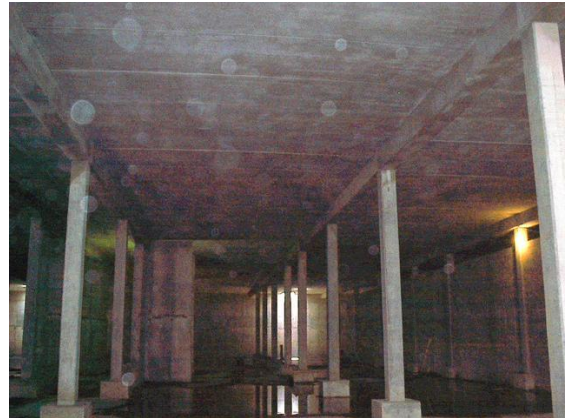
This 50,000 gallon potable water reservoir was waterproofed and protected with Xypex Concentrate and Modified.



TATUQUARA RESERVOIR

Curitiba, Brazil

Xypex Concentrate and Modified were applied to both the negative and the positive side of this reservoir to waterproof and protect the concrete structure.



VOLKSWAGEN PLANT

Buenos Aires, Argentina

Xypex Concentrate and Modified were applied over all the concrete surfaces of this industrial effluents-treatment plant to waterproof and protect it against aggressive chemicals. Xypex Concentrate was also used in the valve chambers.



VILA AMELIA RESERVOIR

Brazil

Xypex Concentrate and Modified were spray-applied to both the negative and the positive side of the top slab of this reservoir to waterproof and protect it.

