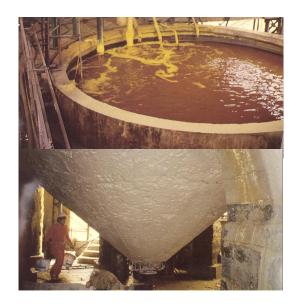


ATOCHEM SODIUM CHLORATE TANK

Isere, France

This concrete at the Isere Atochem plant was deteriorating due to the aggressive action of NaClO3. Xypex was used to eliminate leakage and to protect the concrete structure from further damage. After sandblasting the inside of the tank, joints and cracks were chipped open. The tank was then filled with clean water several times over a period of one month to eliminate any NaClO3 from the concrete substrate. The joints and defects were then repaired with Xypex products and two brush coats of Xypex Concentrate were applied to both the inside and outside of the tank.



FORD MOTOR COMPANY

Avon Lake, Ohio, U.S.A.

All paint and sludge pits at this Ford plant were treated with Xypex materials. The Xypex system provided both waterproofing and chemical protection for these concrete structures. Over the years, Xypex materials have been applied at several Ford operations, including plants in Michigan, Ohio, Illinois, Kentucky and Missouri.



COMINCO LEAD/ZINC LEACHATE TANKS

Trail, British Columbia, Canada

Walls, floors and perimeter troughs of four leachate tanks were treated with Xypex Concentrate and Xypex Modified. Each tank is 24.5 meters (80 ft) in diameter with 4.5 meters (15 ft) vertical walls. Cominco, one of the largest mining companies in Canada, used their own personnel to carry out the spray application under supervision of a Xypex technical representative.





OIL PITS

Slovakia

The oil pits, located under the presses, were treated with a two-coat application of Xypex Concentrate and Modified to protect the concrete against crude-oil substances.



PETROLEUM CONTAINMENT TANKS

Kuwait

Xypex Concentrate was used on these underground oil tank enclosures to prevent oil egress.



HEUSTON RAILWAY STATION PETROLEUM TANK FARM

Ireland

This petroleum storage facility, used by the railway, is situated adjacent to the Liffey River. Protection from contamination was a major environmental concern. Xypex Admix C-1000 NF was dosed at 1% to the PC content of the concrete used in the construction of two 'bund tanks' for secondary containment purposes.





HIGHWAY PROGRAM

Skala, Slovakia

A two-coat application of Xypex Concentrate and Modified was used to waterproof the run-off channels and pits where highway water carrying oils and chemicals is collected.



ZBIROH TRANSFORMER

Czech Republic

Xypex Concentrate and Modified were applied to the refurbished surfaces of the old intercepting traps for transformer oil as well as to the surfaces of the new one.



SWITCHING STATION KV

Czech Republic

Xypex Concentrate and Modified were spray-applied to the reinforced concrete of the underground pits, transformers, inductor sites and construction joints to prevent the leakage of transformer oil into the surrounding soil. The project took more than one year to complete.





NEW ORLEAN CONCRETE MANHOLE RINGS Louisianna, U.S.A.

Xypex Admix C-1000 at a dosage rate of 3% were added to the concrete during the manufacture of pre-cast manholes.

A red oxide pigment was incorporated into the Xypex Admix powder to provide Quality Assurance. As depicted in the photo on the right, the Admix treated manholes can be easily distinguished from other untreated pre-cast structures.



SANTA ROSA PUMP STATION

California, U.S.A.

Xypex Admix C-1000 at 3% dosage rate was used for the waterproofing and chemical protection for the new 10' x 20' x 30' (approx. 3m x 6m x 9m) precast sections. Prior to using Xypex Admix, the Public Works Department of the City of Santa Rosa started with Xypex Concentrate coatings and Patch'n Plug repairs to manhole structures in Santa Rosa's infiltration / inflow reduction program as far back as in 1974. Over 10,000 manhole structures have been successfully treated to this date.



VICKSBURG SEWER MAIN

Mississippi, U.S.A.

Pre-cast Sewer Pipes utilized Admix C-1000 at 3% dosage rate for chemical protection. A total of 1,700 lineal feet (520 linear meters) of pipe was produced in the initial project. Each unit was vacuum tested - ends of pipe section were sealed and a vacuum was used to confirm that there was no leakage.





TOWNWORKS DISTRICT HEATING CHAMBERS *Krefeild, Germany*

The Xypex system was used for the restoration and waterproofing of these underground heating chambers in Krefeild. The concrete had become badly deteriorated and the steel reinforcement was fully exposed in many areas. Temperature in the chambers range from 45 degrees to 65 degrees centigrade. After initial preparation by water/sand blasting, a slurry coat of Xypex Concentrate was applied to the surfaces. A cement render was then applied to the treated surface followed by a coat of Xypex Modified.



SEWERAGE RETICULATION PLANT

Puckapunyal, Victoria, Australia

This 50 year old plant, located at the Puckapunyal Royal Australian Army Base, was repaired completely using Xypex Patch'n Plug and a two coat application of Xypex Concentrate and Modified. Prior to the Xypex treatment. closure of the plant had been considered by Australian Construction Services, the government department responsible for maintenance of all federal structures, however, the A.C.S. now estimates that the plant has gained 25-30 years usable life after the repair.



COSTA DO ESTORIL SANITATION SCHEME

Costa do Estoril, Portugal

This sanitation scheme, constructed in the Costa do Estroril region, will protect Portugal's popular holiday beaches from contamination and pollution. It is designed to serve the needs of 1.2 million people. The Xypex crystalline system was used to waterproof the waste water treatment station including primary clarifier and all galleries, and the tunnels which carry effluents to the station. Also, various leaks and construction joints were repaired with Xypex products. While preventing the leakage of sewage into the environment is a major concern, the decision to use the Xypex system was also based on Xypex's ability to protect the concrete structures from hydrogen sulfide attack.





NITRA SEWAGE TREATMENT PLANT

Nitra, Slovakia

After the concrete walls and floor of this sedimentation basin were pressure washed, a two-coat application of Xypex Concentrate and Modified was used to waterproof the structure. Xypex FCM was applied over the top of the working joints.



IQUALUIT WASTEWATER TREATMENT PLANT Iqualuit, NWT, Canada

The concrete used in the initial construction of this plant was deemed very poor. A 5-1/2 in. reinforced shotcrete liner was used to rectify the problem. A two-coat application of Xypex Concentrate was used to waterproof the walls and slabs of the structure.



PRVATE FARM - FERTILIZER PIT

Cairo, Egypt

These concrete fertilizer pits on a farm outside of Cairo had to be rendered impermeable to the attack of the chemicals used to decompose the material wastes within them. Xypex Concentrate was applied to the surface of the structures. Subsequent inspections indicated no leakage or deterioration of the concrete.





GYOR CITY SEWAGE PURIFYING PLANT

Gyor, Hungary

Xypex Patch'n Plug was used to repair cracks and other defects in the concrete settlement basin of this wastewater treatment facility which was undergoing renovation and expansion. Xypex Concentrate was applied to over 1500 m² surface area, after it was sandblasted.



HOLLAND PUMP STATION

Netherlands

Xypex products were utilized in the renovation of this wastewater pump station. Xypex Concentrate was used to seal around pipes and at the base of pumps. Xypex Restora-Top 100 was used to resurface the concrete decks outside the pump station.



SANTA ISABEL WASTEWATER TREATMENT PLANT Puerto Rico

Xypex products were specified and used to waterproof the digester tank (12,155 sq. ft.), the surge-reverse-batching tanks, and the lift pump station and filter of this wastewater treatment plant.





WATER CONSERV II

Orlando, Florida, U.S.A.

The underground piping of this pollution control facility consists of steel pipe sections which are coated with a thin layer of cement mortar. This mortar layer was very porous and was spalled in some areas. Therefore, if left untreated, the steel would be exposed to ground water and subsequent oxidation. After repairing the spalled areas, exterior surfaces of all pipes were treated with a two coat application of Xypex Concentrate and Modified. The Xypex treatment prevented corrosion to the steel core of the piping.



SEWAGE PIPELINE

Krapina, Croatia

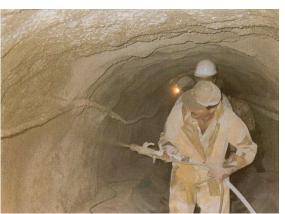
This concrete pipeline in North West Croatia exhibited leakage through various joints. This problem was solved successfully by using Xypex Patch'n Plug and Xypex Concentrate. The photo shows a section of the pipeline after completion of the Xypex treatment.



SEWER TUNNELS

Madeira Islands (Portugal)

Xypex was applied to sewer tunnels located in Madeira Islands, the main city on the group of islands which comprise part of Portugal. At this project, over 10 tons of Xypex Concentrate and Modified were sprayed onto gunite concrete (shotcrete).





WASTE WATER RESERVOIR

Gent, Belgium

The Xypex system was used in the repair and upgrading of this concrete structure which had many cracks and exhibited deterioration of both the concrete and rebar. Once the concrete defects were repaired, surfaces were coated with Xypex Concentrate, after which a cement render was applied. A coat of Xypex Modiied was then applied over the cement render.

The use of Xypex stopped any further leakage from occurring and prevented further degradation of the rebar, thus extending the life of the structure.



SEWAGE TREATMENT PLANT

Sugagawa, Japan

Xypex was applied to the exterior foundation walls of this treatment plant. Project was completed in 1997. Application involved 1,400 m² (15,000 ft²).



SHEBIN ELKOUM SEWAGE TREATMENT PLANT

Cairo, Egypt

35,000 m² (380,000 ft²) of this sewage treatment plant was treated with Xypex.





ALLEGRIA WASTEWATER TREATMENT PLANT Rio de Janeiro, Brazil

Xypex Concentrate and Modified were spray-applied to all foundations walls and slabs of this Wastewater Treatment Plant to waterproof and protect it.



GOIANIA WASTEWATER TREATMENT PLANT Goiania, Brazil

Xypex Concentrate was spray-applied to the foundation walls and floor of this wastewater treatment plant to waterproof and protect the concrete.



SANTA MONICA WASTEWATER TREATMENT PLANT

Campinas, Brazil

Xypex Patch'n Plug was applied to the construction joints followed by an application of Xypex Concentrate and Modified to protect and waterproof the concrete.





CAMURUGIPE SEWAGE PIPELINE

Salvador, Brazil

This pipeline, with a diameter of 2.40 m, exhibited serious leakage through various joints. Over 13,000 kg of Xypex Patch'n Plug and Xypex Concentrate was applied.



CITY OF NELSON SEWAGE PLANT ADDITION

Nelson, BC, Canada

Xypex Admix C-1000 was blended into the concrete mix to waterproof and protect the walls and slab of this sewage plant extension. Xypex Megamix 2 was used to patch the tie holes.



PIG FARM

Krekenava, Lithuania

Xypex Concentrate was applied to the new sewage pits of this pig farm at a rate of 1 kg/m^2 to waterproof the concrete and to provide chemical protection from animal waste.





SEWAGE TREATMENT PLANT

Bahia Blanca, Argentina

Xypex products were successfully used to waterproof and protect the concrete of this sewage treatment plant.



IQALUIT WASTEWATER TREATMENT PLANT Iqaluit, NWT, Canada

The concrete used in the initial construction of this plant was deemed very poor. A 5-1/2 in. reinforced shotcrete liner was used to rectify the problem. A two-coat application of Xypex Concentrate was used to waterproof the walls and slabs of the structure.



GENERAL MOTORS WASTEWATER TREATMENT PLANT

Rosario, Argentina

A two-coat treatment of Xypex Concentrate and Modified was applied to all the concrete surfaces of this effluent-treatment plant.





GOLDBAR WASTEWATER TREATMENT PLANT

Edmonton, Canada

Xypex Admix C-1000 and Xypex Dryshake DS-1 were used to waterproof the holding structures at this waste activated sludge facility. Concrete containing Xypex Admix exceeded the specified mix design strengths at the 28 day tests. The contractor also observed less shrinkage in the Xypex-treated concrete.



WASTEWATER TREATMENT PLANT

Bogota, Colombia

This is the first of three Bogota wastewater treatment plants to be treated with Xypex products. Xypex Patch'n Plug was used to repair defects and stop water leakage in the concrete. More than 5000 kg of Xypex products was used in the concrete waterproofing process.



AASS WASTEWATER TREATMENT PLANT

Entre Rios, Eucador

The walls of this plant were cast using the Machihembrado method. Because of this approach, Xypex Dry-Pac and Xypex Patch'n Plug were required to seal the construction joints. The same Xypex treatment was used on 518 m of cold joints and cracks. After these structural defects were repaired, the surfaces were treated with a 2 coat application of Xypex Concentrate.





NEWBERRY WASTEWATER TREATMENT PLANT Newberry, Pennsylvania, USA

Xypex Admix was used in the concrete mix to waterproof all walls and walkways. Xypex Dryshake DS-1 was used to waterproof the slabs. This was the second Xypex application for this site.



NESCOPECK WASTEWATER TREATMENT PLANT

Nescopeck, Pennyslvania, USA

Xypex Admix was used to waterproof and protect a new tank that would be subjected to a harsh environment. Over 1200 cu.yds. of concrete was treated with Admix C-1000 at 12 lbs/yd³.



PUMP STATION & WASTEWATER TREATMENT PLANT

Central Carbon, Pennsylvania, USA

4,000 cu. yds. of Xypex Admix dosed concrete was used to waterproof this major pump station and wastewater treatment plant.





WASTEWATER TREATMENT PLANT

Palo Alto, California, USA

Xypex Patch'n Plug was used to repair the cracks on the roof of the digester tank. Xypex Concentrate was then applied over all areas.



WASTEWATER TREATMMENT PLANT

Calistoga, California, USA

A two-coat treatment of Xypex Concentrate and Modified was used to waterproof and protect the digester tanks as part of the upgrading of this wastewater treatment plant.



SLUDGE FACILITY

Homestead, Florida, USA

Xypex products were used to waterproof the interior walls of the tanks for phase 3 of this wastewater treatment plant extension. The top four feet of the Xypex application was coated with coal-tar epoxy.

