

XYPEX[®]

XYPEX[®]



Xypex Chemical Corporation

Airports

Chemical Resistance

Resistance to different chemicals

Pacific Testing Laboratories, Seattle, USA

- ASTM C-267-77 Chemical Resistance of Mortars
- Concrete cylinders treated with Xypex and compared to untreated cylinders
- 12 week exposure to different chemicals
- Comparison of compressive strength relative to untreated cylinders

<i>Total Average Difference</i>	<i>17.13%</i>
<i>Pool Chlorine</i>	<i>13.20%</i>
<i>Ethylene Glycol</i>	<i>29.40%</i>
<i>Hydrochloric Acid (pH 3.5)</i>	<i>14.80%</i>
<i>Brake Fluid</i>	<i>18.00%</i>
<i>Transformer Oil (Mineral)</i>	<i>14.40%</i>
<i>Toluene</i>	<i>16.10%</i>
<i>Caustic Soda</i>	<i>14.00%</i>

Chemical Resistance

Resistance to different chemicals

Institute of Civil Engineering Technology and Testing, Bratislava

- Concrete cylinders of 150mm length, 30 Mpa strength
- Xypex cylinders treated with 2 coats Xypex Concentrate
- Chemicals under 14Kpa (1.4m) pressure forced through samples
- Time to pass or maximum penetration measured at 28 days

	<i>Avg Penetration</i>	
	<i>Control</i>	<i>Xypex</i>
<i>Unleaded Gasoline</i>	<i>52.5mm</i>	<i>0mm</i>
<i>Diesel Oil</i>	<i>140mm</i>	<i>5mm</i>
<i>Transformer Oil</i>	<i>57.5mm</i>	<i>2mm</i>
<i>Silage Liquor</i>	<i>72.5mm</i>	<i>0mm</i>



Containment Glycol

Containment - Glycol

Pearson International Airport, Toronto, Canada

- 60% de-icing fluid (glycol) must be collected after aircraft de-icing
- Containment tank required full rehabilitation
- 3,600 sq.m



Tank condition before rehabilitation

Containment - Glycol

 Pearson International Airport, Toronto, Canada



Sand blasting to prepare concrete

Containment - Glycol

 Pearson International Airport, Toronto, Canada



Crack repair (Xypex Concentrate Dry-pack)

Containment - Glycol

 Pearson International Airport, Toronto, Canada



After application of Xypex Concentrate



Containment Gasoline & Diesel

Containment



Fuel Stations Czech Republic



In the case of fuel stations, it is essential that the environment be protected against the damaging effects of petrol. The concrete which encloses the storage of the fuel as well as the concrete surrounding the pumps was protected using Xypex.



Containment



Gasoline Vault Containment, USA



Xypex now has New Mexico state environmental engineering approvals NMED-PSTB for secondary containment of petroleum, gasoline and diesel. This vault was coated up past the containment levels of the walls within Concentrate and Megamix I.



Containment



Repsol Fuel Station, Brazil



Xypex Quick Set, which is a clear surface hardener, was applied over the concrete on the floors of the fuel station

Other containment

Petrochemical

- Gas Station Projects completed in countries such as Belgium, Slovakia, Czech Republic, Brazil, and the UK, among others.
- British Petroleum – Containment Structures, UK
- Detroit Diesel Allison – Secondary Containment, USA
- Petroleum Storage Depot – Aviation Turbine Fuel, UK
- Texaco Oil Company – Separating Tanks, UK
- Hoechst-Celanese – Fuel Oil Containment Slab, USA
- Petroleum Containment Tanks, Kuwait
- Oil Storage Facility, Slovakia

Other containment

Chemical

- Dow Chemical Hazardous Spill Area, USA
- Amoco – Molten Sulfur Pits, USA
- Albert City Ethanol Facility, USA
- Arthur Ethanol Facility, USA
- Dyersville Ethanol Facility, USA
- Heron Lake Ethanol Facility, USA
- Sioux Valley Ethanol Facility, USA
- Jamesville Ethanol Facility, USA
- Menlo Ethanol Plant, USA
- Blue Flint Ethanol Plant, USA
- Green Valley Ethanol Facility, USA
- Shell Rock Ethanol Facility, USA
- Dakota Ethanol Facility, USA
- Valley Ethanol Facility, USA
- Heartland Ethanol Plant, USA
- Palmyra Ethanol Facility, USA



Apron Repair

Apron Repair

 Pune Airport, India

- Cracked and potholed apron
- Rehabilitation with Xypex Megamix II



Aprons

Other projects

Norman Army Reserve Base, USA – apron

Will Rogers World Airport, USA – 1800 sq. m refuelling area

Barmy Reserve Base USA – 5,400 sq. m apron

XYPEX[®]

XYPEX[®]