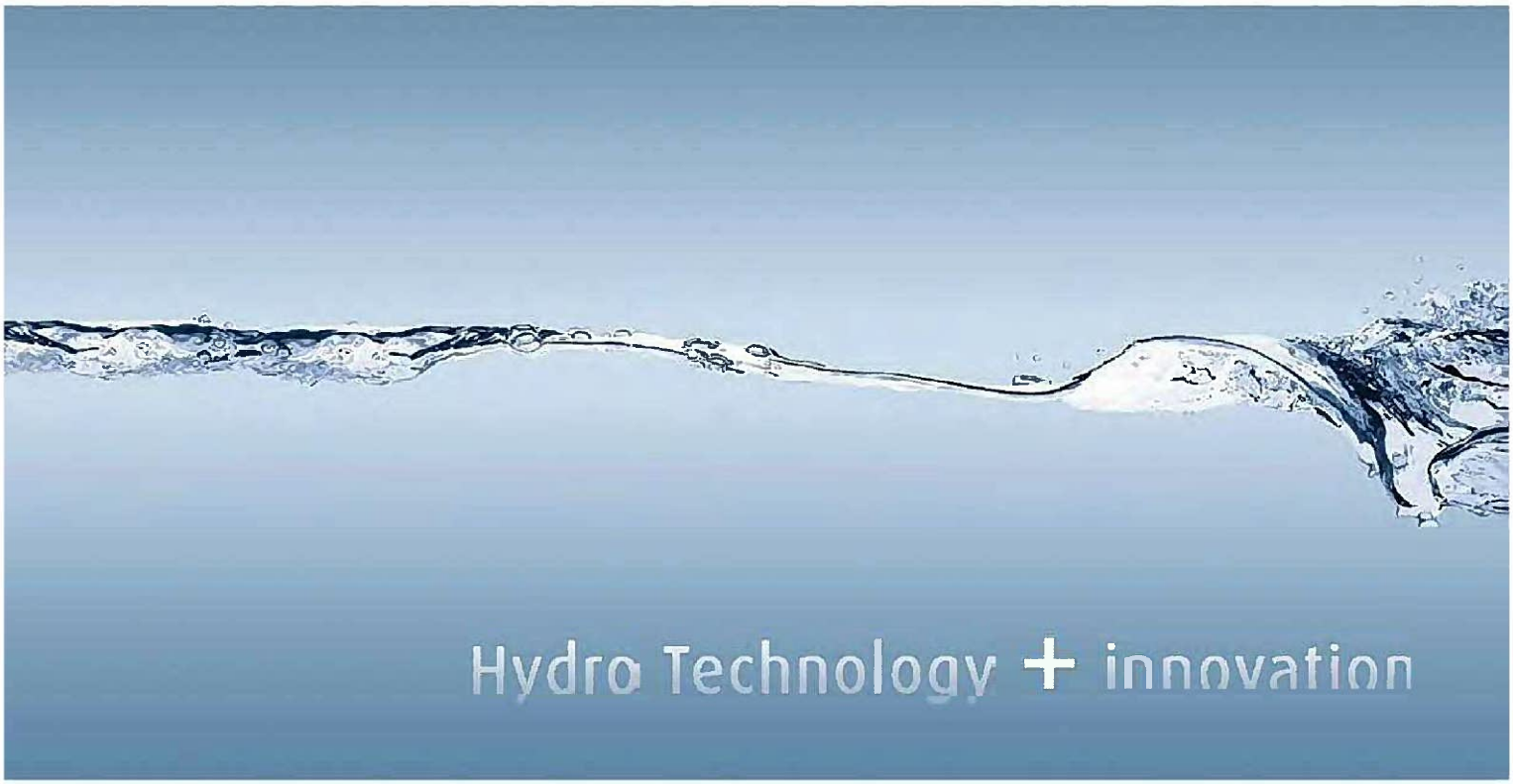
The MPS System

Multi Pulse Sequencing

The permanent solution to water ingress



Hydrotech

Introducing Multi Pulse Sequencing

“Hydrotech provide a permanent solution to capillary water ingress - GUARANTEED”

Water ingress has long since been a major problem for Architects, Property Managers, Contractors and Engineers. Conventional waterproofing techniques only address specific problems for a limited period of time and as such, costs can spiral.

Hydrotech's innovative MPS System succeeds where all others fall and is safe, reliable and cost effective. Furthermore whether it is an existing structure or a new building, Hydrotech's proprietary technology, The MPS System provides water ingress protection when seepage is due to capillary action.

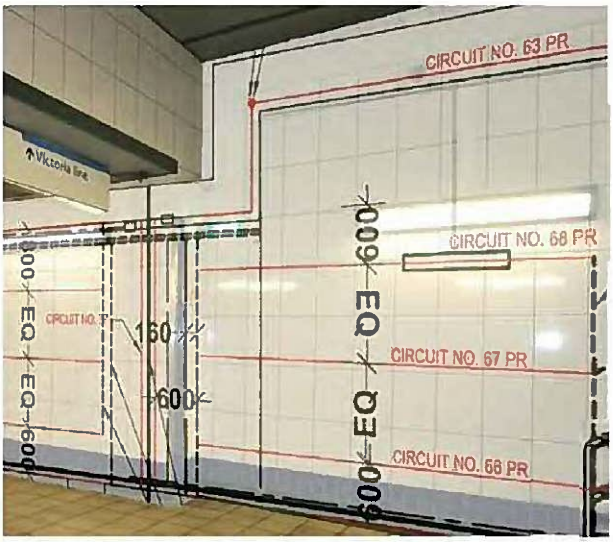
Corporate History

Hydrotech Asia Limited, formerly Hydrotech International Limited, was a publicly listed company on the Australian Stock Exchange until 2013 and traded under the stock code of "HTI". Hydrotech is a total water ingress solutions provider and owns 100% of the intellectual and commercial property rights to the Multi Pulse Sequencing System (MPS System). The company is a specialist design and installation supplier of proprietary technology and know-how in the area of prevention of water ingress into subterranean concrete and masonry structures. The company headquarters in Hong Kong with representations in Mainland China, United Kingdom and an R&D Centre in Norway.

The permanent solution to water ingress

What is the MPS System?

The MPS System is an evolutionary technology built upon established scientific theory. It gives new life to existing structures, avoids expensive reconstruction and allows a broad field of applications in concrete structures.



Concrete and brick masonry structures consist of a mass containing capillary formations. A common form of water ingress into basement structures is through capillary action. Water penetrates into the concrete through voids and cracks and travels along the capillaries using a similar mechanism as plants and trees receive and distribute water.

The MPS System waterproofs both new and existing structures using a series of complex, low voltage, positive and negative pulsating charges passed through electrodes in the form of anode wire strategically placed within the structure. The pulsating charge creates an electromagnetic force which actively repels water within the capillary (<0.2 mm) to the groundwater behind.

Introducing Multi Pulse Sequencing

Where can the MPS System be installed?

The MPS System is extremely effective in the following types of construction:

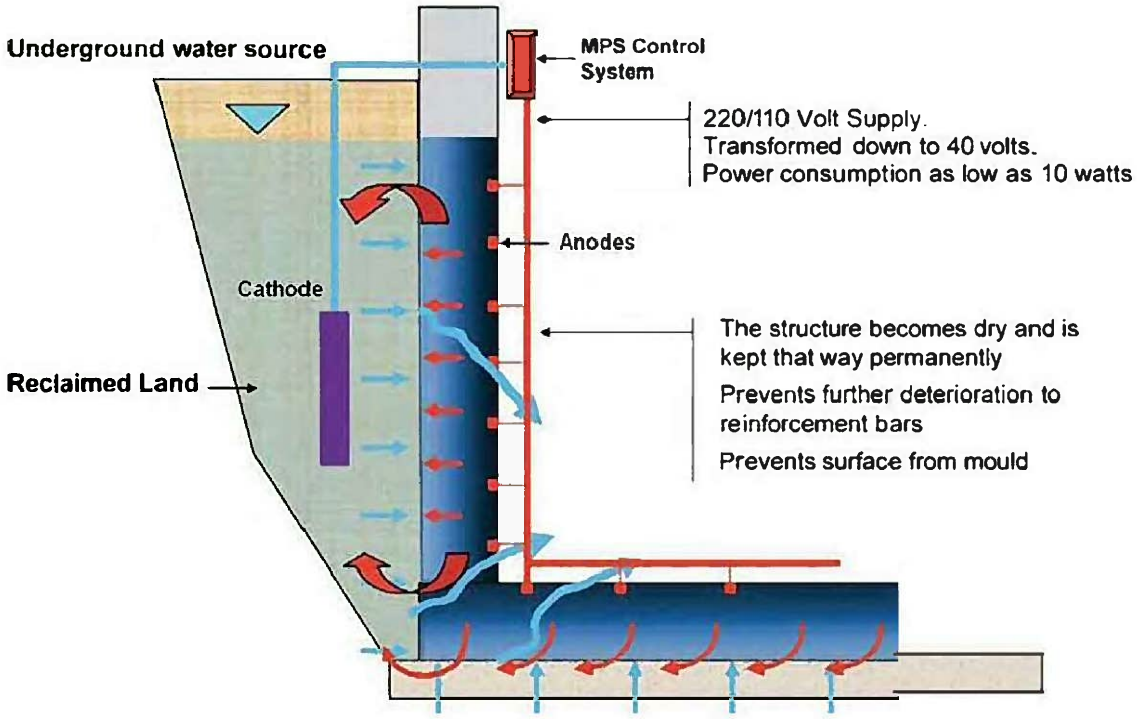
- Basement walls with a high water table
- Tunnels with concrete or masonry lining
- Underground structures and car parks
- Dams, marine structures and foundations
- Bridge abutments and arches

Why choose the MPS System?

- The MPS System provides a permanent solution to all substructure waterproofing requirements
- Dry-wall construction with drained cavities may not be required, providing greater utilization of space and reduced construction costs
- If water ingress occurs, mechanical crack remedial measures are extremely effective and easy to implement
- Eliminates the need for an internal wall when a diaphragm wall type of construction has been used
- The MPS System is installed from the exposed side of a structure, negating the need for expensive exterior excavation work to existing basements
- The MPS System prevents mould and mildew growth
- The MPS System reduces energy costs

The permanent solution to water ingress

Characteristics of the MPS System



- Low voltage system, with minimal running costs. (Approx 10 Watts per 1,000m^2)
- Touch safe
- Reduces the corrosive environment for steel reinforcement within a structure
- Improves a structure's insulation, reducing cooling and heating loads
- Prevents penetration of waterborne bacteria

Introducing Multi Pulse Sequencing

The MPS Installation Process

1. Identification of the water ingress problem
2. Feasibility study to determine the suitability of the installation
3. Provide a proposal and quotation
4. Design the layout
5. Installation of the MPS System
6. Commissioning
7. Ongoing monitoring until results achieved

Typical Specification

The Proprietary Electro Osmosis waterproofing system shall be Hydrotech's Multi-Pulse Sequencing (MPS) system. The MPS System has over 10 years proven track record for use in waterproofing below grade concrete or masonry structures. The MPS System will use low voltage and low current to repel water actively out of the structure and shall incorporate the MPS Control Unit capable of supplying current to a minimum of 150 square metres of concrete surface. Anode circuits comprising of 2.0mm diameter, titanium wire embedded into 23mm deep x 8mm wide grooves saw-cut or formed in the concrete surface and 14mm diameter copper coated mild steel cathodes as detailed in the design specification.

MPS Clients: Hydrotech has worked with the following clie

UNDERGROUND

Architectural Services Department
The Government of the Hong Kong Special Administrative Region

Hong Kong Housing Authority

MTR
心繫生活每一程

MPS Project References

...a truly global solution for water ingress issues

Hong Kong

- Central Station Pedestrian Subway (MTRC)
- One IFC (Henderson Land)
- Cityplaza 4 (Swire Properties)
- International Plaza, Kowloon Bay
- Hang Seng Bank Headquarters
- Wo Hop Shek Crematorium, Fanling (ASD)
- Oi Man Estate, Homantin, HK Housing Authority
- HK Institute of Education, Taipo
- 181 Gloucester Road, Wanchai

China

- Tengmieshan Highway Tunnel, Yunnan
- Zhengzhou Electric Cable Tunnel, Henan
- Hydro-power Dam, Guiyang Guizhou Province
- Residential Basements, Green Rivers Manor, Beijing
- Shanghai Villa and Ping Hu Villas in Zhejiang Province

Rest of World

- Walthamstow Station Pedestrian Subway, London Underground
- Oslo Central Railway Station, Norway
- Norwegian National Museum
- Oslo Housing Society
- Oslo Ullevall Hospital
- Tafjord Dam, Norway
- Tonstad Power Station, Norway
- The Norwegian Building Research Station
- The Norwegian National Hospital
- St George's Hospital, Christchurch, New Zealand

nts in the provision of permanent solutions for water ingress:

生 銀 行
NG SENG BANK
Managing wealth for you, with you.

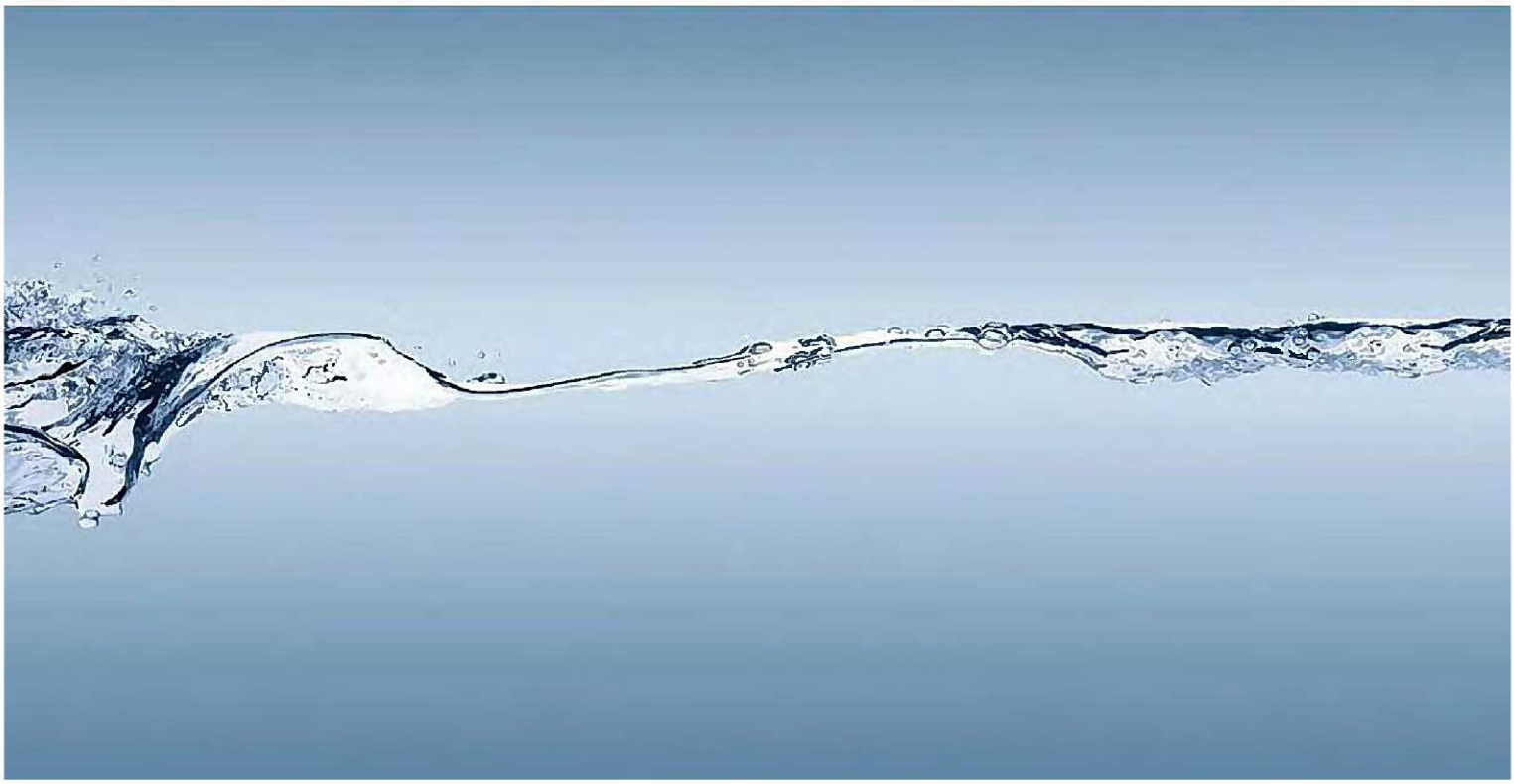
HENDERSON LAND GROUP

The Hong Kong Institute of Education
香港教育學院

SWIRE PROPERTIES

MPS

MULTI PULSE SEQUENCING



Hydrotech

HYDROTECH ASIA LIMITED
Tel: +852 2865 6600
Fax: +852 2488 7098

www.hydro-usl.com

For all assistance, please contact enquiries@hydro-usl.com