

HYDREX ASIA LIMITED

COMPANY PROFILE



Business Nature:

- Design and Supply of Water and Wastewater Treatment Plants
- Project Management and Construction of Water and Wastewater Treatment Plants

Main Products:

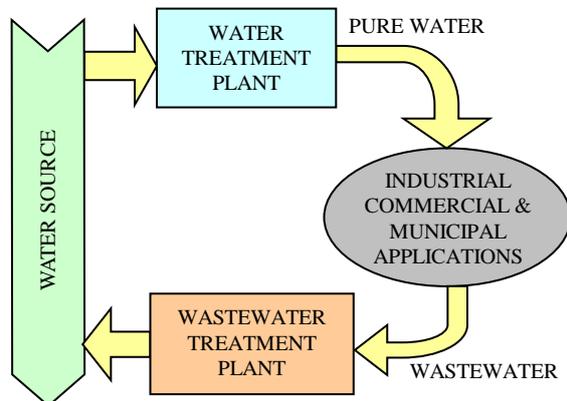
- Design and Supply of a Complete Range of Water Treatment Systems
- Design and Supply of a Complete Range of Sewage and Wastewater Treatment Systems
- Design and Supply of Wastewater Recovery and Recycle Systems
- Supply of Anaerobic Systems for High Strength Industrial Wastewaters
- Supply of Advanced Wastewater Treatment Systems for Nitrogen and Phosphorous removal

A single source water and wastewater treatment company with total capability to design, supply and construct water and effluent treatment facilities.

HYDREX - The water and wastewater treatment specialists

Hydrex Asia Limited specializes in custom designing, building and installing water and wastewater treatment systems for industrial, commercial and municipal applications, serving primarily China, South East Asia and the Middle East.

Cleaning and purifying water and wastewater is a highly specialized task, subject to wide diversity of requirements. New technological developments constantly occur and each installation in itself is unique. There are no ready made solutions as each water source presents its own individual characteristics and problems.



Providing effective solutions to individual treatment needs requires a high degree of expertise, coupled with an intimate knowledge of a full range of treatment equipment. The highly qualified and experienced process design engineers at Hydrex exhaustively evaluate process alternatives with a view of providing the most dependable, efficient and cost effective type of treatment system for the particular project.

The hundreds of water and wastewater treatment plants installed by Hydrex and in

operation for many years are proof of our leadership in this area.

A cross section of Hydrex's clients, for example, would include:

- San Miguel Corp., Philippines
- San Miguel Brewery, Hong Kong
- Coca-Cola, Philippines
- Coca-Cola, China
- Coca-Cola, Sri Lanka
- Coca-Cola, Vietnam
- Coca-Cola Tirtalina, Indonesia
- Coca-Cola, Pakistan
- Coca-Cola, Camdodia
- Nam Sang Textile Dyeing, China
- Ayala Corp., Philippines
- Lever Bros., Thailand
- Textile Industries Corp., Burma
- Royal Palace, Brunei
- Allied Properties, Hong Kong
- Goldzack Textile Mill, Philippines
- Signetic Corporation, Philippines
- Hua Guang Brewery, China
- Foshan Electronic, China
- Fuji Xerox, China
- Tak Fu Dyeing & Printing, Hong Kong
- P.T. Kaltim Prima Coal, Indonesia
- Bali Intercontinental Hotel
- Plaza Indonesia Hotel
- Motorola, China
- Motorola, Philippines
- Light Industry & Science Park, Philippines
- First Philippine Industrial Park
- Proctor & Gamble, Philippines
- Duracell, China
- Duracell, India
- Nestle Corp., Philippines
- Matsusita Zuhai, China
- Olympus Camera Factory, China

Hydrex is, in short a one-source water and wastewater treatment company with total capability to construct water and effluent treatment facilities on an individualized basis.

HYDREX - Wastewater Treatment Capabilities

Hydrex engineers are highly experienced in both industrial and municipal effluent treatment, and over the years have built a variety of treatment systems specifically designed to meet the special needs of particular industries and rapidly growing housing estates, resorts, villages and towns. Hydrex systems are compact, economical, odor free, noise free, efficient, easy to construct and simple to operate.



Domestic sewage treatment plants for Phase I and II of Hong Kong's Red Hill Peninsula, a deluxe residential development, were designed and supplied by Hydrex. The biological treatment system, utilizing a Rotating Biological Contactor (RBC) achieves very high levels of performance at a most economical cost.

A visit by top management from the Hua Guang Brewery, Shanghai to several of Hydrex's wastewater treatment plants resulted in an order to us for a complete, state of the art, package plant for the treatment of 1,200 m³/day wastewater with 1,500 mg/l of BOD.

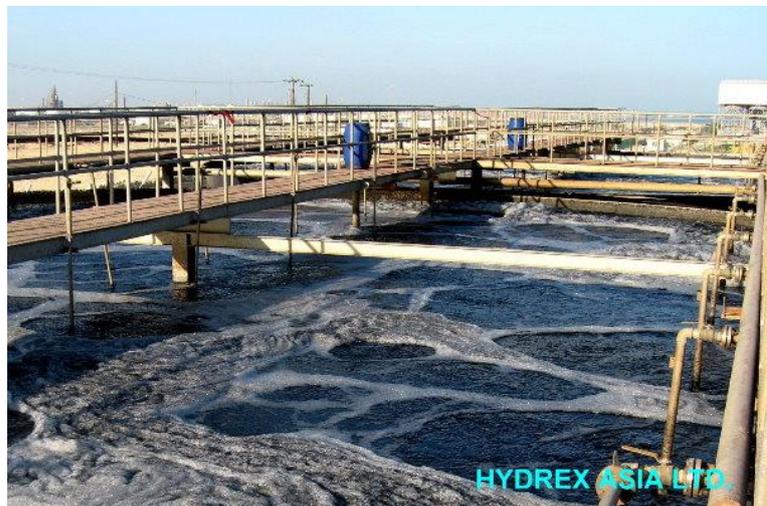




In the Coca-Cola concentrate plant in the Philippines, BOD levels in the incoming wastewater will vary from 300 to 4,500 mg/l and pH levels from 6 to 12 daily. Hydrex supplied an uniquely designed treatment plant which produces treated effluent of

consistent quality despite the wide fluctuations in wastewater influent. Similar plants have since been supplied by Hydrex for Coca-Cola's Concentrate Plants in Indonesia, Pakistan and China, and Coca-Cola has awarded Hydrex the contracts for various other wastewater treatment systems with capacities ranging up to 4,000 m³/day.

The wastewater treatment system designed and supplied by Hydrex for the treatment of bleaching, dyeing wastewater neutralization and color removal in Bahrain, is typical of the many installations supplied by Hydrex for various textile plants throughout the Asia region.



Hydrex designed and supplied a 3,500 m³/day technically challenging wastewater treatment plant for the Foshan Color Picture Tube Factory, China, which removes various heavy metals as well as PVA fluorescent powder, graphite, hydrofluoric acid and various other acids.



A previously existing 19,000 m³/day municipal sewage treatment plant in Makati, Philippines was expanded by Hydrex to handle a total of 40,000 m³/day. The satisfied client promptly awarded Hydrex the order for a 9,500 m³/day plant for installation in their new Alabang Village housing development.

Kaltim Prima Coal, Indonesia, in a three year time period, ordered a total of eleven sewage treatment plants with capacities ranging from 70 to 400 m³/day due to the plants' outstanding design and performance.



A fully pre-assembled, fabricated steel package sewage treatment plant of 10 m³/day for a Cola concentrate plant in Lahore, Pakistan.



One of the industrial effluent wastewater treatment projects recently undertaken by Hydrex was for the design, supply and construction of a plant at the **Light Industry & Science Park of the Philippines** in Cabuyao, Laguna. The plant is to be constructed in several stages with the first stage, which was completed in early 1993, having a capacity of 4,000 cu. meter per day.



The BOD content of the wastewater is relatively high, up to 1,000 mg/l, and the hydraulic load fluctuates with the seasons and production cycles. The treated effluent meets with the strict discharge standards set by the local authority.



For this project a most advanced state-of-the-art two stage biological treatment process, with a high rate activated sludge followed by a conventional activated sludge, was selected. Prior to the activated sludge process, the wastewater is chemically conditioned to make it amenable to biological treatment.

Process Tank
(above left)

Clarifier
(left)

- The system is capable of treating widely varying flow rates and wastewater compositions.

- Glass fused steel tanks are used throughout to prevent corrosion by the wastewater and provide long life with no need for maintenance.

- Highly efficient aerators were selected to minimize energy consumption, keep noise to a minimum and provide a high level of flexibility. The aerators turn on and off automatically in response to the actual oxygen demand of the wastewater. The presence of oxygen in all tanks prevents any odor emission from the plant.

- The excess sludge produced by the system is digested and dewatered, making it suitable for soil conditioning within the park grounds.

- A duplicate plant was supplied for the second stage of LISP, and a similar plant was supplied for LISP-II in Calamba.



Clorination Tank
(above right)

Sludge Dewatering
Unit (right)





A 550 m³/day package wastewater treatment plant for a beverage bottling in Cambodia.

A Tertiary Treatment and Color Removal System for 300 m³/day Cola Concentrate wastewater treatment plant in Shanghai, China.



The wastewater treatment plant with the most energy efficient surface aerators for FPIP in Sto. Tomas, Batangas, Philippines





A wastewater treatment plant for an industrial park located at Kawarang of Java, Indonesia in 1997 which utilized the most advanced modular tank design. In 2011 and 2013, Hydrex was again awarded the contract to design and supply Phase 2 and 3 for expansion of the plant respectively due to the outstanding modular design.

HYDREX - Water Treatment Capabilities

The uses of pure and clean water are as divergent as industry itself. Soft drink bottling, beer making, textile dyeing and printing, oil refining, power generating and food processing all require differing amounts of water in different qualities. An important facet of Hydrex is its ability to provide treatment systems that are custom tailored to the wide range of industries it serves.

We provide a complete range of engineering and installation services covering the whole range of water treatment systems, including:

- * CLARIFIERS
- * DEALKALIZERS
- * PRESSURE AND GRAVITY FILTERS
- * ION EXCHANGE SYSTEMS
- * REVERSE OSMOSIS SYSTEMS
- * DEAERATORS AND DEGASIFIERS
- * CHEMICAL FEED SYSTEMS
- * WATER RECOVERY SYSTEMS



A fully automatic water treatment system with media filterds, demineralizer, carbon purifier, UV and polishing filters to produce high quality water for a beverage plant in Shanghai, China.



Granular media filters, together with chemical feed systems, have been supplied to many industries for suspended solids, iron and oil removal. Activated carbon filters will remove chlorine, organics, taste and odor.

Ion exchange softeners with capacities ranging from 350 to 4,500 m³/day have been supplied for the removal of hardness for many industries.



Shwedaung Textile Finishing Plant in Burma, in consultation with Tootal UK, selected Hydrex to design and supply a 4,550 m³/day water treatment plant to treat the muddy water from the Irrawaddy River several kilometers from the factory.



Well over 25 packaged demineralizer systems with deaerators, capacities ranging from 300 to 4,000 m³/day, have been supplied to various industries for boiler feed water treatment.

San Miguel Brewery, Hong Kong invited Hydrex to modify their existing water treatment plant and in addition supply a new 1,700 m³/day water treatment plant to ensure that they utilize the highest quality water in their beer processing operations.

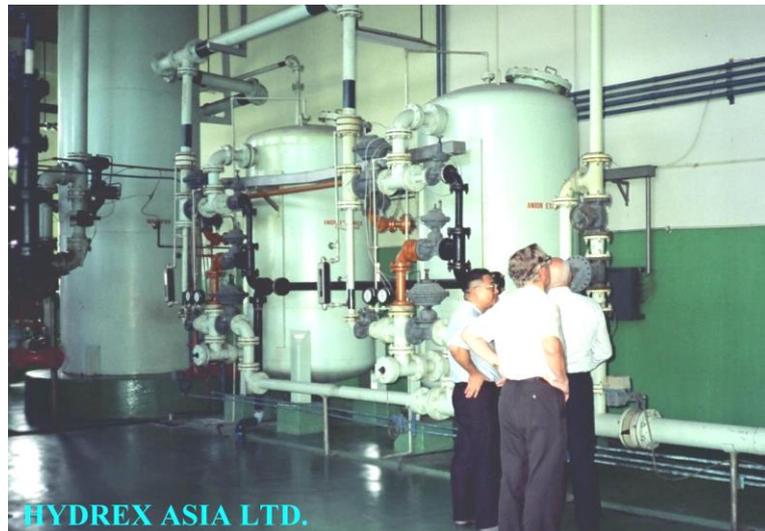


A fully automatic skid mounted, two train demineralization system with cation, anion and mixed beds is shown ready for delivery to Indonesia. The system was built to the most stringent specifications as outlined by Bechtel.



Santa Rosa Plant, Philippines, one of the largest Coca-Cola bottling plants in the world, selected Hydrex to design and supply a fully automatic ion exchange water treatment system for their product, process and utility water. Similar systems have been installed by Hydrex at a number of their other plants as well.

Hydrex designed and installed a fully automatic demineralization system sized at 3,900 m³/day for San Miguel's San Fernando Brewery, Philippines in 1982. In 1990, Hydrex expanded the plant's capacity to 4,900 m³/day. A 1,000 m³/day demineralization system for their Bacolod Brewery was awarded to Hydrex the same year.



Our engineers have designed efficient, economical water treatment systems and equipment for a vast variety of industries, experience which we can put to work for your firm today.

A 2,200 m³/day plant, designed and supplied by Hydrex, was installed and commissioned for Kaltim Prima Coal at one of their mining sites in Indonesia. The purification system proved superior to all previously installed water treatment systems, especially in terms of iron removal, and another order was immediately placed for an additional plant to handle the remainder of the site's water demands.



Hydrex undertakes turn key contracts for almost any small to medium size domestic sewage and industrial wastewater treatment package plants.

An examination of Hydrex's installation list covering the past 19 years will show that many of our clients are repeat customers. Such customer confidence and loyalty reflects well on our ability to provide the most cost effective, quality water and wastewater treatment systems and services.

FOR FURTHER INFORMATION

A full range of water and wastewater treatment systems and equipment are available from Hydrex. For further information, please contact us or our authorized agent.

Authorized Agent:

HYDREX ASIA LTD.

701, BEVERLEY COMMERCIAL CENTRE,
87-105 CHATHAM ROAD, KLN, HONG KONG.
PHONE: (852) 2527-9544
E-mail: info@hydrexasia.com www.hydrexasia.com
