

HONGKONG INTERNATIONAL TERMINALS





Message from HPH Group Managing Director



John E. Meredith Group Managing Director

HIT's history is a tale of many successes, spread across four exciting decades. From our early days managing the docks of the former Hongkong and Whampoa Dock Company, through the development of Terminals 4, 6, 7, 8 and 9 in Kwai Tsing, we have become one of the world's leading container terminal operators, taking centre stage in the growth of trade in Hong Kong as we have witnessed the opening of China to the world economy.

HIT is now the flagship of the Hutchison Port Holdings Group. Through the sharing of resources, expertise, talent and technological know-how with member ports, HIT has played an important role in contributing to HPH's rapid expansion into a global network of 50 ports in 25 countries.

This photo album commemorates the last 40 years, which have seen HIT transform from a small entity in 1969 into a global leader in the international maritime industry today. This transformation would have been impossible without the support of our customers and stakeholders.

I hope you will enjoy this album as we trace the path of HIT's history of growth.

Message from HIT Managing Director



Eric Ip Managing Director

Over the last 40 years, HIT has become one of the world's largest and most technologically advanced container terminal operators. We have broken records year after year, and our performance has set industry benchmarks.

All this has been accomplished with one primary goal in mind – to deliver a competitive advantage to our customers, providing them the support and service they need to run their operations with flexibility and efficiency.

We take pride in the close partnerships that we have formed with our customers over the years. These progressive working relationships have allowed us the privilege to grow in tandem with them in this rapidly changing business environment.

This history album illustrates HIT's growth in the last four decades. It is on this solid foundation of past development that HIT will go forward, embracing the challenges of the future with determination and dedication as we transform our role from being a gateway to South China to becoming a transshipment hub of Asia.

ONCE UPON A

TIME ...

The history of HIT can be traced back to 1866 when the Hongkong and Whampoa Dock Company, Hong Kong's first registered company, was founded. For nearly 100 years, the Dock Company provided ship construction and repair services. In the 1960s, when the containerisation revolution was sweeping across the maritime world, the Dock Company diversified into cargo- and container-handling operations.

In the early years, the Dock Company's container operations were scattered around Hong Kong, with docks crammed into areas like Hunghom, Kwun Tong and North Point. HIT was formed in 1969 to centralise the manangement of activities at these dock areas.

At the end of 1977, Hutchison International and the Hongkong and Whampoa Dock Company merged to form Hutchison Whampoa Limited (HWL), and HIT became a subsidiary of the new holding company.

HWL would soon branch out into new spheres and expand its core interests at home and overseas, Hutchison Port Holdings (HPH) was formally established in 1994 to manage HWL's ports and related services, and HIT became its flagship operation.



Head office of the Hongkong and Whampoa Dock Company in Hunghom between the two World Wars. In addition to shipping, the company also handled general, non-marine engineering work

In 1966, although shipbuilding and ship repair were still core elements of the company's businesses, the Dock Company began to handle containers, many of which were carried by converted cargo ships.

The company's small container-handling operation was confined to a tiny pocket of space on the edge of the shipyard complex at Hunghom. It was able to receive early container ships. As demand for container-handling facilities in Hong Kong increased, modifications and improvements were made at Whampoa Terminals. Container storage areas were cleared and paved; early shore cranes were introduced; and adjustments were made to the layout of the facility to better support the stacking of containers.



Some berths were redesigned to accommodate containers at Whampoa Terminals. With the introduction of Portainer cranes (top left) and some early rubber-tyred gantry cranes (bottom left), the terminals were able to handle both containers and general cargo



In 1972, HIT handled approximately 7,000 containers at Hunghom. The following year, 205 ships berthed and container throughput jumped to 40,000 TEU.

A view of Whampoa Terminals in Hunghom, 1973



A view from the top of a Portainer crane

The spreaders of early quay cranes had to be positioned manually over the containers

Soon, more wharves under the Dock Company were converted for container handling in order to cope with the increased popularity of container shipping.

The North Point Wharves occupied 6.5 acres of land in North Point. They were adjacent to oil plants and a large godown. Like many other industrial sites along Hong Kong's coast, they were eventually released for residential development in the 1980s.

The North Point Wharves had a seven-storey warehouse next to the terminal, which was equipped with eight wall cranes to allow cargo to be moved from floor to floor and to vessels at the container terminal.



The North Point Wharves in North Point were also redesigned for container handling. The land was shared by a container yard (top right) and a large warehouse eqipped with wall cranes (centre)

The facility in Kwun Tong, also under the name of North Point Wharves, was located close to Kai Tak International Airport. It offered 9,200 square metres of container freight shed area.



The North Point Wharves in Kwun Tong was the second largest general port facility in Hong Kong at that time

The Dock Company's three sites in Hunghom, North Point and Kwun Tong were all located in densely populated urban areas, which left no room for further expansion. As the demand for container-handling facilities increased, it became clear that they would soon reach capacity. The company needed a new home if it wanted to keep growing.

In December 1966, Kwai Chung was earmarked by the government for the development of Hong Kong's first large-scale, purpose-built deep-water container terminal. The new port would have plenty of space for reclamation and easy access to the open sea. These advantages stoked HIT's desire to move to the new location – a wish that would be granted in 1974.

By the end of 1976, HIT's brand new container-handling facilities were fully operational. In the decades that followed, HIT would become an industry leader at the world's busiest container port.

in the making...

HIT in Kwai Tsing: Four Decades of Growth



HIT was granted the right to build Terminal 4 at Kwai Chung

The Kwai Chung Creek and Satellite Yard expansions were completed

Container Terminals 6 and 7 were completed

Kwai Tsing Port

Development



Terminal 8 East became fully operational

Terminal 9 on Tsing Yi Island was completed. Since then, the container facilities in Kwai Chung and on Tsing Yi Island have been referred to as the "Kwai Tsing Port"

Terminal

In 1974, HIT was granted the right to develop Terminal 4 at Kwai Chung. In the same year, the company began the enormous job of reclaiming 42 acres of the sea. The reclaimed land would soon become Hong Kong's largest single container terminal.

Two years later, Terminal 4 received its first container vessel. Within five months, the facility would be fully operational, providing all-weather loading and discharging of boxes.

Hong Kong's industrialisation in the 1960s and 1970s enhanced its role as an entrepot. HIT's construction of Terminal 4 occured just in time to satisfy increased growth in demand for container handling.



HIT started construction of Terminal 4 in 1974



Land reclamation progressed rapidly. Millions of cubic yards of mud were dredged and replaced with sand fill. Terminal 4 was completed in 1976, two years after the land was granted



The construction of Terminal 4 involved over 40,000 metres of steel piling, which were driven into place to form an 881-metre-long quay with three berths



Ships began calling at Berth 4 before Terminal 4 was fully operational in 1976



Terminal 4 became fully operational in September 1976. In the background is the Lai King area. The hill would soon be pared back for the development of residential buildings and Princess Margaret Hospital



HIT acquired Terminal 2 from Kowloon Container Warehouse Company Limited, a subsidiary of Oyama Shipping, in 1976, the year Terminal 4 was completed. As part of a rationalisation agreement, HIT would sell Terminal 2 to Modern Terminals Ltd., a neighbouring container terminal operator, when Terminal 6 opened in 1985

From the late 1970s to the early 1980s, Hong Kong Port would become one of the largest container ports in the Asia Pacific region. In terms of container throughput, Hong Kong ranked third, after Rotterdam and New York.

A "Trigger Point Mechanism" was adopted to determine the timing for the development of new container terminals. The mechanism tied further development to the meeting of forecasted capacity thresholds. In 1983, when congestion and land insufficiency were becoming apparent, HIT embarked on the next phase of development – reclamation of the Kwai Chung Creek, a drainage channel behind Terminals 3 and 4.



HIT signed a private treaty agreement with the government to extend the Kwai Chung Container Port on 12 December 1983. John Meredith, Deputy Chairman and Chief Executive of HIT (fourth from left), and the Hon. Piers Jacobs, former Secretary for Economic Services (third from left), formally signed the agreement at a press conference held to announce the port expansion project



The reclamation of the creek was a complex project. It involved not only the diversion of the nullah and reclamation, but also sophisticated planning of the whole area within the creek, including the provision of drainage outfalls, roads and other non-container facilities.

The reclamation of the creek began in 1984. Three years later, the reclamation was completed, and HIT would gain 11.7 hectares of extra stacking space and a new barge berth to handle transshipment traffic to and from the Pearl River Delta.

Terminal

By the beginning of the 1980s, HIT's container throughput had already grown substantially. The total annual throughput of Terminals 2 and 4 had risen to 600,000 TEU – over 85 times the annual throughput that the company had handled ten years earlier. It was becoming apparent that demand for container handling at the two terminals would soon exceed their capacity. In 1986, the need for another expansion would arise. The development of the cross wharf and Terminal 6 would soon follow.



From left to right: Simon Murray, former Managing Director of Hutchison Whampoa Limited; John Meredith, Deputy Chairman and Chief Executive of HIT; Li Ka-shing, Chairman of Hutchison Whampoa Limited; John Todd, former Director of Lands; and the Hon. Piers Jacobs, former Secretary for Economic Services, at the Terminal 6 agreement-signing ceremony on 13 December, 1985

The expansion project called for the use of the world's most sophisticated dredging equipment to extract marine sand off the northwest coast of Lantau Island and transport it 14 kilometres to the site of Terminal 6. Seawall construction materials were brought from nearby Tsing Yi Island. In 1989, the new 29-hectare terminal was completed, giving HIT three additional berths capable of handling "Supermax" ships, the largest vessels of the period.

The completed cross wharf had a quay length of 305 metres and an indented berth that was designed for use by barges and feeders from the Pearl River Delta.



Terminals 4 and 6 and the connecting cross wharf receive vessels. The reclamation of Terminal 7 is in progress (right)

HIT Office

Towers





Construction of the second office tower in 1985

Construction of HIT's office towers began at the same time as the construction of Terminal 4.

By the time Terminal 4 was completed, HIT's first office tower was in use. Today, HIT has four office towers located in Terminals 4 and 6.


Office Tower 1 (taller white building in the middle) rises above the adjacent Tower 2. Tower 3 is on the left. The Hutchison Logistics Centre is in the background. Photo taken in 2003

Hutchison

Logistics Centre



Construction started in 1989

warehousing facility, was built to meet the needs of the fast growing container-handling industry. Road vehicles carrying containers up to 45 feet in length can go from the ground floor up to the rooftop to deliver freight directly to each tenant's premises.

The Hutchison Logistics Centre, a distribution centre and



The first phase of the Hutchison Logistics Centre started operations in 1991 while the building was still under construction. The ground floor of the building is used to stack containers as part of the Terminal 4 container yard

The Hutchison Logistics Centre has over 377,000 square metres of floor space, making it one of the largest consolidated cargo warehouses in Asia

Terminal

In 1988, HIT would begin building yet another container terminal. The 31.5-hectare Terminal 7 was completed two years ahead of schedule in 1991.

The significance of HIT's expansion during the 1980s cannot be understated. With the completion of Terminal 7, the layout of HIT included ten contiguous container berths that could provide efficient simultaneous service to large shipping lines. Terminals 4, 6 and 7 together provided HIT with over 3,000 metres of quay and 93 hectares of integrated terminal yard, allowing the company to maintain efficiency and flexibility for its customers.



By the time Terminal 7 began operations, HIT was serving over 30 shipping lines. The picture shows vessels from two of these lines docked at Terminal 7

Container Yard

Modification

Land shortage has always been a challenge for HIT. The company has had to devise innovative ways to optimise the use of existing resources. After the completion of Terminal 7, the yard between Terminals 6 and 7 was modified to accommodate 24 rail-mounted gantry cranes (RMGCs).

The adoption of RMGCs, which were specially developed in-house, was a major equipment milestone. The RMGCs stack containers 1 over 6 and 12 across. These cranes are highly automated and can operate on both sides of the stacks, enhancing container marshalling efficiency at the yard.



Preparatory construction for the installation of RMGCs



RMGCs can stack containers six high along 12 rows

Terminal

As China's export industries gained steam in the 1990s, the expansions of the previous decades would provide the foundation for future growth, even as it became clear that the port needed to grow larger in order to accommodate increased container flows.

In March 1991, HIT and Modern Terminals Limited were awarded a private treaty grant to jointly develop Terminal 8 at Stonecutters Island. Concurrently HIT signed a joint venture agreement with China Ocean Shipping Company (COSCO) to set up a company called COSCO-HIT. COSCO-HIT owns and operates the two berths at Terminal 8 East.

Terminal 8 East commenced operations in 1994. It mostly handled containers carried by COSCO's vessels. Later the joint venture shareholder changed from COSCO to COSCO Pacific.



The Terminal 8 land grant signing ceremony in March 1991. From left to right: Mark Leese, former Managing Director of Modern Terminals Limited; David Gledhill, former Chairman of Modern Terminals Limited; Anson Chan, former Secretary for Economic Services; Graham Barnes, former Secretary for Planning, Environment and Lands; Robert Pope, former Director of Lands; Simon Murray, former Managing Director of Hutchison Whampoa Limited; and John Meredith, Deputy Chairman and Chief Executive of HIT





Above: A view of the construction of the two berths and the cross wharf of COSCO-HIT. Terminal 8 East was built adjacent to HIT's terminals

Right: Additional land was reclaimed to provide space for container storage adjacent to Terminals 7 and 8





A COSCO container vessel berths at COSCO-HIT

Terminal

When further port expansion was needed, a site was chosen on southeast Tsing Yi Island, across from Terminals 1 to 8. In December 1998, the government signed a private treaty grant that allowed HIT to participate in the construction of Terminal 9 and own and operate two berths known as Terminal 9 North.

The first berth opened in 2003, and the second berth opened in 2004. The seabed was dredged to 15.5 metres to allow the new berths to accommodate the latest megavessels. The extra capacity created by Terminal 9 would increase HIT's ability to offer timely, flexible and individually tailored services to its customers.



The reclamation and construction of the yard and quay deck of Terminal 9



The Terminal 9 opening ceremony was held on 22 July 2003. From left to right: Lee Ji-Song, Hyundai Shipping; Kenneth Ying, former Executive Director of HIT; Raymond Fan, former Head of the Port, Maritime and Logistics Bureau; Eric Ip, Managing Director of HIT; Stephen Ip, former Secretary for Economic Development and Labour; John Meredith, Group Managing Director of HPH and Deputy Chairman and Chief Execuive of HIT; S.Y. Tsui, former Director of Marine, Marine Department; James Tsien, Group Executive Director of HPH; and Raymond Wong, former Commissioner of Customs and Excise, Ship Search and Cargo Command, Kwai Chung



Aerial view of Terminal 9 in 2008 with HIT's two berths in the foreground

Today, Kwai Tsing Port has 300 hectares of land and eight kilometres of quay deck.

HIT is the largest container terminal operator at the port, operating 12 berths at Terminals 4, 6, 7 and 9 and another two through its joint venture with COSCO Pacific at Terminal 8 East. HIT occupies over 140 hectares of the port, including five kilometres of quay with depths alongside of 15.5 metres.

Outside of Kwai Tsing, a sister company of HIT operates 49 barge berths at Hong Kong's River Trade Terminal, servicing the manufacturing base in the Pearl River Delta. Another sister company, Asia Port Services, runs 10 barge berths and a fleet of barges nearby.

Through these facilities, HIT can offer a list of comprehensively priced logistics services. HIT has created for its customers an integrated supply chain network.





Aerial view of Terminals 4, 6, 7, 8 East and 9

Productivity Achievements



10 millionth container handled in 1988



15 millionth container handled in 1991 during former UK Prime Minister Margaret Thatcher's visit to HIT



20 millionth container handled in 1992





25 millionth container handled in 1993. HIT was named Asia's Best Container Terminal Operator in that year

30 millionth container handled in 1995. Railmounted gantry cranes arrived in HIT



50 millionth container handled in 1998



70 millionth container handled in 2002. HIT commenced a seven-year modernisation programme to improve its infrastructure, equipment and systems in that year





80 millionth container handled in 2004



90 millionth container handled in 2005. In the same year, HIT received the Technology Innovation Award in recognition of its in-house designed and developed management and operating systems

100 millionth container handled in 2006. HIT was the first privately owned container terminal operator in the world to handle 100 million TEU

Becoming

the centre of ...

Excellence

Within the port operating industry, HIT is the market leader in the use of advanced technology, the cultivation of promising talent, and the adoption of high standards of service. From its base in Hong Kong, HIT has evolved into a globe-spanning entity consisting of 50 ports in 25 countries.

As the years have passed, HIT has played a key role in setting benchmarks for growth in each of the markets into which HPH has expanded. Modern management techniques, attention to customer needs, innovative IT breakthroughs, training of talent, and technological know-how are among the many advantages that HIT has exported to ports throughout the HPH network as the centre of excellence of the Group.

Yard

Management

HIT has a low yard-to-quay ratio with only 12.6 hectares of terminal land for every 400 metres of berth. To compensate for the deficiency of land, HIT has increased the density of container stacking in its terminals, deploying different kinds of modern yard equipment to help stack boxes.

At the same time, precision and efficiency in locating and moving the boxes must be maintained, making the whole stacking process a very complicated exercise.

A sophisticated system which can keep track of the whereabouts of containers and make sure they are in the best locations for retrieval is vital to ensure smoothness in yard operations. Performance can also be enhanced through increases in crane productivity.

In both aspects, HIT is a model for other HPH terminals to follow.





Yard

Equipment



Satellite-based GPS technology has been deployed to help HIT stack, locate and control boxes in the yard and make maximum use of scarce land.



1-over-3 rubber-tyred gantry cranes (RTGCs) were used in the 1970s



1-over-4 RTGCs would be used in the 1980s



By the 1990s, 1-over-5 RTGCs would be employed





CAPITAL CAPITAL AD

Rail-mounted gantry cranes (RMGCs), which stack containers six high and twelve across, are also used

Quayside







Early shipyard cranes at the Whampoa Terminals were used to lift many kinds of cargo

Low-profile Portainer cranes had an outreach limited to five or six containers

The earliest quay cranes were converted dockyard cranes with spreaders that had to be positioned manually over the containers. In HIT's early days, a containership with a capacity of 600 boxes was considered to be huge and unloading six boxes an hour was fast. Today ships capable of carrying more than 10,000 TEU are common. As vessels become larger, HIT keeps investing in quay cranes capable of handling the latest generation of container vessels. Bigger vessels will carry a larger number of containers, necessitating improvements in quayside capability, efficiency, and yard space management at HIT.



In the 1970s, quay cranes were upgraded to "Panamax" specifications. Panamax cranes can fully load and unload containers from a container ship capable of passing through the Panama Canal



In the 1990s, "post-Panamax" quay cranes were purchased. These cranes have an outreach of 17 containers



Today, HIT has 22 super-post-Panamax quay cranes, each of which has a 60-tonne twinlift capacity and a 60-metrelong boom for reaching 22 containers across a vessel

Technological

Advancement







In the mid-1970s, HIT used two small computers to handle container and cargo tracking

In the 1960s, muscle power, ordinary building cranes, and pens and paper kept boxes and ships moving. The movement and whereabouts of every box in the yard had to be manually charted.

Information technology would later become an essential tool in port operations at many levels. In 1986, HIT launched its first computerised yard-management system. This system connected almost every aspect of container handling at HIT.



HIT's Control Tower, the brain centre of operations

Today, ship and yard planning, gate operations, vessel operations and interactions, yard configuration and performance, overall operations monitoring, equipment utilisation, productivity, and cost optimisation are controlled by HIT's newest terminal management system, the Next Generation Terminal Management System (nGen).

Next Generation

Terminal Management System



nGen is a comprehensive, fully integrated system that controls the entire scope of container terminal operations. It was developed in-house at HIT and launched in 2005. nGen has a real-time, modular, flexible and scalable architecture. It can adapt to terminals of all sizes, to any operating conditions, and to use with third-party systems.

nGen enables HIT to plan and speed up the movement of goods between the gate and the quayside, thus reducing dwell times for goods and berthing times for vessels. nGen also increases yard utilisation with the help of automation and optimisation modules.

This advanced terminal operating system has systematically increased the productivity and efficiency levels achieved at HIT's facilities and expedited the seamless integration of its computer systems with those of the shipping lines it serves.

HIT customises nGen to suit the unique business and technology requirements of HPH ports around the world. The system has been expanded to 13 ports in the HPH network. It handles about 40 percent of HPH's throughput worldwide. System roll-outs at other ports will follow.







The exit gate of HIT's Terminals 4, 6 and 7

In the past, truckers had to receive a printout detailing where they would drop off or pick up containers. Today, they use a Tractor Identity Card to signal their arrival at HIT. This paper-free system is efficient, requiring drivers to spend less than 45 minutes in the terminal on average.





Trucks wait to pick-up or discharge containers

A driver swiping his Tractor Identity Card

HIT's Radio Data System (based on Wi-Fi technology) links up to 400 internal trucks to HIT's Internal Tractor Scheduling System, which calculates the best possible deployment of container transport between quayside and stacking areas, according to availability and location.

Customer

Focus

HIT started with a very small client base. In the early 1970s, there were just three major shipping line customers, and about 200 ship calls were received annually. Today, HIT serves over 30 different lines, with links to the United Kingdom, Europe, the Americas, Africa, the Middle East, Southeast Asia and Australia. Many shipping lines have been loyal customers for years.

From worldwide IT networking, to sophisticated yard operation, HIT uses a flexible and proactive strategy to offer its customers comprehensive value-added services.

HIT has also diversified its operations beyond the traditional role of a container port operator, leveraging the strength of the HPH Group to develop a worldwide logistics network based on the principles of efficiency, productivity and cost-effectiveness.






As container ships grow in size, customers demand speedy service to keep turnaround times at a minimum. Ship turnarounds are being measured in ever decreasing hourly increments. HIT's productivity achievements have earned it the status among shipping lines of a "catch-up" port – a port where time lost elsewhere on a voyage can be made up.

With multiple berths, HIT is able to offer "hot connections" to shipping lines. Transshipment cargoes can be transferred from one ship to another while the vessels are worked simultaneously. This service allows HIT to operate as an effective hub port for transshipment connections, allowing customers to lower costs by making fewer calls to other ports.



Berths have been dredged to accommodate seven 8,000-plus TEU vessels at the same time. Few ports in the world are capable of accommodating this many large ships simultaneously.

HIT works around the clock

and strives to ensure efficient operations for customers



















Left and right: Day and night views of HIT from Lai King in 1995 and 2001







Over the course of its 40-year history, HIT has overcome many challenges through timely expansion, cutting-edge innovation, a clear vision of the future, and premium customer service.

Today, a new set of challenges has arisen. As ports along the South China coast multiply and mature, Hong Kong is attracting less import and export cargo. Hong Kong is also competing with hub ports across Asia as the percentage of transshipment cargo that the territory receives increases.

HIT's commiment to efficiency, technological advancement and professionalism will become ever more important in the future. These qualities will encourage customers to continue to use Hong Kong as a regional transshipment hub. HIT will be a partner for growth to Hong Kong Port for decades to come.

into the next 40 years >>

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