

D·NEWS

D

DRAGAGES HONG KONG

March·2014



Shaping a **Better Life**

Shaping a **Better Life**

A New Era of Challenges

We continued to reach new heights in 2013, both in terms of business growth and project innovation. Thanks to the tireless dedication of our staff, we have added to our successful track record with three major new contracts. As some of the world's most technically-demanding projects, these three new contracts are another milestone for Dragages Hong Kong, demanding a new level of innovation in both building and tunnelling technologies.

Project highlights in 2013 included the Kai Tak Cruise Terminal Building, an extremely fast-track project that was delivered through the successful integration of building and civil works' technologies. We also substantially completed two railway projects, namely MTR West Island Line Contract No. 703 (WIL 703), and MTR Express Rail Link Contract No. 821 (XRL 821). These projects have been showcases of our innovative thinking and diverse strengths. WIL 703 is one of the most technically challenging civil works in the region. Successful delivery of the project has required the adoption of a number of technical firsts, including the world's first Tunnel Dismantling Machine. For XRL 821, we created one of the largest underground caverns in Hong Kong, yet further testament to the relentless innovation and precision of our engineering skills.

Business at the award-winning AsiaWorld-Expo continues to boom. The venue now plays an increasingly important role in the economic development of Lantau Island, which itself is a focal point for future development.

BYME, our E&M arm, also enjoyed promising business growth in 2013. Much more than a provider of E&M services, the company is emerging as a recognised pioneer in the development of energy-efficiency plans.

Having grown in tandem with Hong Kong for almost 60 years, we're proud that we continue to play a pivotal role in the city's leading infrastructure projects. With a long presence in Hong Kong, we understand local practices intimately, and are committed to providing continued training to our long-serving colleagues while also nurturing the younger generation. In parallel with this local strength, our global network empowers us to swiftly mobilise the right people and the right resources for every project. We believe success is built on people. Drawing on the rich expertise and dedication of our 2,000 local staff, we will continue to drive our projects forward with innovation and a tireless commitment to excellence.



Nicolas Borit

Managing Director

AWARD
OF CONTRACT

A



To design and build Hong Kong’s longest, largest, and deepest sub-sea road tunnels

Tuen Mun – Chek Lap Kok Link – Northern Connection Sub-sea Tunnel Section



By enhancing the regional transport network between Hong Kong, Macao, Shenzhen and Zhuhai, this project will contribute to the economic integration of Hong Kong and the Pearl River Delta Region.

Client	Highways Department of HKSAR
World’s Largest TBM	17.6-m in diameter
HK’s Deepest Sub-sea Road Tunnels	50m below sea level
HK’s Longest Sub-sea Road Tunnels	Approx. 4km long × 2 tubes
HK’s Greatest No. of Cross Passages	42
Completion	2018

HKSAR: Hong Kong Special Administrative Region

This HK\$18.2 billion contract awarded by the Highways Department is the largest contract sum ever awarded in Hong Kong. The project involves the design and construction of the longest, largest, and deepest sub-sea road tunnels in Hong Kong.



The main scope of the project is to design and construct dual two-lane sub-sea tunnels, each approximately 14m in diameter and 4.2km long, running between Tuen Mun in the Western New Territories and the Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities on Lantau Island.

Two identical slurry Tunnel Boring Machines (TBMs), each with a diameter of 14m together with a world’s largest TBM of 17.6m in diameter, will be employed to excavate Hong Kong’s deepest and longest sub-sea road tunnels. Two pieces of cutting-edge equipment, namely MOBYDIC and SNAKE, will be installed on each TBM. These new technologies will enable real-time geological mapping of rock faces and the robotic detection of damaged components on the cutter heads, thus eliminating the need for manual inspections under hyperbaric conditions.

Construction of the tunnel will start from the north to the south. In the north, 16.5 hectares of land will be reclaimed for the construction of a ventilation building, and the launching chamber for the TBMs. In the south, there will be another ventilation building, a 670m-long cut-and-cover approach tunnel, and TBM retrieval chambers.

Working under a compressed air environment is a key challenge in this project. Saturation diving will be adopted for maintenance works on TBM cutter heads, which will maximise the health and safety of workers while also enhancing project efficiency.

Works commenced in the third quarter of 2013. Reclamation works for the northern landfall are in full swing with more than 120,000 cubic metres of marine sediment dredged and some 150,000 cubic metres of rocks filled for seawall construction. Design of the TBMs is also progressing well. The first mega-sized TBM, with a diameter of 17.6m, is scheduled to arrive in Hong Kong at the end of 2014.





Taking building technologies to new heights

City of Dreams - The Fifth Hotel Tower

Client	Melco Crown Entertainment Limited
Total Floor Area	150,927sqm
Number of Storeys	40
Number of Rooms	Approximately 780 guest rooms, suites and villas
Architect	Zaha Hadid Architects
Completion	Early 2017

City of Dreams, located in the heart of Cotai in Macao, is a unique integrated entertainment resort that combines electrifying entertainment, a diverse array of accommodation, regional and international dining, designer-brand shopping, and a spacious and contemporary gaming area.



Exoskeleton structure



With the vision of bringing world-class integrated resort and entertainment experiences to Macao, City of Dreams is the home of the world's largest water-based extravaganza, and the largest and most prestigious club in Macao. The resort is now expanding with Phase 3, the fifth hotel tower – featuring a luxury hotel exceeding 5 star standards. The hotel design is led by Zaha Hadid, founder of Zaha Hadid Architects. She was the awardee of the Pritzker Architecture Prize in 2004 and ranked top of the Thinkers' category under the list of "100 Most Influential People in the World" in TIME magazine. This new development is set to become an iconic landmark to the Cotai skyline and Macao.

A comprehensive variety of facilities will be on offer at this new landmark hotel, including a casino, restaurants, meeting and event facilities, sky pool, ultra lounge, as well as approximately 780 guestrooms, suites and villas.

A 'Bai Sun' cum Groundbreaking Ceremony was held on 14 January 2014, symbolising the official commencement of the project. The development of the new hotel tower has commenced and is expected to open in early 2017. Seamless collaboration between the client, designer, and working partners will be the key to making this building a dream come true.

Dragages Hong Kong is responsible for the construction of this one-of-a-kind hotel, which represents the realisation of a "dream" building. The rectangular outline of the site is extruded in a monolithic block, where the sculpted void creates a blend of roof walls and ceilings without distinction of traditional architectural elements. The volume is emphasised with the use of an exposed exoskeleton mesh structure, where the definition of building itself is pushed towards its boundaries. The expressed structure defines a sensuous and intriguing form while providing the construction advantage of contributing to the building lateral stability and reduces the internal structural requirements optimising the interior layout. Featuring two central voids, this 40-storey building appears to be two separate blocks linked at a single point. This dynamic and revolutionary design is sure to become an artistic centrepiece in the heart of the city.





The longest road tunnel in Hong Kong

Liantang / Heung Yuen Wai Boundary Control Point (BCP) Site Formation and Infrastructure Works – Contract 2



Liantang / Heung Yuen Wai BCP, connecting to the Eastern Corridor in Shenzhen, will provide a more efficient cross-border link to eastern Shenzhen, eastern Guangdong and neighbouring provinces.

Client	Civil Engineering and Development Department of HKSAR
Tunnels and Road	2 × 4.8km tunnels forming part of a 5.4km dual two-lane road
EPB TBM	14-m in diameter
Completion	2018

HKSAR: Hong Kong Special Administrative Region

Dragages Hong Kong was awarded this HK\$10.3 billion contract by the Civil Engineering and Development Department at the end of 2013. The project comprises the design and construction of two 4.8km tunnels, associated ventilation buildings, and an administration building.

To cope with the various ground conditions along the 4.8km route, a combination of solutions will be adopted to construct the tunnels. In the northern section, where various fault zones are located, a dual mode Earth Pressure Balanced (EPB) Tunnel Boring Machine (TBM) will be used. Integrated with in-house innovations, namely MOBYDIC and SNAKE, this TBM will conduct real-time geological mapping of the rock faces, and enable remote detection of damaged cutter head components. Meanwhile, a drill and blast solution will be implemented in the rock zones of the tunnels' southern sections.

Tunnelling through the first 500m of the enlarged section from the North Portal presents one of the biggest challenges of the project due to soft ground conditions. To meet this technical challenge, a pilot tunnel will be bored using the TBM, followed by enlargement works conducted by a traditional soft ground tunnelling method.

All tunnel construction activities will take place concurrently to maximise efficiency. To achieve further cost and work efficiencies, and to eliminate the need for bored pile construction, alternative designs for the buildings' foundations have been proposed.

Caring for the needs of the community is an integral aspect of our commitment. A Community Liaison Group, comprising both engineers and community liaison officers, will work hand in hand with the client to keep local residents informed about key production activities, and to address their concerns in a prompt and efficient manner.

Workforce mobilisation has progressed smoothly since the award of the contract in December last year. Works covering survey, site clearance and installations are ongoing on all three work sites – North, Mid and South Portals. Site formation of some 700,000 cubic metres at the North Portal, slope works at the Mid Portal, and foundation works of the temporary access bridge to the South Portal all commenced in the first quarter of 2014.



PROJECT
SPOTLIGHT

P



Hong Kong-Zhuhai-Macao Bridge Hong Kong Link Road

We are pleased to report that more than 50% of piling works were completed by March 2014.



Segment casting yard



Construction of the interfacing pier between Hong Kong and the PRC

The project team overcame a variety of challenges to achieve this, including severe marine conditions, complex navigation requirements, restricted land access, airport height restrictions, stringent dolphin monitoring works, the need to supply concrete using a floating batching plant, and the logistics of transporting concrete trucks on Ro-Ro barges. The floating batching plant, a first in Hong Kong, facilitates marine production and significantly reduces marine and land traffic, which in turn minimises air and noise pollution.

During piling, we encountered some extraordinarily deep rock head levels, over 100mPD in places, for which we adopted extended Kelly bars. Pile cap construction for the marine viaduct has also commenced, with left-in precast concrete shells used to provide temporary formwork as well as permanent corrosion protection to the in-situ concrete pile caps. To date, a number of precast concrete shells weighing more than 230 tonnes have been installed in early 2014.

This is the first bridge in Hong Kong designed with a pre-stress precast pier structure. A number of technical issues have been resolved, including structural health monitoring for the bridge during the operation stage. The finished viaduct, which will support dual three-lane carriageways over the HKSAR's deep western waters, will be in the form of post tensioning reinforced concrete box girders, with some bridge spans up to 180m in length. A segment casting yard has been set up for this, with some 190 segments completed in February 2014.



HONG KONG-ZHUHAI-MACAO BRIDGE

3-hour

Upon completion of the project, the entire Pearl River West region will be within a 3-hour commuting radius of Hong Kong.



Trade and Industry Tower

This 20-storey government office building is designed with minimal columns, which creates maximum flexibility for office layout plans. As of early 2014, the building had already reached the ninth floor, and will reach its full height by the summer. The reinforced concrete structure of the Community Hall has been completed as scheduled, and trade works and façade installation are now ongoing.

To facilitate design development with our client and its numerous end-users, we created a 200sqm mock-up room in early 2013, including flooring, lift lobby, toilets and even a whole curtain wall. This sophisticated mock-up room has proven invaluable in assisting our client and its 13 end-users to understand both the aesthetic and practical functions of the building, thus enhancing the design's overall efficiency. By mid 2014, a sample floor will be available for site visits, at which time end-users will be able to see their future workplace for real.

This is the first Hong Kong Government office building designed to achieve BEAM Plus Platinum and LEED Platinum. Submissions for a sustainable design credit have already been made to the Hong Kong Green Building Council and the U.S. Green Building Council.



A rendering of the open plan offices



TRADE AND INDUSTRY TOWER

green

This is the first Hong Kong Government office building designed to achieve the highest “green” standards: BEAM Plus Platinum and LEED Platinum.



MTR West Island Line Contract No. 703 – Sheung Wan to Sai Ying Pun Tunnels

This technically-demanding project received ten awards in 2013, affirming its outstanding performance in every aspect of Quality, Safety and Environment (QSE). In the biannual Quality, Safety, Environmental and Stakeholder Engagement Awards held by MTR Corporation in 2013, the project team was honoured to receive the Gold Safety Award, Best Site Condition Award, DNV Independent Audit Highest Score Award, Best Site Housekeeping Award, and Bronze Environmental Award in the first presentation. The team also received the Workplace Hygiene Outstanding Award and Gold Environmental Award in the second presentation.

In addition, the project received the Bronze Construction Industry Safety Award (civil engineering sites) organised by the Labour Department, as well as the Diamond Caring Award of Caring Construction Site, given by the Occupational Safety and Health Council.

Globally, the project won the “Product or Equipment Innovation of the Year” Award at the International Tunnelling Awards held in London in November 2013. This highly respected award is designed to recognise excellence in innovation that specifically enhances performance and safety in tunnelling projects.

Seamless coordination with clients and counterparts, a strong team spirit, and a tireless commitment to innovation have all contributed to the smooth progress of works since the commencement of the project in 2009. Major tunnelling works were completed at the

end of 2012, and the Tunnel Boring Machine (TBM) components were removed in early 2013. This allowed the onward completion of the remaining in-situ tunnel interfaces in early 2013, which also facilitated track laying works and the handover of a refuge siding to the operation team. Tunnelling works and an entrance structure to the new MTR station were also completed at the end of 2013. Completion of the entire project is scheduled for mid-2014.



MTR WEST ISLAND LINE

8 mins

By connecting Western districts with the city’s business hub, travelling time between Kennedy Town and Sheung Wan will be reduced from about 20 minutes to just 8 minutes.



MTR Express Rail Link
Contract No. 820 –
**Mei Lai Road
to Hoi Ting Road
Tunnels**



MTR EXPRESS RAIL LINK CONTRACT NO. 820

1,682,640man-hrs

No reportable accidents for a consecutive 1,682,640 man-hours – the best record among all MTR projects.

We continue to work closely with our client to attain the highest standards in quality, safety, environmental management, and stakeholder engagement. Our project team was honoured to receive the MTR Corporation’s Gold Stakeholder Engagement Award, Silver Safety Award, Best Site Housekeeping Award, and Lowest Reportable Accident Frequency Rate Award in 2013. These awards are testament to our team’s efforts to maintain the highest standards.

We achieved three important breakthroughs by Tunnel Boring Machines (TBMs) – two breakthroughs in the north track and one breakthrough in the south track.

The north down-track tunnel broke through in December 2012 after a 10.5-month journey by our Tunnel Boring Machine (TBM), ‘Iron Lady’. She then commenced her second journey of the north up-track tunnel, boring a further 2,075m, representing 1,153 tunnel rings, and broke through in November 2013.

In September 2013, our second TBM, ‘Soeng Ngo’, broke through on the south down-track tunnel in great success in an underwater condition. ‘Soeng Ngo’ had an especially tough journey, including the removal of steel obstructions by hyperbaric divers using special tools at depths of 40m below ground level. The volume of these underground steel obstructions set a new record for Hong Kong’s tunnelling industry. The machine was then dismantled and reassembled in only 2.5 months, followed by the last break-in on 13 December, ready for a last journey of 2,440m to the south shaft.

The first breakthrough of the cross passage between the up track and down track TBM tunnels took place in May 2013. Thanks to the collaborative efforts of our two teams, the 2,048m of invert construction at the north down-track tunnel was completed in just five months, meaning the tunnel was handed over one month ahead of schedule for the installation of services and laying of tracks. This was the first completed tunnel section on the entire Express Rail Link Hong Kong Section.



MTR Express Rail Link
Contract No.821 –
**Shek Yam
to Mei Lai Road
Tunnels**



MTR EXPRESS RAIL LINK

48mins

The journey time between Guangzhou and Hong Kong will be reduced to just 48 minutes, giving passengers unprecedented ease of access to the Mainland’s 16,000km high-speed railway network which connects to all major cities nationwide.

On 11 November 2013, our Tunnel Boring Machine (TBM) completed the excavation of the project’s up-track (north side) tunnel. At the northern end of the twin-track tunnel, lining work and a combined sump were constructed concurrently in July 2013, with our project team successfully overcoming the formwork transfer challenges across the sump area.

At the southern end of the twin-track tunnel, our project team enlarged the lining formwork three times in the bifurcation area in August 2013. Remaining work on the twin-track tunnel, namely the central wall, water sump pits and drainage systems, were all completed by December 2013. The up track and down track of the twin-track tunnel have since been handed over to the designated subcontractors for rail pulling and track base concrete work, bracket installation, and cable lying.

ABWF on the ventilation building and Link Bridge were completed in October 2013, with external work on the ventilation building scheduled for completion in the first half of 2014. Lining works and the internal structure of the T-junction cavern above the plenum slab are also scheduled for completion in the first quarter of 2014.





A global one-of-a-kind building, similar to the construction of a 3-deck large span bridge

Kai Tak Cruise Terminal Building

The arrival of cruise liners in 2013 not only symbolised the opening of this new facility, but also confirmed Hong Kong’s status as one of the world’s leading regional cruise hubs.

Since the commencement of operation of the terminal building in 2013, many passengers have already expressed their delight with the terminal building, and complimented both its design and scale. Some passengers even commented that it is the best terminal they have ever visited.

Innovation and sustainability are the core principles behind its design. The building’s 42m-wide, column-free span is one-of-a-kind in building projects, thus allowing maximum flexibility in the utilisation of space and enabling the accommodation of various events, from exhibitions and car shows to banquets and concerts.

Kai Tak Cruise Terminal Building was one of the first developments in Hong Kong to receive a HK BEAM Plus Platinum Rating. A commitment to sustainability is reflected in its low-energy design and its wide range of green features relating to energy conservation, renewable energy and recycling. It is heartening to see that the extensive landscaped roof garden, which is Hong Kong’s largest public roof garden, is already a hot spot for the general public.

This technically-demanding building was only made possible by the strong commitment and close collaboration of all parties - in particular our client, the Architectural Services Department, and the major end-user, the Tourism Commission. With this tenacious mindset, all parties were able to rise to the project’s many challenges and see it through to the end. Everyone involved can justly feel proud of this project: a truly one-of-a-kind building on the global map.

The project is also something of a homecoming for Dragages Hong Kong. In 1955, we redesigned the runway of the former Kai Tak International Airport. Over half a century later, we have come full circle with yet another visionary project that will help meet Hong Kong’s needs long into the future.



KAI TAK CRUISE TERMINAL BUILDING

23,000sqm

An urban oasis – Hong Kong’s largest public roof garden, measuring 23,000sqm.

S

SUSTAINABILITY

1. Building a Sustainable Hong Kong

The “Caring Company” logo is one of the many accolades that Dragages Hong Kong has received. In March 2013, the company received the Gold Award for the second consecutive year in the MTR Corporation’s annual Stakeholder Engagement Awards. In September 2013, the company also received the Gold Environmental Award – again presented by MTR. These awards are high-profile testament to the company’s commitment to both environmental and community awareness.

Corporate social responsibility is another top priority for Dragages Hong Kong. Since 2006, the company has organised the annual “Actitudes” Funday (a sustainable development initiative of our parent company, Bouygues Construction). On this relaxed and enjoyable day, staff and their families, as well as clients, industry partners and members of local charity organisations, are invited to join a series of fun-filled activities that encourage a spirit of partnership and mutual respect.

We recognise that our success is driven by the expertise and passion of our people. In addition to providing structured training programmes for all staff members, we also established a pioneering Safety Training Centre in 2011 to reinforce our safety motto, “The Safe Way is the Only Way”. To date, more than 9,500 workers have completed our construction safety training course.

Hand in hand with our employees, stakeholders and the community, we are proud to be playing a key role in making Hong Kong a sustainable city.

1a: A community visit to the Safety Training Centre
1b: The annual Actitudes Funday held in 2013 at Ocean Park



2. World Health & Safety Day

Following the success of our first-ever civil works World Health & Safety Day in June 2011, we held our second event in July 2013. This meaningful initiative, which is led by our parent company Bouygues Travaux Publics, is designed to transform safety policies into a vibrant culture of safety. All of our parent company’s civil work sites around the world closed for half a day to join the event, collectively representing some 8,000 workers on more than 40 sites in 11 countries.

Here in Hong Kong, the event was supported by our colleagues from all work sites and our head office. In total, some 1,000 colleagues participated, from frontline on-site workers to senior management. The half-day event featured an informative blend of management presentations, sharing of best practices, and safety tips from site colleagues, as well as safety-related videos.

3. Joining Hands to Achieve Zero Accidents

Jointly organised by the Development Bureau and the Construction Industry Council, the Zero Accident Declaration Ceremony took place at the Kai Tak Development area on 27 May 2013. The Chief Executive, Mr. C Y Leung, together with government officials led more than 30,000 construction workers in a series of morning exercises and a pledge to work together to achieve the goal of zero accidents.

Safety has always been a priority for Dragages Hong Kong. All workers on our sites, including frontline colleagues and top management, participated in this public pledge. We’ll also continue doing everything in our power to provide a safe working environment and to foster a proactive culture of site safety.



4.The 11 Safety Essentials

To further enhance our safety culture, we have introduced 11 safety essentials for strict compliance by all colleagues. Thorough briefing sessions have now been held with all site workers. Posters and banners have also been posted in prominent locations on site.

- 1) Possession or consumption of drugs or alcohol is strictly forbidden on site.
- 2) Personal Protective Equipment (PPE) is required on site.
- 3) All types of earphones, headphones, radios and other audio-playing devices are banned on site.
- 4) The site must provide designated and safe pedestrian routes.
- 5) It is prohibited to use TOYO scaffolding as a working platform. Only certified platforms with a valid statutory form can be used.
- 6) It is mandatory to use a safety harness for PPE, and ladders with handrails, MEWP, platforms and scaffolds as tools in all high-level operations.
- 7) Only rigid materials (steel tubes and posts) can be used as guardrails at floor edges.
- 8) Materials must be properly stacked using tie ups, racks or stoppers.
- 9) All dangerous parts of machinery and equipment must be installed with a guard.
- 10) Materials cannot be stacked up against guardrails or mesh.
- 11) Only trained signallers and banksmen are allowed to operate lifting and moving plant machinery.



5.Caring for Employees & the Environment

On-site toilets play an important role in workers’ welfare and also offer a real opportunity to show our commitment to the environment. After 10 months of research and development, we are proud to have created a new generation of ‘green’ site toilets. Housed in 20-foot, customised shipping containers, the toilets can be easily transported by trailer and crane, and become fully operational on site simply by connecting them to a power supply.

Each unit consists of three vacuum toilets and four waterless urinals. The vacuum toilet system cuts water use by 90%. This not only translates into reduced sewage volumes, it also represents significant savings on the energy needed to supply water.

The low-maintenance, easy-clean design ensures the toilets remain in a user-friendly condition at all times. Feedback from site workers has been very positive, and another 10 units will be ready for use in 2014.

6.Quality, Safety & Environmental Awards

Project	Awards	Organiser
Hong Kong-Zhuhai-Macao Bridge – Hong Kong Link Road	Construction Industry Safety Award Scheme 2013/2014 Civil Engineering Sites Category – Bronze	Labour Department
Kai Tak Cruise Terminal Building	BEAM Plus Platinum	Construction Industry Council & Hong Kong Green Building Council
MTR Express Rail Link – Shek Yam to Mei Lai Road Tunnels	Caring Construction Site Award Scheme 2013 – Diamond Caring Award	Occupational Safety & Health Council
MTR Express Rail Link – Mei Lai Road to Hoi Ting Road Tunnels	Good Housekeeping Plan 2013 (Construction) – Bronze Award	Occupational Safety & Health Council and Construction Industry Council
	Caring Construction Site Award Scheme 2013 – Diamond Caring Award	Occupational Safety & Health Council
	Innovative Environmental Award 2013 – Merit Award	Hong Kong Construction Association
	Silver Safety Award	MTR Corporation
	Lowest Reportable Accident Frequency Rate Award	MTR Corporation
	Best Site Housekeeping Award	MTR Corporation
	Stakeholder Engagement Awards – Gold	MTR Corporation
	Innovative Safety Initiative Award	Development Bureau
	Construction Industry Safety Award Scheme 2012/2013 Civil Engineering Sites Category – Gold	Labour Department
MTR West Island Line – Sheung Wan to Sai Ying Pun Tunnels	Product or Equipment Innovation of the Year, International Tunnelling Awards 2013	New Civil Engineer, Ground Engineering and the International Tunnelling & Underground Space Association
	Caring Construction Site Award Scheme 2013 – Diamond Caring Award	Occupational Safety & Health Council
	Gold Safety Award	MTR Corporation
	Best Site Condition Award	MTR Corporation
	Outstanding Award of Contractor Worksite (Extension Projects) in Workplace Hygiene Competition 2013	MTR Corporation
	Gold Environmental Award	MTR Corporation
	Best Site Housekeeping Award	MTR Corporation
	DNV Independent Audit Highest Score Award	MTR Corporation
	Best Site Condition Award	MTR Corporation
	Environmental Awards – Bronze	MTR Corporation
	Construction Industry Safety Award Scheme 2012/2013 Civil Engineering Sites Category – Bronze	Labour Department
	The HKIE Innovation Awards for Young Members 2013 – Certificate of Merit (Ng Pui Lam)	The Hong Kong Institution of Engineers





1. Gold Stakeholder Engagement Award

Our Express Rail Link Contract No. 820 received the Gold Stakeholder Engagement Award from MTR Corporation in March 2013. This is the second consecutive year that Dragages Hong Kong has won this award, which was given in recognition of our commitment to proactive stakeholder engagement. Through meticulous care and innovation, we've been able to greatly minimise the impact of this project on the local community. For instance, the cross-passage ground treatment works were carried out in phases so that the local bus stop could be retained.

We remain dedicated to building a sustainable city and a better life for everyone. This award is a recognition of our mission, and a representation of the emphasis we place on both environmental and community awareness.

1a: Joining hands with our client in a community engagement activity
1b: We conduct regular community visits
1c: Our traffic control colleague being complimented by the Hong Kong Police Force

2. Caring for Our Neighbours

Together with our client, the project team members of West Island Line Contract No.703 visited local businesses to distribute rice dumplings during the Tuen Ng festival. In total, we visited about 50 shop owners around Sai Woo Lane and Ko Shing Street. Some 10 project team members participated in the programme, from the project director and engineers to administrative colleagues.

3. Sharing Our Expertise with the Engineers of Tomorrow

Our Express Rail Link production team colleagues were invited to be speakers at Chu Hai College in April 2013. The project director and a tunnelling engineer shared their experiences with a group of Year 3 students in the Civil Engineering Department. The students were particularly interested in our staff members' technical know-how, the challenges presented by the project, and the innovative solutions we have employed.

4. Welcoming Students to Our Safety Training Centre

Some 25 students from Tong Nai Kan Secondary School, which is adjacent to our Safety Training Centre, visited the centre in July 2013. During their visit, we introduced the essentials of a safe work environment, and how to work in a safe way. By the end of this fascinating tour, every student understood our safety slogan "The Safe Way is the Only Way"!

5. Overseas Master Students Visit Hong Kong

In April 2013, we welcomed 29 Master Urban Planning Postgraduate Students from the University of Rennes in France. The students were visiting Hong Kong on a one-week field trip designed to help them better understand the essentials of urban planning in cosmopolitan cities and the challenges behind city planning. Dragages Hong Kong was invited to support the programme in recognition of the key role it has played in Hong Kong's major infrastructure projects. Our Business Development Director met with the students to share the latest trends and policies shaping Hong Kong's urban development. The one-day visit ended with a tour of one of our greenest building projects, the Trade and Industry Tower.

6. Upper Secondary Career Expo

Our Trade and Industry Tower project team colleagues participated in a career expo held at Cognitio College in March 2013. The expo was designed to inspire upper secondary students on their career paths by offering insights on work environments and job requirements in a variety of industries, from finance to construction. Our colleagues from various streams – such as production, safety, quality, environmental, and administration – participated in the expo, enabling us to provide students with a wide-ranging spectrum of advice.



PEOPLE P

1. A Market Leader in Comprehensive Training

Dragages Hong Kong offered 160 in-house and external training courses in 2013, benefitting more than 600 colleagues. Throughout the year, we also continued to expand the scope of our training programmes, providing a wide variety of courses from classroom training to outdoor activities, spanning technical know-how courses, team-building and much more.

Technical seminars included topics such as “Autodesk BIM Revit Architecture Training”. Team-building exercises included “Wall Climbing” and “Trust Building in a Multicultural Workplace”, while our well-being courses offered a number of stress-relief opportunities such as “Kickboxing”. In recognition of the multi-cultural, multi-lingual nature of our work environment, we also offered language courses in French, English and Cantonese.

2. The Art of Communication

Large-scale projects typically involve a huge number of interfaces and demand both meticulous planning and precise coordination. Communication is key to success at every stage of the project.

To enhance our site workers’ communication, coordination and supervisory skills, in 2013 we held a series of customised 4-day training courses for engineers, foremen and supervisors. The courses were led by our project directors, all of whom are veteran engineers and project managers, with the additional support of professional trainers. Participants received a huge variety of valuable information, from best practices relating to safety, risk assessments and emergency preparedness, to mindset training and brainstorming.

In total, four classes were held in 2013, with encouraging feedback from participants. We plan to extend this training to include more site colleagues in the future. Feedback will also be taken into account to further enhance the course content.



3. Grandmaster Programme

We held our first Grandmaster training programme in June 2013. Organised in partnership with the Chinese University of Hong Kong, this five-day training programme brought together 23 managerial participants from across Asia.

Topics included team building, negotiation skills, cultural differences, and the art of influencing, as well as the importance of Corporate Social Responsibility. The very intensive programme used a mix of workshops, group presentations, team work and seminars. Site visits were also arranged to enhance participants’ understanding of our core business and the construction industry.

The next session of Grandmaster will be held in Singapore in mid-2014, with a final wrap-up session to be held in France at the end of 2014.



4. Celebrating the “Dragon” Spirit

It’s a long-established tradition for Dragages Hong Kong and its parent company to recognise individuals’ commitment and loyalty through membership of the elite “Guild of the Dragon”. Guild members are role models in the promotion of compliance to best practices, team work, and on-site excellence.

In 2013, our parent company celebrated the 50th anniversary of the Minorange Guild. The Chairman and CEO of Bouygues and Bouygues Construction together with the Group’s senior executives invited more than 1,000 Guild members from all around the world to an event held in eastern France, in September. The highlight of this exclusive three-day event was a plenary meeting featuring round-table discussions of key corporate issues, such as the evolution of safety practices, as well as how we can adapt to changes in society and industrialisation.

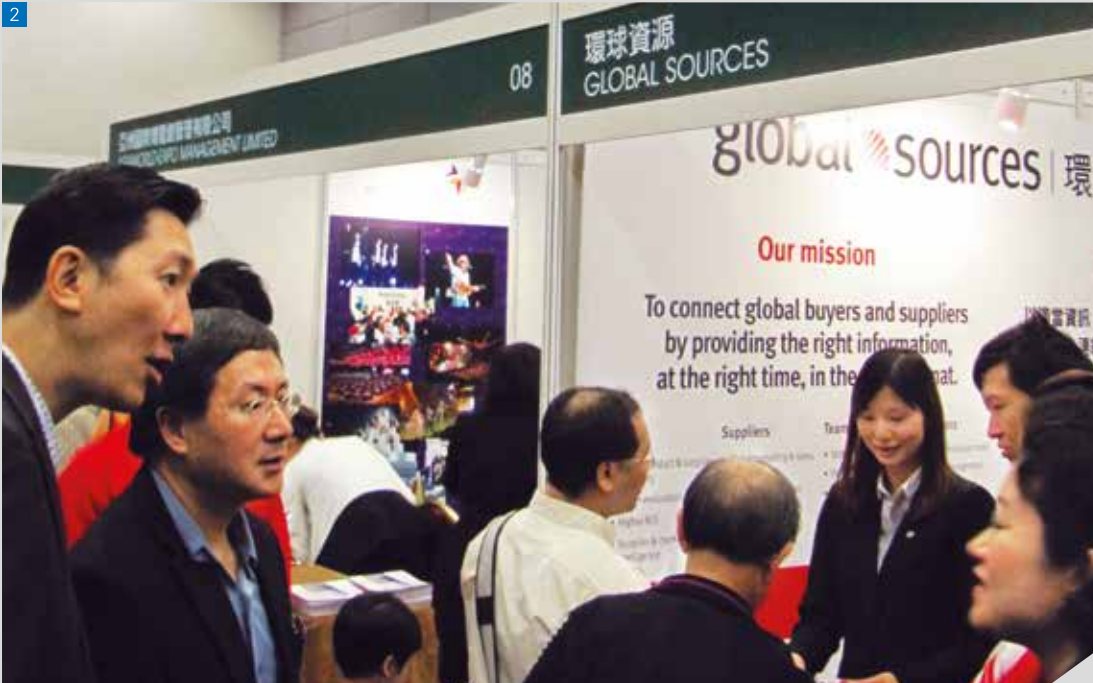


5. The Next Generation is our Future

Some 500 staff members from Hong Kong and overseas participated in our Annual Staff Information Meeting held in November 2013. This was the first time that the event was hosted by the company’s younger generation. A total of 28 young presenters, each representing a project or department, delivered 15 presentations that showcased the innovative ways in which we address the technical challenges of our projects.

This inspirational occasion reflects our belief that the next generation is our future. It also complements the recently stepped-up efforts of both government and industry players to attract new talent to the industry.





AsiaWorld-Expo Set to Become One of the World’s Leading MICE Venues

AsiaWorld-Expo has proven that it plays a pivotal role in the success of Hong Kong’s exhibition and convention industry. In addition to winning various industry awards in the past few years, AsiaWorld-Expo has once again been recognised for its excellent business performance and branding. In 2013, AsiaWorld-Expo was named the first runner-up of “Best Convention and Exhibition Centre” in Asia at the renowned CEI Asia Industry Awards. This industry recognition of AsiaWorld-Expo from second runner-up in 2012 to first runner-up in 2013, despite keen competition in the region, is a boost of confidence for the venue, which has been in operation for just eight years.

In the past few months, AsiaWorld-Expo successfully played host to a variety of business and entertainment events. Riding the wave of K-Pop culture, AsiaWorld-Expo welcomed a number of hugely popular Korean super stars, including Super Junior, Girls’ Generation and SHINee among others. In addition to many other top-billing concerts such as Sarah Brightman Dreamchaser World Tour Hong Kong 2014, a number of large-scale trade events including the Hong Kong Jewellery & Gem Fair, the Hong Kong International Diamond, Gem and Pearl Show by HKTDC and the China Sourcing Fairs were hosted. AsiaWorld-Expo is also going to welcome a brand-new exhibition – the International New Energy Vehicle Show Hong Kong by EUROPEXPO. All these are fitting testaments to AsiaWorld-Expo as a renowned international exhibition platform.

Looking ahead, the completion of the Hong Kong-Zhuhai-Macao Bridge in 2016 will see AsiaWorld-Expo positioned at the heart of a seamlessly integrated Pearl River Delta (PRD) region. As stated in its 2014 Policy Address, the Government will accelerate the development of Lantau. The new development of cross-border infrastructure will also bring “fundamental change to Lantau’s functions and development potential”. The Lantau Development Advisory Committee has also been established to solicit proposals through which to capitalise on the benefits brought by major infrastructure projects in the area and the synergy between Hong Kong and the PRD region. With so many opportunities in the future, AsiaWorld-Expo is set to become one of the world’s leading MICE venues.

AsiaWorld-Expo

- 1: AsiaWorld-Expo has become a top pick for many K-pop stars, and a hot spot for youngsters to experience K-pop culture
- 2: A job fair organised by Lantau Development Alliance (a group founded by enterprises and local groups on Lantau) aims to promote local employment
- 3: The Longines Hong Kong Masters, Asia’s only five-star international equestrian show jumping event, was held at AsiaWorld-Expo for the second time

BYME

A Record-Breaking Year of Business Growth

It's been another remarkable year for BYME, with business continuing to flourish. After some 36 months of challenging work, it completed Kai Tak Cruise Terminal Building, one of the largest projects BYME has ever been awarded in terms of contract value. This landmark project affirmed the company's status as a pioneer in the provision of building services in Asia. To enhance the accuracy of its technical coordination and handle the project's multiple interfaces, BYME adopted Building Information Modelling (BIM) for this extraordinarily complex project. By using its technical know-how to streamline workflows, the company was able to achieve seamless coordination within the team and with working partners. It was also able to meet the diverse needs of the project's numerous end-users. By attaining the most stringent electrical and mechanical requirements, BYME played an integral role in enabling the project to achieve Hong Kong BEAM Plus Platinum Rating.

In 2013, BYME received several new contracts from Hong Kong International Airport (HKIA) and Hong Kong Jockey Club (HKJC). Building on the success of its renovation works for HKJC in 2011 and 2012, the company has been appointed to enhance the Track Flood Lights system at both the Club's Happy Valley and Shatin racecourses, as well as the air-conditioning system at Shatin racecourse.

In Macao, too, BYME continues to grow its business. In 2008, the company worked on Venetian Parcel 2, handling E&M works for the podium and the hotel. Building on this experience, in early 2014 BYME received the award for electrical works for the Venetian Parcel 3 Podium, a mega-sized podium of 200,000sqm. Substantial electrical works, representing some 25km of cables, will be completed by 2015. The immense scale of works to be delivered within a tight schedule presents great challenges. This landmark project is indicative of the excellent business potential in Macao, and it is BYME's long-term strategy to establish a strong foothold there.

To create energy-efficient and sustainable buildings, BYME provides value-added services to its clients, and the industry as a whole, by engaging in energy audit exercises. Clients using this valuable service span from property managers to building owners. Being a pioneer in the electrical and mechanical industry, BYME targets to elevate its service to the next level by developing energy enhancement measures in the near future. Modes of operations and users' behaviours will be thoroughly assessed in the course of development.

Safety is key to project execution and BYME actively promotes safety to its working partners via various channels. Since 2012, an annual workshop with working partners has been organised, providing a platform for the exchange of best practices. In February 2014, it organised its third safety workshop, a full-day event in which subcontractors and clients shared safe work practices and industrial case studies, working hand in hand to create a safe and respectful work environment. The workshop enjoyed proven success, with the number of participants increasing from about 20 in 2012 to some 100 this year.



1: Kai Tak Cruise Terminal Building – a BEAM Plus Platinum building
2: Recurred business with Hong Kong Jockey Club
3: The immense scale of electrical works to be carried out at the Venetian Parcel 3 Podium
4: The annual safety workshop held in February 2014

Bouygues Construction

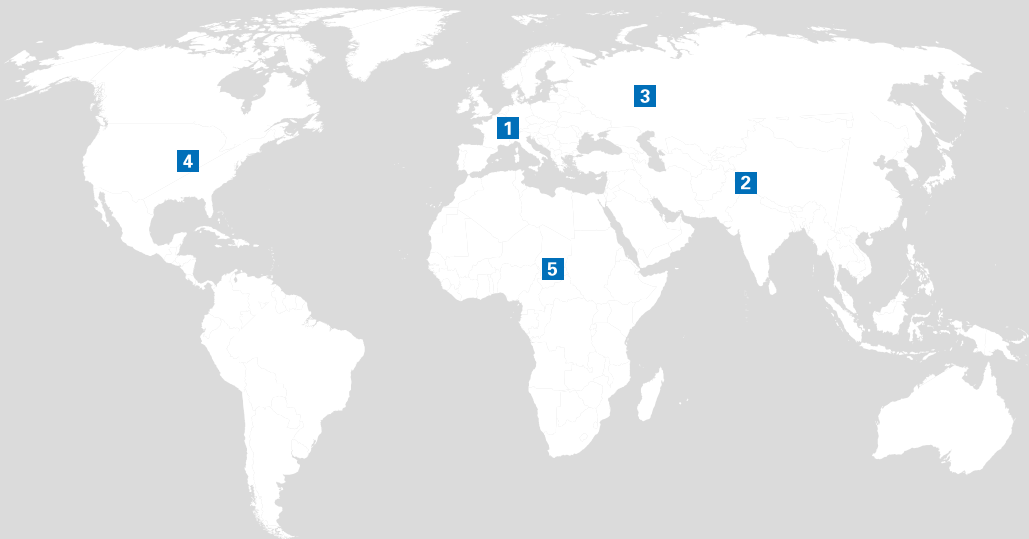
parent company of Dragages Hong Kong

Order book

17,832

million euros

1. France	51%
2. Asia and Middle East	21%
3. Europe (excl. France)	19%
4. America	5%
5. Africa	4%



11,111

million euros sales

52,163

employees

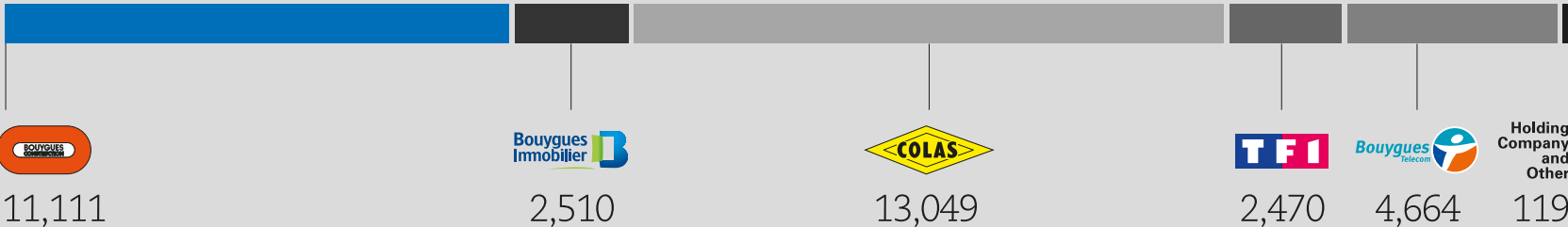
www.bouygues-construction.com

Bouygues

parent company of Bouygues Construction

2013 sales by business area

(million euros)



33,345

million euros sales*

128,067

employees

* Intra-Group Elimination: 578

www.bouygues.com