



Press Release

HERRENKNECHT

German Minister for Economic Affairs Sigmar Gabriel fascinated by tunnel construction in Hong Kong

November 3, 2016

Hong Kong, China / Schwanau, Germany

Sigmar Gabriel, the German Minister for Economic Affairs and Energy, took the time on November 3 to inspect construction progress at one of the currently most important inner-city tunnel projects in Hong Kong – powered by high-tech Herrenknecht tunnel boring machines. The Minister and his delegation were fascinated by how top German technology is being used to develop groundbreaking infrastructure in Hong Kong. The mega-city is permanently rising above itself. Investments are being made in high-performance underground tunnel structures in particular to keep abreast of development by the city, setting international standards and realizing technical flagship projects.

_____ The German Minister for Economic Affairs and Vice-Chancellor Sigmar Gabriel visited the jobsite for the >>Shatin to Central Link Contract No. 1128<< metro tunnels during a delegation trip to the 15th Asia-Pacific Conference focusing on the construction of infrastructure. Visiting the construction site against the Hong Kong skyline, Gabriel appeared impressed by the technical challenges of the project and German tunnel boring technology. “The progressive dimensions at which Hong Kong is being developed not only on the surface but also underground are very impressive. It makes me very optimistic that German companies and top technology are playing a key role when it comes to building state-of-the-art and pioneering infrastructure projects in the Asian-Pacific region,” Gabriel said.

The Shatin to Central Link is an efficient extension to the existing underground metro network. As the city is extremely densely built up, there is no avoiding mechanized tunnelling at key points. The Dragages-Bouygues joint venture has been

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commissioned by the client MTR to build four tunnel sections in urban areas under heavy traffic trunks. Both construction companies are subsidiaries of the French construction corporation Bouygues Construction. The joint venture selected Herrenknecht as a partner for highly-innovative tunnelling technology (1x Mixshield, 1x Variable Density TBM, Ø 7.41 m each). Both companies are long-standing project partners and have successfully realized a variety of challenging premier projects in the southern Chinese commercial metropolis.

Entrepreneur Dr.-Ing. E.h. Martin Herrenknecht explained that top-level tunnel construction has been pursued in Hong Kong for the past 15 years. "The Shatin to Central Link is not the only example. The >>Tuen Mun – Chek Lap Kok Link<< road tunnel being built in parallel is a true giant and record-breaker on a global scale. Commissioned by the Hong Kong government, Dragages-Bouygues is also constructing this gigantic tunnel, the largest ever built with TBM. With a diameter of 17.6 meters, this represents a world record and is truly in a league of its own," the entrepreneur said in the course of a panel discussion at the 15th Asia-Pacific Conference in front of international expert audience and industry representatives. The five-kilometer long subsea tunnel, being an integral part of Tuen Mun-Chek Lap Kok Link, will help enhance the transportation network of Hong Kong as it will link the Northwest New Territories with Hong Kong's Airport.

Herrenknecht has been active in the Asian-Pacific region and China since the 1990s. Meanwhile, the company operates its own subsidiaries at six locations in China with a total of around 850 employees. Herrenknecht technology has been applied in more than 700 projects to date in China. The construction of metro lines alone has involved more than 240 Herrenknecht TBMs boring their way through the underground in 25 Chinese cities.

Website construction joint venture Dragages-Bouygues

<http://dragageshk.com/projects-post/mtr-shatin-to-central-link-contract-no-1128/>

Website client MTR Corporation Limited

<http://www.mtr-shatincentrallink.hk/en/home/>

Official project brochure

<http://www.mtr-shatincentrallink.hk/pdf/multimedia-gallery/publication/leaflet/HKI-leaflet-en-201602.pdf>

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Project data

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MACHINE DATA

Machine type: 1x Mixshield S-988, 1x Variable Density TBM S-989

- › Diameter: 2x 7.41m
- › Drive power: 1,280kW, 1,920kW

Variable Density TBM for highly variable ground conditions

- › combines the advantages of Mixshield and EPB Shield
- › possibility to switch between various operational modes smoothly
- › possibility to vary the density of the support medium in the excavation chamber to balance the pressure conditions at the tunnel face. The high density mode closes the gap between Mixshield and earth pressure balance operation.

PROJECT DATA

Project

- › Shatin to Central Link Contract No. 1128, Hong Kong

Client

- › MTR Corporation Limited

Contractor

- › Dragages-Bouygues joint venture

Geology

- › Extremely varying ground conditions along the complete tunnel alignment (slightly to completely decomposed granite, marine deposits, fill, sand, silt, clay)

Advance lengths

- › 2x 675m, 2x 450m

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Photos: German Minister for Economic Affairs Sigmar Gabriel fascinated by tunnel construction in Hong Kong

Picture download via www.herrenknecht.com/en/hongkong



Photo 1

The German Minister for Economic Affairs Sigmar Gabriel and company founder Dr.-Ing. E.h. Martin Herrenknecht jointly visited the jobsite for the >>Shatin to Central Link Contract No. 1128<< metro tunnels in Hong Kong. Minister Gabriel was impressed by how top German technology is being used to develop groundbreaking infrastructure.



Photo 2

During a delegation trip to the 15th Asia-Pacific Conference in Hong Kong, the German Minister for Economic Affairs Sigmar Gabriel informed himself on-site about one of the currently most important inner-city infrastructure projects of the commercial metropolis, the metro extension >>Shatin to Central Link Contract No. 1128<<.



Photo 3

Both high-tech tunnel boring machines for the construction of the underground sections of the >> Shatin to Central Link Contract No. 1128<< in Hong Kong have been assembled and tested in the Chinese production plants of Herrenknecht prior to jobsite delivery.

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Photo 4

The official launching ceremony of the Mixshield S-988 took place in March 2016 in Hong Kong in the presence of high-ranking representatives from the client MTR. The specially designed tunnel boring machine can advance safely also in challenging ground conditions. (Shatin to Central Link Contract No. 1128)



Photo 5

Part of the extension of the mass transit railway network is the construction of a new metro station near the >>Hong Kong Convention and Exhibition Centre<<. The related underground tunnel sections will be built by the Dragages-Bouygues joint venture with German machine technology from Herrenknecht.

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For further information: Please contact us.

Herrenknecht AG

Herrenknecht is the only company worldwide to deliver tunnel boring machines for all geologies and in all diameters – ranging from 0.10 to 19 meters. The product range comprises tailor-made machines for traffic, supply and disposal tunnels, technologies for installing pipelines as well as additional equipment and service packages. Herrenknecht also manufactures drilling equipment for vertical and inclined shafts as well as deep drilling rigs.

The Herrenknecht corporation achieved a total output of 1,343 million euros in 2015. This independent family company employs more than 5,000 people worldwide, including 180 trainees and apprentices. With 76 domestic and overseas subsidiaries and associated companies working in related fields, Herrenknecht can offer comprehensive and specific services at all times which are close to each project and customer.

› <http://www.herrenknecht.com/de/referenzen>

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