WEST RAIL UPDATE

Since the commencement of construction of the West Rail Project in October 1998, many significant challenges have been overcome. One of the toughest has been the need to carry out heavy construction works in the vicinity of densely populated areas with minimum traffic disruption and environmental nuisance.

The use of "Mu Lan" in constructing the Tsing Tsuen Tunnels was a case in point. "Mu Lan" was a huge Tunnel Boring Machine (TBM) with earth balancing shields, measured 8.7m along its diameter. It could drill through both rock and soft ground and was the first of its type used in Hong Kong. The machine was designed in France and fabricated and tested in Shanghai.

Thanks to the dedicated and concerted efforts of the KCRC project team and concerned Government departments, the West Rail work that comprises 9 stations, 1 depot, 11.4 km tunnel and 13.5 km viaduct has been more than 80% complete overall, with railway system contracts about 75% complete.

In April 2002, the first completed seven-car West Rail train was delivered to Hong Kong and in May 2002, the first section of track for train car testing was energized at the Pat Heung Depot. To enable the start of train testing on the whole line in early 2003, the railway system works are proceeding in full swing.

With the 88 km of track laying completed by the end of July 2002, the installation works for signaling system, overhead line power supply system, telecommunications system and main control system are progressing smoothly from Kam Sheung Road Station and Pat Heung Depot into other areas.

At the opening of West Rail, 20 trains of seven cars each per hour per direction at three-minute intervals will be operating to provide the initial peak service. As patronage grows, their frequency will be increased to 33 trains per hour per direction comprising of nine cars.

The new West Rail trains, designed to operate at a maximum speed of 130 km/hr, have adopted an environmentally friendly design. Firstly, the new Regenerative Braking System can reduce the train's energy consumption by 25%. Secondly, the Multi-Plenum Noise Attenuation System in the rolling stock and track design reduces the noise level of trains to as low as 55 dB and ensures the West Rail to be one of the quietest railways in the world.

With the target opening of the West Rail by the end of 2003, Hong Kong will soon have a fast, comfortable and environmentally friendly mass transit system connecting the North-west New Territories with the urban areas.

(Cover photo supplied by Kowloon-Canton Railway Corporation)

西鐵最新情況

西鐵工程自一九九八年十月動工以來，我們已 克服多項重大挑戰。其中最艱巨的，是需要在人口稠密地區內進行大型工程建設的同時，盡量減少對交通及環境的影響及滋擾。

使用「木蘭號」鑽挖機開鑿青荃隧道便是一個很好的例子。「木蘭號」是一部直徑達 8.7 米的巨大隧道鑽挖機，在法國設計，在上海裝嵌及測試。「木蘭號」與傳統鑽挖機不同之處，是它擁有一組擋土護壁，使它可以同時穿越岩層和軟土。這種新機器是首次在本港使用。

目前，西鐵工程整體上已完成超過八成，當中包括建成了九個車站、一個車廠、11.4 公里長的隧道及 13.5 公里長的橋樑。此外，鐵路系統工程亦已完成四分之三。這些進度都是端賴九鐵公司工程隊伍及有關政府部門通力合作而成。

首部由七卡車廂組合而成的西鐵列車已於二零零二年四月運抵本港，而第一段用作測試列車的八鄉車廠路軌亦已於二零零二年五月通電。爲了趕及二零零三年初開始測試整段鐵路的運行，我們現正全速興建餘下的鐵路系統工程。

隨著 88 公里長的路軌於二零零二年七月底鋪設完成，信號系統、架空電纜供電系統、通訊系統及主控系統等安裝工程便逐步從錦上路站及八鄉車廠向其他地區推進。

在西鐵啓用初期，每列列車將設有七卡車廂，每小時會有 20 班列車，即每三分鐘開出一班，在繁忙時間行走每個方向。隨著乘客量的增加，班次亦將會增至每小時 33 班，而列車的車廂數目則會增至九卡。

西鐵的新列車最高時速爲 130 公里，並採用環保設計。首先，新的再生制動系統可節省高達 25%的能源；其次，所有列車及路軌的設計，亦採用多重吸音系統，使列車行走時的噪音水平降至 55 分貝，致令西鐵能成爲全球最寧靜鐵路之一。

西鐵將於二零零三年底前啓用，到時，香港將擁有一條快捷、舒適及合乎環保要求的集體運輸系統，將新界西北部及市區連接起來。

(封面照片由九廣鐵路公司提供)