## Vehicles for the Mass Transit Railway Corporation Hong Kong



The Hong Kong Mass Transit Railway Corporation operates one of the highest capacity metro systems in the world. Most services are operated by eight-car trains with a crush-loaded capacity of 375 passengers per car, which gives a theoretical train capacity of 3,000 passengers. Their high capacity is achieved by providing maximum space for standees (most journey times are only a few minutes duration) and there are wide vestibules between cars to improve circulation. Each vehicle has five wide doors on each side to assist fast passenger entry and exit.

Metro-Cammell Limited has supplied 671 vehicles to the Mass Transit Railway Corporation; most are power cars with all axles motored but a few are trailer cars. All vehicles are of rivetted aluminium construction and great care has been taken to incorporate fire resistant materials - for example, seats are of stainless steel. Each vehicle is fitted with two independent air-conditioning units.

All the MTRC vehicles have been supplied by Metro-Cammell under four separate contracts which were placed between 1976 and 1985.

All the vehicles are fitted with propulsion equipment supplied by GEC ALSTHOM Traction Limited, the earlier trains with camshaft control and the later ones with GTO thyristor chopper control.



**Local assembly** Vehicles on earlier contracts were assembled at Metro-Cammell's works at Washwood Heath in Birmingham. Since 1985, however, final assembly has been carried out in Hong Kong from "kits" shipped out from the UK using local labour under the supervision of UK personnel.

**1000th Vehicle** Metro-Cammell (and GEC ALSTHOM Traction) have also supplied a large number of vehicles to the Kowloon-Canton Railway Corporation in Hong Kong. The 1,000th GEC ALSTHOM heavy rail vehicle for Hong Kong was, in fact, for the Kowloon-Canton Railway and was delivered in March 1991.

## **Data**

Track gauge 1432mm

Traffic type mass transit/metro

Traction supply 1500 V dc

Number of vehicles per unit 8
Capacity, seats per vehicle 48

seats per train 384

Maximum - crush load per train 3000

Vehicle length - driving car 22850mm
trailer car 22000mm

Width 3096mm Height 3700mm Bodyshell aluminium

Doors - number 5

width 1400mm
Bogie centres 15600mm
wheelbase 2500mm
Wheel diameter 850mm

Primary suspension steel/rubber chevron

Secondary suspension pneumatic

Number of motors & type 4-83kW motors per car, type G313

Traction control

- early contracts- later contractsMaximum speedcamshaftGTO thyristor80 km/h

## **About the GEC ALSTHOM Transport Division**

Metro-Cammell Limited and GEC ALSTHOM Traction Limited are both members of the GEC ALSTHOM Transport Division. The Division is one of the largest suppliers of railway rolling stock, with an annual turnover of £1,000 million and nearly 18,000 employees at factories in six countries.

GEC ALSTHOM supplies the world's widest range of electric and

diesel locomotives and passenger rolling stock (highspeed main-line, suburban, transit, light rail and people-movers). It has been supplying railway rolling stock continuously since 1823 - longer than any other manufacturer in the world. Whilst the majority of its production is in its own factories, technology transfer agreements have permitted local manufacture in more than 20 other countries.



## TRANSPORT DIVISION

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