

Matangi EMU - Fact Sheet

The name Matangi:

Matangi means "wind" or "breeze" and was chosen as the winning name from a public competition. Greater Wellington wanted a new name for its trains to avoid nomenclature such as "the new EMUs" or the "Hyundai Rotem Mitsuis".

Purchaser:

Greater Wellington Rail Ltd (wholly owned subsidiary of Greater Wellington Regional Council)

Supplier:	Manufacture:
Hyundai Rotem / Mitsui	Changwon - South Korea
Professional Services:	Delivery:
Halcrow and KiwiRail	Commences in 2010
Design Life:	Supplier technical support period:
30 years	2011 to 2020
Quantity ordered:	Increase in fleet capacity:
96 cars or 48 2-car units known as Electric Multiple Units (EMUs). The Matangi EMUs will be able to be configured as 2, 4, 6 or 8 car units.	4744 seats 53% 8744 total (including standees) 51%

Current fleet capacity (2009):

Total EMU fleet capacity 8920 seats + standees 8136 = 17056

- Ganz Mavag 88 cars (148 seats per 2-car) seats 6512 + standees 5896 = 12408
- English Electrics 37 cars (128 seats per 2-car, 200 seats per 3-car) 2408 seats + 2240 standees = 4648

Post full Matangi fleet introduction capacity:

Total EMU fleet capacity 13664 seats + 12136 standees = 25800

- Ganz Mavag 88 cars (148 seats per 2-car) seats 6512 + standees 5896 = 12408
- Matangi 96 cars (149 seats per 2-car) seats 7152 +standees 6240 = 13392

Features:

- Modern stainless steel body
- Low floor boarding in one car and integrated ramps
- Fresh modern interior
- Sealed windows (quiet, clean interior)
- Air conditioning
- Doors operating on demand
- Open movement (ie. no doors) between the cars of a 2-car unit (see Figure 1.)
- Public Address system / Public Information System (automated visual and audio next station information) (see Figure 1.)
- CCTV
- Driver intercom (allowing direct communication with the driver in the case of emergency)
- Two dedicated wheelchair spaces in multi-function area (see Figure 8 and 9.)
- Dedicated cycle's space (up to three bikes) in multi-function area (see Figure 2 and 10.)
- Multi-function area also suitable for prams and other large bulky items (see Figures 7,8,9 and 10.)



Design and Mock-up images:



Figure 1. Motor car



Figure 2. Trailer Car (low floor area) note lack of steps at doorways

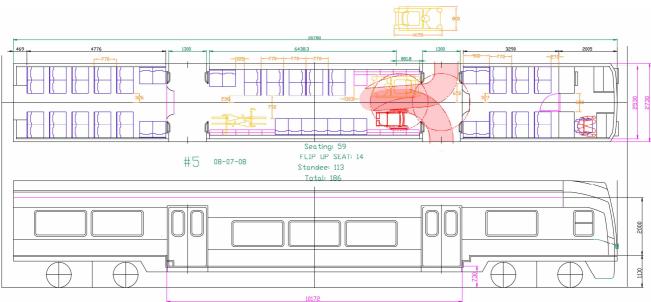


Figure 3. Trailer Car showing location of bikes and wheelchairs



Figure 4. The wooden 'mock-up' of half of the low floor trailer car at the Hutt Workshops



Figure 5. Mock-up of the drivers desk

Figure 6. Testing one of the wheelchair ramp options



Figure 7. Double 'buggie' in low floor area

Figure 8. Wheelchair entering dedicated space



Figure 9. Mock-up showing cantilevered seat concept



Figure 10. Mock-up showing storage option for bikes (up to 3 will likely be possible)



Figure 11. Mock-up of high floor seating area