

Meter-Gauge Diesel Electric Multiple Unit Train

This meter-gauge diesel electric multiple unit train is designed for export. The train features a 6-car formation with diesel generators as power sources and AC-DC-AC electric drive.



Overview

Meter-Gauge Diesel Electric Multiple Unit (DEMU)

This Meter-Gauge Diesel Electric Multiple Unit (DEMU) train is engineered for efficient regional transport, utilizing a hybrid diesel-electric propulsion system designed for meter-gauge tracks. With a seating capacity of 668 passengers and a maximum operating speed of 80 km/h, it offers a reliable solution for high-density commuter routes. The train features a robust AC electric drive system and modern bogie technology, ensuring passenger comfort and operational safety.

Performance Metrics

Maximum Running Speed

80 km/h

Max Running Speed

90 km/h

Max Test Speed

Acceleration & Braking

Metric	Value
Starting Acceleration	2.0 km/h/s
Normal/Emergency Deceleration	3.0-4.0 km/h/s
Emergency Braking Distance	d400m

Technical Specifications

Dimensions

- Overall length: Approx. 108.4 m
- Width of car body: 2650 mm
- Floor height above rail: 1130 mm

Weight & Capacity

- Gross weight (fully loaded): 254 t
- Motor car gross weight: d48 t
- Trailer car gross weight: d39.5 t
- Seating capacity: 668 persons

Propulsion & Drive

Propulsion System

- Drive mode: AC electric drive
- Installed power: 1236 kW (618 kW x 2)
- Engine speed: 1800 rpm
- Starting tractive effort: Approx. 145 KN

Fuel Tank Capacity

750 L

Running Gear

Bogie & Wheel Details

Component	Specification
Motor Car Bogie	TWD161
Trailer Car Bogie	TWT162
Wheel Diameter (New)	700 mm
Wheel Diameter (Abraded)	640 mm
Axle Arrangement	B0-B0

Compliance & Safety

Safety & Operational Ratings

Riding index d2.5, Wheel unloading rate d0.65, Derailment coefficient d1.2, K-value d1.2 W/m2.K