

# 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