

# Case Study – Bombardier Transportation

## Application

- [Vlocity 160 DMU \(Diesel Multiple Unit\)](#)

## Specification

- Passenger train with diesel drive designed to reach 160Km/hr
- Cummins QSK19R rated at 563kW @ 2000rpm
- Roof module for traction engine and genset engine cooling
- Underfloor charge air module for traction charge air and fuel cooling

## Benefits

- Whole of life cooling platform with validated performance beyond 35,000 hrs of operation
- Maximum train availability with world class performance indicators

## Solution

- Fully customised cooling solution comprising
  - Copper/brass heat transfer cores for engine coolant circuits
  - Ultraseal technology for charge air cooling at elevated turbo temperatures
  - Full stainless steel super structure, built to last 30 years
  - Pin Fin technology for fuel cooling
  - Electric fan drive with all wiring terminated to quick fit plugs

## Volume

- Over 150 trains in full service since 2006.

