

Self Powered Bogie

COST EFFECTIVE HYBRID SOLUTION

Retrofit or New

+ Simple, Reliable Integration

- Passenger / Freight Friendly
Modular Design
- Axle Mount, Gearless, Air Cooled, PM Motor
- **Easy Retrofit** – Isolated & Autonomous Traction

+ Environment

- **Reduced CO₂e**
- **Zero Emissions** in Stations
- Last Mile Operation
- Enable Running on Discontinuous OLE

+ Economical

- **Significant** Fuel / Energy Saving
- **Reduced** Brake Wear
- **Lower** Maintenance Costs
- **Less** Locomotives / Traction
- **Short** Financial ROI

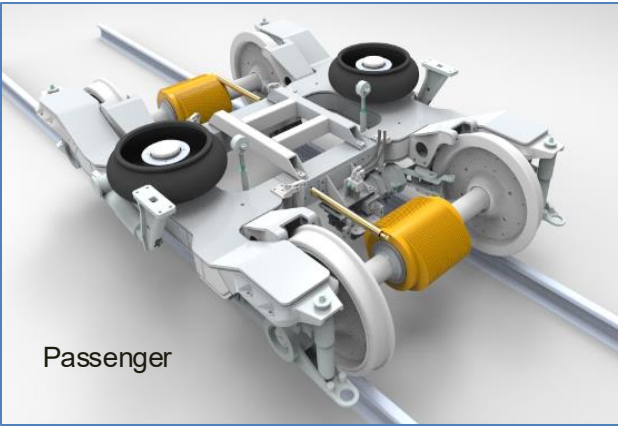
+ Performance

- **Increased** Acceleration
- **Reduced** Journey times
- **Exceptional** on-demand Power, TE & BE
- **Increased** Range

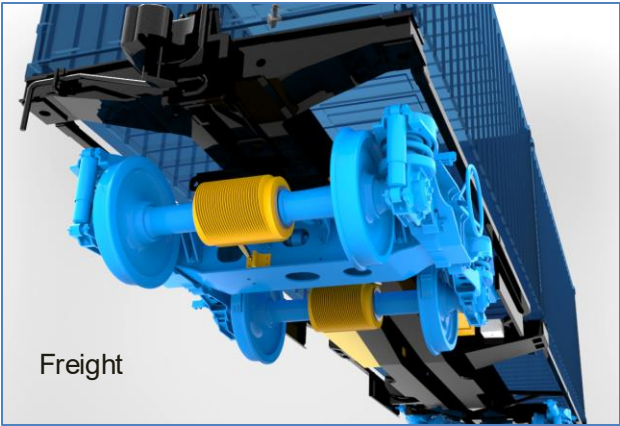
The demonstrator project was partly funded by SBRI Innovate UK, as part of the “FOAK 2022 Low emissions and a greener railway’ competition”

The Class 153 bogie used for the demonstrator vehicle was kindly loaned by Angel Trains

The live Demonstration Event is scheduled at Great Central Railway in Q1 2026



Passenger



Freight

	Technical (Prototype Equipment Per Bogie)
Peak Power	240kW
Peak Tractive / Braking Effort	12kN (840mm Wheel Dia.)
Max Duty Cycle	25%
Peak Motor Efficiency	94%
Operating Speed	0 - 100 mph
Motor Cooling	Free Air
Energy (Usable)	27kWh
System Mass	1,100kg



Contact:

Claire Bowman
Business Development Manager
Tel: +44 7973 783464
Email: cbowman@wabtec.com
www.Wabtec.com