ST Engineering

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DOP 0920

ELECTRIFY YOUR DIESEL FLEET

DIESEL-TO-ELECTRIC BUS RETROFITTING

ST Engineering

RETROFIT TO GO GREEN FASTER

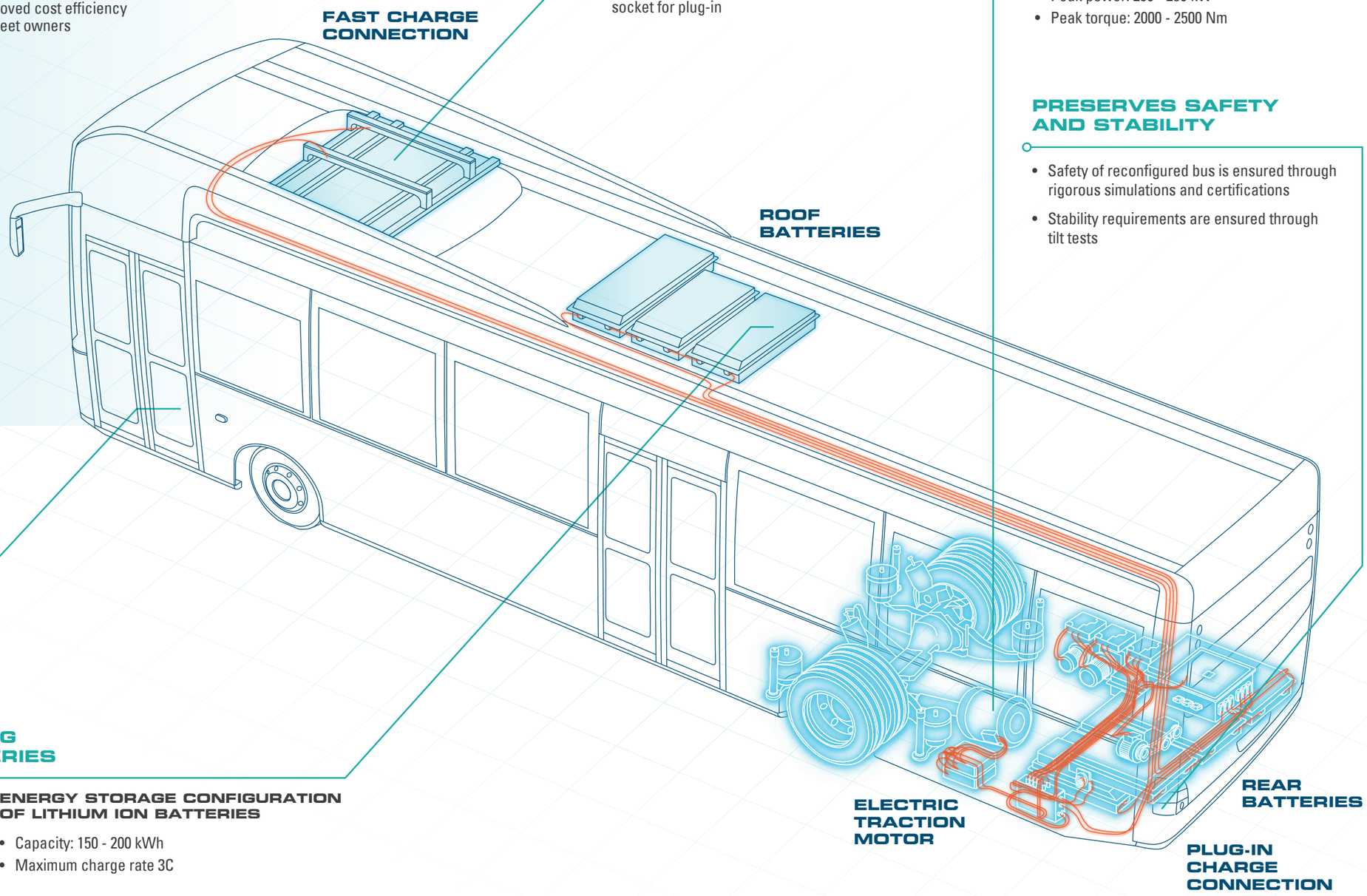
Diesel bus owners have a greener option now! You can opt for a mid-life retrofit and change to electric power.

BENEFITS OF MID-LIFE RETROFIT

- Elimination of tail pipe emissions translates into cleaner air for the environment
- Reduced maintenance cost and time
- Quiet operation translates into an improved rider experience
- Improved cost efficiency for fleet owners
- Retrofitting rejuvenates powertrain performance of existing fleet

KEY FEATURES

- Safe and stable
- Electric powertrain
- Real-time bus health updates
- Customised modifications
- High power opportunity charging (overnight charging option also availble)
- Space optimisation via engineered solutions



OPPORTUNITY CHARGING FOR A LIGHTER AND MORE ENERGY EFFICIENT BUS

- Energy replenishment at every bus stop and terminal
- Halves number of batteries required
- Travels 110 – 120 km per full charge
- Charging apparatus options: Roof-mounted charging rails for inverted pantograph, and CCS2 socket for plug-in

HIGH-TORQUE DUAL INVERTER ELECTRIC TRACTION MOTOR

- Maximum torque move-off from bus stop
- Easy navigation on hilly terrain

POWERTRAIN CONFIGURATION

- Permanent magnet motor
- Peak power: 200 - 250 kW
- Peak torque: 2000 - 2500 Nm

PRESERVES SAFETY AND STABILITY

- Safety of reconfigured bus is ensured through rigorous simulations and certifications
- Stability requirements are ensured through tilt tests

REAL-TIME ON-BOARD TELEMETRY SYSTEM

- On-board telemetry system for operators to remotely monitor bus health in real-time

CUSTOMISED RAPID CHARGING LITHIUM ION TRACTION BATTERIES

- Charges up to 3 times as fast as generic batteries
- Every minute of charging using a high-power inverted pantograph typically extends the range by 5 km

ENERGY STORAGE CONFIGURATION OF LITHIUM ION BATTERIES

- Capacity: 150 - 200 kWh
- Maximum charge rate 3C