



Cleaner. Quieter.  
Faster. Less cost.

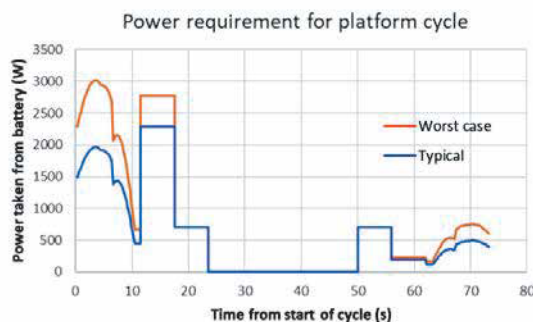
### WHY CHANGE?

- Lower carbon footprint
- Fuel and maintenance savings
- Quieter
- Faster platform speed
- Smooth operations

### THE STARTING POINT

An idling van burns a litre of diesel per hour. This means that a PTO driven access platform on a conventional 3.5t diesel van will burn about 600 litres of fuel a year and generate 1.5 tons of CO<sub>2</sub>, on top of all the smoke and toxic pollutants.

An engine uses about 10kW of power on tick-over which is far more than is needed. The graph below shows the power required to raise our VZ140 to maximum height, pause for 26 seconds, and then return to the ground.



The average over the cycle is only 800W. If the time spent at full reach is 3 minutes, the average requirement falls to 250W.

# 90% - 98%

of fuel is wasted with diesel engines when operating an access platform.

## WHAT ABOUT ELECTRIC MOTORS?

Conventional electric systems are better. The motor doesn't run when there is no demand, and it needs less power if the pressure is low.

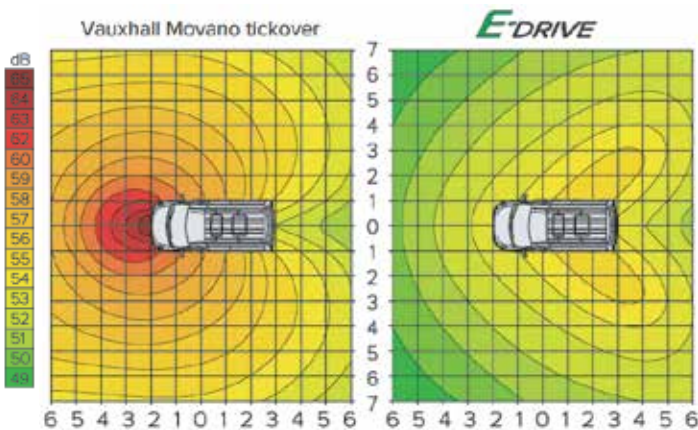
However, like an engine, the motor pumps oil at a fixed rate, even if it's not all needed. The un-used flow is pressurized and returned to the tank without doing any work.

## JOIN OUR SUSTAINABLE FUTURE

Aldercote *E-Drive* works differently. We only pump the oil that we need. This eliminates waste, which lets us use smaller batteries and gives us far more control than before. This means faster, smoother movement and millimetre accuracy.

Our batteries power up to twenty cycles and recharge quickly during transit, meaning there is never any need to plug in. They are lightweight so payload is the same as with a conventional system.

Using the best available components, in the most efficient way, makes the system exceptionally quiet. As shown below, peak noise is no higher than 55dB, which is similar to an office conversation.



## YOUR BENEFITS

- **Lower carbon footprint:**  
Engine is off whilst platform is in operation.
- **Fuel and maintenance savings**  
Save on fuel costs, and costly engine services (oil changes and DPF repairs); now mileage, not engine hours will control service schedule.
- **Quieter**  
Reduced noise pollution benefits both the operator and the immediate environment.
- **Faster platform speed**  
Increases productivity and performance efficiency.
- **Smooth operations**  
Vibration-free for the operator, as engine is not running.
- **Millimetre accuracy**  
Compared to conventional, diesel-operated engine driven systems.
- **Improved vehicle security**  
Vehicle doors can be locked using normal key when working since engine is turned off; saves on expensive key-out systems.

