

Hub Drives

Scalable electric drive technology
for wheeled military vehicles



Platform electrification is essential, and happening now; integrating Hub Drives as part of a hybrid powertrain delivers significant operational, capability and cost saving advantages

Mobility requirements for wheeled platforms are changing and conventional drive systems constrain the ability to radically re-think armoured vehicle design and dramatically improve mobility.

This requirement combined with the imperative to reduce reliance on fossil fuels and improve automotive performance poses a significant challenge to vehicle OEM's and military users; adapting swiftly to this new world requirement is of paramount importance.

Contact us to find
out more:

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How can Hub Drives help?

QinetiQ’s Hub Drive technology is designed specifically for military wheeled applications. Validated to TRL 5 it combines electric propulsion with mechanical and regenerative braking and is encapsulated within a 20 inch rim.

The Hub Drive is scalable and configurable to meet and exceed existing 4x4, 6x6 and 8x8 performance requirements, and when integrated as part of a hybrid or all-electric powertrain can enable a step change in wheeled vehicle mobility. This is due to the removal of mechanical elements of the drive line and integration of novel running gear solutions such as long travel suspension, and advanced control methodologies.

Key Benefits of HDUS as part of an electrified powertrain



Increased mobility



Improved automotive performance



Reduce fuel consumption by 10-20%



Regenerative braking



Improved safety and redundancy



Increase on-board power generation



Silent manoeuvre and extended silent watch



Reduced through life support cost



Future proof - a cornerstone to the All-Electric Combat Vehicle (AECV)

Collaborating with QinetiQ

At QinetiQ we bring organisations and people together to provide innovative solutions to real world problems, creating customer advantage.

Working with our partners and customers, we collaborate widely, working in partnership, listening hard and thinking through what customers need. Building trusted partnerships, we are helping customers anticipate and shape future requirements, adding value and future advantage.

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