



## HORSE AND WEG SIGN MEMORANDUM OF UNDERSTANDING FOR POWERTRAIN PARTNERSHIP

- R&D partnership between HORSE and WEG focuses on development of Range Extender technology for light commercial and heavy duty vehicles.
- As part of the agreement, WEG to supply electric generators, e-motors, electrical inverters and battery packs
- Range Extender powertrains also can use bioethanol and flex fuels, allowing the vehicle to achieve comparable emissions to fully electric vehicles

[HORSE](#), a global leader in innovative and low emissions powertrain systems, has signed a memorandum of understanding (MOU) with leading Brazilian electronics manufacturer, [WEG](#) for a Research & Development partnership on its new Range Extender powertrain. This commercial partnership is HORSE's first as a division of HORSE Powertrain Ltd.

As part of this agreement, HORSE and WEG will jointly-develop a market-leading Range Extender powertrain for light commercial and heavy duty vehicles, with WEG supplying the key components for the technology.

Upon completion of the R&D study, HORSE will become the system owner and supplier to customers.

HORSE will own the electronic architecture of the Range Extender, integrating components within existing requirements, as well as supplying the 1.0-litre 'HR10' engine and Control Module. WEG will supply the electric generators, e-motors, and electrical inverters.

**Julien Faure, Chief Technology Officer at HORSE, said:** *"HORSE is focused on delivering decarbonisation technologies around the world, and this partnership with WEG will help to democratise the Range Extender powertrain solution. Working with a world-class electrical technology provider like WEG demonstrates our ability to create world-class powertrain solutions for the world's differing needs and technical requirements."*

A Range Extender is made up of six key modules:

- The **combustion engine**, which generates mechanical energy that powers the electric generator.
- The **electric generator**, which converts mechanical energy from the engine into electric charge for the battery.
- The **electric inverter**, which converts direct current into alternating current, and enables communications between electronic components.
- The **electronic control unit**, which issues real-time instructions for vehicle components and electronics.
- The **e-motor**, which converts charge from the battery into mechanical traction for vehicle propulsion, as well as providing regenerative braking functionality.
- The **battery**, which stores the electrical energy originating from the electric generator and e-motor.



This partnership with WEG will grant HORSE preferential access to these critical components for its fully integrated Range Extender units, allowing continuous supply for customers. Designed for both light commercial and heavy duty vehicles, the Range Extender features an optimised battery pack and HORSE's 85kW 1.0-litre, three-cylinder 'HR10' engine. The HR10 can use flex fuels, allowing the Range Extender's total emissions profile to be comparable to that of a fully electric vehicle.

The benefit of a Range Extender is the engine constantly operates in its most efficient operating window, minimising fuel consumption and emissions.

### **HORSE: a leader in automotive innovation**

HORSE was created to provide highly efficient, low-emission engines, transmissions, and technologies to meet the varying power generation needs around the world. HORSE operates eight production plants across seven countries, three R&D centres and a head office based in Madrid, Spain – the company produces 3.2 million units per year for its customers around the world.

### **Ends**

#### **About WEG**

Founded in 1961, WEG is a global electro-electronic equipment company, operating in the capital goods sector with a focus on electric motors, gearboxes and drives and controls, energy generation and transformers, electrification products and systems, automation and digitalization. WEG stands out in innovation by constantly developing solutions to meet the major trends in energy efficiency, renewable energy and electric mobility. With manufacturing units in 15 countries and present in more than 135 countries, the company has more than 40,000 employees worldwide. WEG's net revenue reached R\$ 32.5 billion in 2023, 52.9% from external markets.

#### **About HORSE**

HORSE is a global supplier of innovative powertrain solutions. It believes that there is no one-size-fits-all solution to sustainable mobility and so is investing in technologies which will support the automotive industry, and other sectors requiring power generation, in their transition to a sustainable future. With decades of industrial know-how, HORSE develops, produces and supplies highly efficient full-hybrid, plug-in hybrid and internal combustion powertrains, and cutting-edge technologies (engines, gearboxes, full-hybrid and plug-in hybrid systems, and batteries).

HORSE employs over 9,000 people in seven countries, it is headquartered in Madrid, Spain and has eight manufacturing plants and three R&D centres around the world (Argentina, in Córdoba; Brazil in Curitiba; Chile in Los Andes; Portugal in Aveiro; Romania in Bucharest, Mioveni and Titu; Spain in Seville and Valladolid, and Türkiye in Bursa in partnership with Oyak).

HORSE is a division of HORSE Powertrain Limited, a worldwide leader in hybrid and combustion powertrain solutions. Headquartered in London, UK, the company employs 19,000 people globally across 17 plants and five R&D centres. HORSE Powertrain Limited was officially created on 31 May 2024, with Renault Group and Geely each holding a 50% stake in the company.

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