



Horse Powertrain reveals new high-efficiency motor made from amorphous steel

- Horse Powertrain reveals new high-efficiency hybrid transmission motor, leveraging amorphous steel alloy for stator block
- Motor outputs peak power of 140kW at 360Nm, with industry-leading efficiency of 98.2%
- Amorphous steel alloy layers in stator are just 0.025mm thick, reducing motor iron energy losses by 50%

London, UK (5 March 2026) – Horse Powertrain, a global leader in innovative and low-emission powertrain systems, has made the global debut of its groundbreaking “Amorphous Motor” technology. This dedicated hybrid transmission motor achieves industry-leading efficiency of 98.2%, enabling a 1% reduction in whole-vehicle fuel consumption.

First showcased at IAA Summit 2025, the Amorphous Motor uses amorphous steel – a steel alloy with incredibly high durability, strength, and magnetic permeability.

By leveraging these properties of amorphous steel, Horse Powertrain has been able to dramatically reduce the thickness of the steel layers required that make up a motor stator. As a result, the sheets used to assemble the Amorphous Motor are just 0.025mm thick – one tenth the thickness of steel used in traditional motors.

Using this highly conductive material, the Amorphous Motor’s losses to stator iron are reduced by 50% compared to equivalent designs. This allows the motor to achieve industry-leading efficiency of 98.2%. This is achieved while outputting a maximum power of 140kW at 360Nm.

These efficiency gains mean that hybrids using the Amorphous Motor in their powertrains will see a 1% reduction in fuel and power consumption compared to those using existing motor designs, helping automotive OEMs deliver a new generation of low-emission vehicle models.

Ingo Scholten, Deputy Chief Technology Officer of Horse Powertrain, said: *“This latest innovation demonstrates Horse Powertrain’s continued commitment to research and development, providing suppliers and OEMs with the tools to raise the bar on when it comes to fuel economy and emissions performance. The Amorphous Motor is an ideal tool to power a new generation of high-efficiency range extended EVs, hybrids, and plug-in hybrids, ensuring these technologies continue to play a substantial role in automotive’s decarbonization journey.”*

Horse Powertrain’s continued innovation across the hybrid and combustion component stack is powered by a global footprint of 17 manufacturing plants, five R&D centers, and 19,000 employees. This latest innovation follows the recent announcement of several new high-efficiency technologies that form part of Horse Powertrain’s global strategy, focusing on a technologically neutral approach to decarbonization.

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About Horse Powertrain

Horse Powertrain is a new global leader in hybrid and combustion powertrain solutions, supporting automakers with a range of systems including engines, transmissions, power electronics, and integrated hybrid platforms. Consisting of two divisions, Aurobay Technologies and Horse Technologies, Horse Powertrain operates 17 plants and 5 R&D centers globally, and counts some of the world’s leading automakers among its twenty customers. Horse Powertrain is headquartered in London, UK, and employs 19,000 people globally. The company’s three shareholders are Renault Group (45%), Geely (45%), and Aramco (10%).