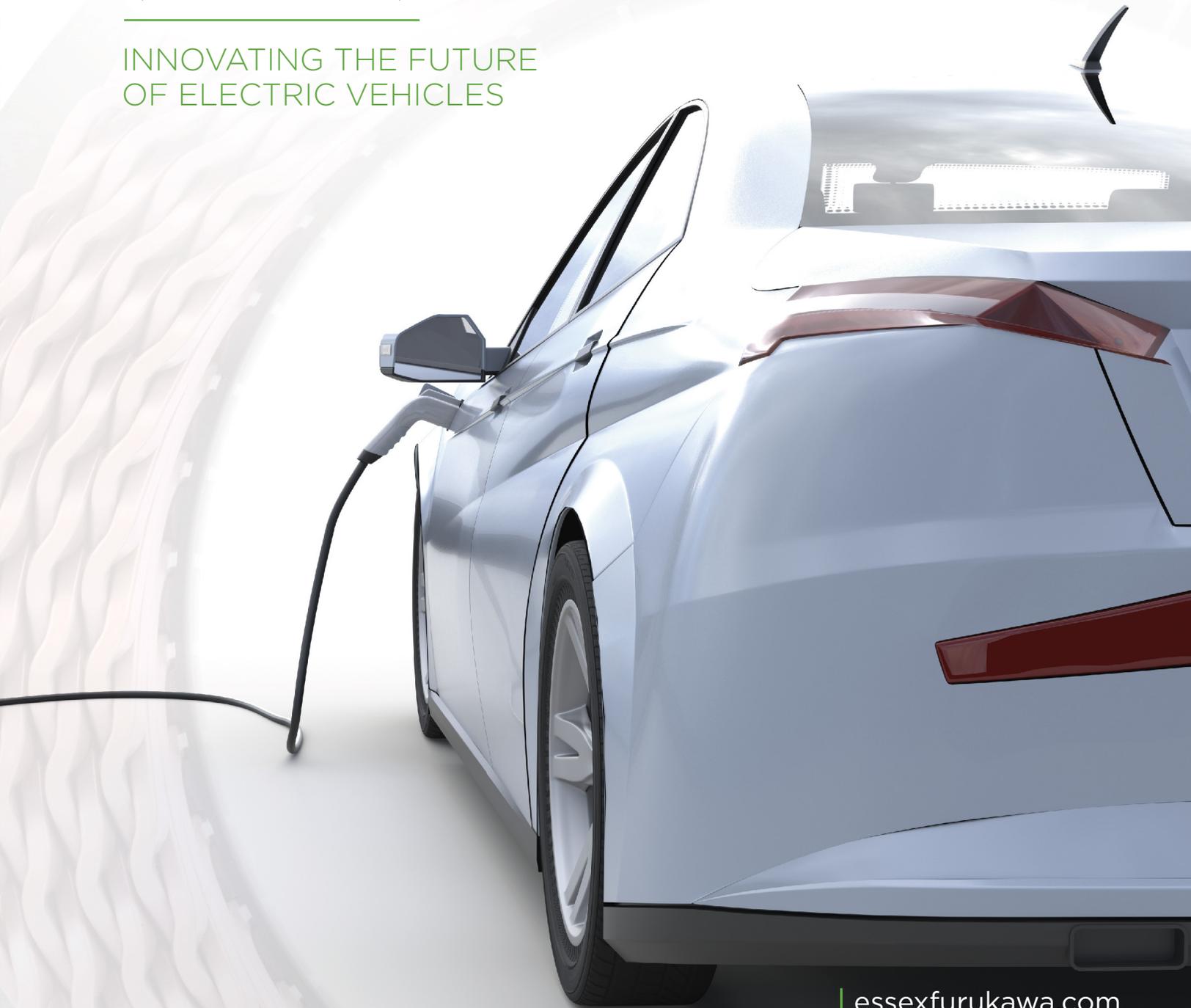


# High Voltage Winding Wire (HVWW<sup>®</sup>)

---

INNOVATING THE FUTURE  
OF ELECTRIC VEHICLES



# The Power of Two Pioneering Industry Leaders

Essex Furukawa Magnet Wire was established in 2017 as a joint venture between Essex in Germany and Furukawa Electric, providing High Voltage Winding Wire (HVWW®) to the European market, for the automotive industry in Europe. Due to the success of this partnership, Essex Furukawa has now expanded to the global market.

Essex Furukawa is built upon the presence of Essex leadership in the European automotive market, global supply chain, and European sales force. The local manufacturing capability combined with Furukawa's technical expertise of magnet wire and high voltage winding wire, including extruded winding wire.



## Innovation

Driving the automotive industry through ongoing R&D



## Quality

Excellent heat and chemical resistance with 10-years on-road testing



## Collaboration

We partner to innovate and improve existing technology



## Global Reach

The combined resources of two industry leaders across three continents

# Exceeding Expectations

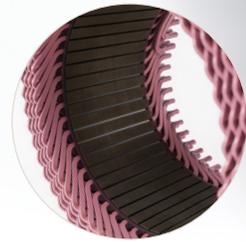
Essex Furukawa offers a HVWW® product designed for use in the automotive industry. Our technology benefits customers demanding lighter weights to achieve smaller and more efficient traction motors.

High voltage creates high heat. In the electric vehicle industry, heat resistance, flexibility and repeated stress are ongoing obstacles to magnet wire performance. Our engineers accepted the challenge to perfect every design element for an exceptional product.



## Highly Customizable

Designed to meet specific customer requirements with tight tolerances and no room for imperfections. Varieties of thickness in height and width allow for implementation within new and existing motor technology.



## Highly Flexible

A highly flexible design improves the installation process. This also enables new design innovation otherwise not possible with more rigid materials. The malleable rectangular shape fills any gaps, leading to higher power and torque.



## High Temperature

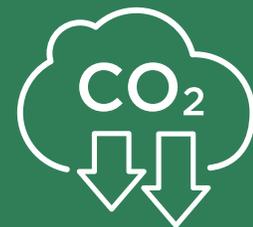
The extruded outer layer provides excellent heat resistance and reliability. The unique design can run at a constant temperature of 240°C without any reduced performance. Allows for high voltages of over 1000V without partial discharge (PDIV).



## Reduced Carbon Impact

HVWW® is the best choice for customers looking to reduce their carbon impact. Both the production process and material construction result in fewer carbon emissions.\*

Essex Furukawa is committed to lessening our own carbon footprint through a holistic sustainability initiative, Vision 2030.



\*As compared to traditional enameled magnet wire



# Leading Innovation

---

Our HVVW® technology enables more durable, efficient and downsized large electric traction motors running at higher voltages and currents and speed the time-to-market of major advances in automotive engineering.



## Speak With An Expert

Contact a representative in your region to learn more.  
[essexfurukawa.com/contact-us](https://essexfurukawa.com/contact-us)

[essexfurukawa.com](https://essexfurukawa.com)

---