



The Power of Two Pioneering Industry Leaders

HVWW® was initially developed in 2017 during a joint venture between Essex in Germany and Furukawa Electric in Japan. With the growth of xEVs, the goal was to support the high-performance demands within the European automotive market. Due to the success of this partnership, Essex has since expanded the technology to the global market.

In 2024 Essex bought out the global joint venture, rebranding the magnet wire business Essex Solutions. With an expanded global presence and streamlined operations, the company is well-positioned to meet the evolving needs of its customers and drive future technologies forward through the production of HVWW® and a comprehensive suite of products.



Innovation

Driving the automotive industry through ongoing R&D



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



