Press Release

Solvay and Essex Furukawa win recognition for innovative KetaSpire® PEEK polymer coated magnet wire technology

Bollate, ITALY, March 28, 2018 – Solvay, a leading global supplier of specialty polymers, together with Essex Furukawa Magnet Wire Europe (EFMWE), has won recognition from Magna Powertrain for the development of next-generation automotive magnet wires. Magna had invited suppliers to submit ideas for innovations capable of advancing demanding challenges in the production of automotive electric and hybrid motors. The jointly developed winning concept combines EFMWE's High Voltage Winding Wire™ (HVWW) technology for electric traction motors and an insulation coating using Solvay's KetaSpire® PEEK polymer.

As one of only seven innovation concepts that made it through to the second round of the competition, the joint entry by Solvay and EFMWE was awarded first prize by Magna's Innovation Committee.

The KetaSpire® PEEK wire insulation is applied using an extrusion process and allows the magnet wires to attain unprecedented performance levels. Notably, the coated enamel wires exhibit greatly enhanced heat and chemical resistance and can operate at higher voltages - above 600V. This, in turn, enables more compact motor designs with subsequent space and weight savings as well as overall higher system efficiency. The technology also reduces the number of assembly steps versus conventional high-performance electric traction motors.

"This collaborative achievement underscores our committed approach to helping customers optimize their technology and speed up their innovation process," says Andreas Lutz, Area Development Manager, Automotive Europe for Solvay's Specialty Polymers global business unit. *"We are very pleased about the success of our industry leading PEEK polymer in this important application, which is an excellent example of real value created by our focused partnership with our customers."*

The new technology demonstrates the benefits gained by industry leaders collaborating to overcome existing constraints by enabling more durable, efficient and downsized large electric traction motors running at higher voltages and currents. It also speeds the time-to-market of major advances in automotive engineering.

Electrified powertrains are among the main drivers of automotive innovation that will bring significant changes to the design and manufacture of vehicles, particularly hybrid and fully electric models.

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Essex Furukawa Magnet Wire Europe GmbH

Essex Furukawa Magnet Wire Europe GmbH was established in 2017 as a joint venture business of Essex Magnet Wire, a division of Superior Essex Inc. (Atlanta, Georgia, USA) and Furukawa Electric Co., Ltd. (Tokyo). The joint venture operates with headquarters and production facilities at Bad Arolsen (Germany) and specializes in advanced high-voltage wire systems for electric motors in automotive.

About Essex Group, Inc. - a Superior Essex Inc. Company

Superior Essex Inc. manufactures and distributes copper and aluminum wire and cable products that power and connect everything from homes and data centers to electric vehicles and mobile devices. For over 85 years, Superior Essex has been serving the magnet wire/winding wire, communications and related distribution markets. Its Essex subsidiary holds top market share in North America and Europe providing the automotive, industrial, energy and commercial and residential markets with seamless delivery and service from facilities in seven countries. Dedicated to resolving customer's challenges while positively impacting our communities worldwide, Superior Essex, and its divisions, continue to push boundaries in technology, sustainability, and innovation. For more information, visit **superioressex.com**.

Furukawa Electric Co., Ltd. (**www.furukawa.co.jp**) started business in 1884 when its copper smelting facility and wire-manufacturing factory was established. Since then, it has emerged as a pioneer in state-of-the-art technology addressing challenges in a wide range of industries, including telecommunications, electronics, automobiles and construction.

Solvay is an advanced materials and specialty chemicals company, committed to developing chemistry that address key societal challenges. Solvay innovates and partners with customers worldwide in many diverse end markets. Its products are used in planes, cars, batteries, smart and medical devices, as well as in mineral and oil and gas extraction, enhancing efficiency and sustainability. Its light-weighting materials promote cleaner mobility, its formulations optimize the use of resources and its performance chemicals improve air and water quality. Solvay is headquartered in Brussels with around 24,500 employees in 61 countries. Net sales were €10.1 billion in 2017, with 90% from activities where Solvay ranks among the world's top 3 leaders, resulting in an EBITDA margin of 22%. Solvay SA (**SOLB**) is listed on Euronext Brussels and Paris (Bloomberg: **SOLB:BB** – Reuters: **SOLB.BR**) and in the United States its shares (SOLVY) are traded through a level-1 ADR program.

Solvay Specialty Polymers

Solvay Specialty Polymers manufactures over 1500 products across 35 brands of high-performance polymers – fluoropolymers, fluoroelastomers, fluorinated fluids, semi-aromatic polyamides, sulfone polymers, ultra-high performance aromatic polymers, and high-barrier polymers – for use in Aerospace, Alternative Energy, Automotive, Healthcare, Membranes, Oil and Gas, Packaging, Plumbing, Semiconductors, Wire & Cable, and other industries.
Learn more at **www.solvayspecialtypolymers.com**.

Marla Witbrod
Solvay Specialty Polymers
+1 770 772 8451
marla.witbrod@solvay.com

Dan McCarthy
AH&M Marketing Communications
+1 413 448 2260 Ext. 470
dmccarthy@ahminc.com

Umberto Bianchi
Solvay Specialty Polymers
+39 02 2909 2127
umberto.bianchi@solvay.com

Alan Flower
Industrial Media Relations
+32 474 117 091
ALAN.FLOWER@INDMR.COM

Press Contacts

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