Press Release
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Impact Coatings Launches Premium FC Coating for Heavy Duty Applications

Impact Coatings has launched a next generation premium fuel cell (FC) coating for heavy duty applications. The new premium FC coating offers enhanced properties and protection for anode and cathode metal plates in LT-PEM FC stacks. The coating is currently available as job coating at the company's Coating Service Center in China.

During the last decades, focus on ways of leaving fossil fuel-based powertrains has increased. Electrical vehicles transferring hydrogen into electricity in fuel cells have become increasingly interesting for OEMs to pursue, especially for long distances and heavy-duty applications. The most common technology in this field is the LT-PEM (Low Temperature Proton-Exchange Membrane or Polymer Electrolyte Membrane) based fuel cell system. LT-PEM fuel cells rely on anode and cathode plates arranged in the fuel cell stack, plates that are either made of metal or graphite. From a production point of view metal plates are the emerging solution, thanks to the higher power density, and to lower cost, size and weight. To assure a long lifetime and efficiency in the stack's challenging environment, a surface treatment, such as PVD coating, is necessary.

During recent years heavy-duty applications have been driving an increasing demand for components that can withstand higher voltages without degradation of the protective coating. To meet this demand, Impact Coatings has developed and introduced the new premium FC coating in the group's fuel cell coating portfolio. The coating is currently offered as job coating to best support customer needs in verification stages.

Impact Coatings' new robust premium FC coating mitigates metal ion leakage into the fuel cell stack at potentials up to 1.6 V. Leaking metal ions damage the stack membranes, reducing both stack life and performance. With the new, premium FC coating, which offers good adhesion and electrical conductivity, as well as stable and low contact resistance, the stack's performance will be maintained throughout the stack's lifetime.

Impact Coatings is a center of expertise and a leading provider of PVD coating solutions for metal plates in the hydrogen industry. Development of the company's fuel cell coatings started over fifteen years ago. The company's mid-end coating, Ceramic MAXPHASE™, for LT-PEM fuel cell plates has almost a decade of field qualification in automotive applications. Today, the company continues to work closely with customers in coating development to meet coming market demands for fuel cells, as well as for electrolyzers and the production of green hydrogen.

For more information contact:

Anette Therén, VP Marketing & Communications
+46 721 46 09 76
anette.theren@impactcoatings.com

About Impact Coatings

Impact Coatings offers customer-focused coating services, clean coating technologies, and flexible coating systems with focus on hydrogen solutions, autonomous safety functions, and tailored coating solutions for high-end applications.

The company utilizes vacuum deposition methods - sustainable processes to apply thin layers of metal or ceramic coatings that improve performance and durability. Impact Coatings markets coating equipment under the trademark INLINECOATER™ and coating materials under the trademark MAXPHASE™. The company's service models and systems are flexible and scalable to fit the fast-paced markets the company operates within.

The Impact Coatings share is listed on Nasdaq First North Growth Market (Nasdaq Nordic). The company's Certified Adviser is Redeye AB.

Image Attachments

2309 Next Generation FC Coating Header

Attachments

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