

Solvay to Showcase Composite Materials, Specialty Polymers and Innovation for Automotive and Aerospace Applications at CAMX 2016

Anaheim, Sept. 26, 2016 --- Solvay, a leading global supplier of advanced composites, process materials and specialty polymers, will showcase its broad portfolio of products and technologies at CAMX 2016 (Booth F14), along with updates on successful application and business developments the company has recently announced in support of the aerospace and automotive markets. CAMX 2016 is scheduled to run from Oct. 26-29 in Anaheim, CA

"With the integration of the new Composites Materials business late last year, Solvay returns to CAMX with a full spectrum of solutions to meet our customers' needs for developing lightweight and high-performance components – ranging from specialty resins, structural and 3D-moldable foams, adhesives, surfacing films, as well as rapid-cure thermoset and thermoplastic composites, resin infusion systems and process materials," said Carmelo Lo Faro, Head of Strategy and Business Development at Solvay's Composite Materials. "In addition to expanding key resources for supporting customers in Automotive and Aerospace, we've introduced several new materials technologies, advanced manufacturing processes and high-visibility customer applications. We look forward to sharing these developments during this year's event."

Automotive Highlights

Late last year, Solvay Composite Materials marked a major milestone in its commitment to the aerospace and automotive industries with the opening of a new Application Center in Heanor, U.K. The center's capabilities range from press molding and injection molding equipment, to robotics for automated pick and place, material formatting and trimming, as well as recycling and 3D printing capabilities. The Center's mission is to promote collaborative innovation with customers seeking more efficient, high-volume production technologies for composite applications that target transportation markets.

Among the innovations that emerged from the business this year were rapid cure materials for high-speed, automated manufacture of complex structures for automotive applications. Solvay will highlight several of these rapid cure technologies and processes at CAMX, including:

- MTM® 710-1 epoxy resin prepreg: Enabling three-minute cycle times for hot compression molding processes, this advanced material targets the serial manufacture of automotive structural applications.
- MTR™ 760 thermoset resin: Developed specifically to manufacture resin impregnated carbon fiber tailored blanks, this rapid cure solution delivers superior toughness and a Class-A paint finish. BMW selected the material to form the carbon fiber reinforced polymer hood of its new M4 GTS using a fast, affordable manufacturing process. The M4 GTS hood will be on display at Solvay's booth during CAMX 2016. This part recently won the SPE Process Innovation Award as "Most Innovative Composite Part."
- MTR™ 750 epoxy resin: Tailored for high-pressure resin transfer molding (HP-RTM) processes, this two-part epoxy resin offers low viscosity for use with low injection pressures and cures within three to five minutes at 120°C to 130°C (248°F to 266°F). It can help manufacture components with a total cycle time of five minutes or less.



Aerospace Highlights

Solvay's expansive portfolio encompasses solutions for nearly every application of aircraft manufacturing, ranging from the cabin and cargo holds to secondary and primary structural applications. Solvay's technologies are lightweight alternatives to metal and heavier solid plastic structures, addressing industry demand for greater fuel efficiency, lower waste and faster production, refurbishment and maintenance of aircraft.

Leading the recent developments that Solvay unveiled in support of its aerospace customers are two facility inaugurations:

- A new carbon fiber production line at its Piedmont Facility, in Greenville, S.C., doubling production capacity of a key raw material to make carbon fiber-reinforced composite materials. The new production line has won qualification by Boeing to manufacture secondary structures such as wing movable flaps and engine nacelles, as well as interior applications.
- A state-of-the-art resin facility and an upgraded site in Östringen, Germany. Solvay's site will produce and supply materials for the LEAP engine produced by CFM International (the joint company between General Electric and Safran Aircraft Engines) for Airbus programs and Boeing. Resin infusion processing technologies are increasingly important in the manufacturing of composite parts as they meet demands from the aerospace industry for higher production rates.

Another major development that Solvay will discuss at CAMX is its contribution toward the successful rollout of the MC-21 plane produced by United Aircraft Corporation member PJSC "Irkut Corporation" — the only single-aisle passenger plane whose composite wing structures are made without the customary use of an autoclave, but based on the break-through infusion technology with the automated laydown of dry carbon reinforcement. The primary structures of the MC-21 wing are produced with Solvay's dry carbon fiber slit tape PRISM® TX 1100 and PRISM® EP 2400 toughened resin. This unique technology allows the design and manufacture of large complex and integrated parts faster and more efficiently, gaining capacity flexibility and reducing capital intensity.

Solvay will also feature at CAMX its broad and innovative range of aerospace solutions, including:

- Primary and secondary structure applications: Developed to meet a range of high performance needs in
 commercial and military aircraft and other extreme-demand applications, Solvay's CYCOM® prepregs,
 adhesives and surfacing materials offer excellent toughness and strength. The booth will feature an aircraft
 stringer and cross section of a horizontal stabilizer fabricated with CYCOM® technology.
- Aircraft interiors: Solvay's booth will also spotlight innovative material solutions that improve passenger safety and comfort by meeting the highest regulatory standards for aircraft interior components. These lightweight structural materials are also contributing to reducing fuel consumption by enabling opportunities for metal replacement.
- TegraLite™ light-weighting material solutions: Designed to make flight more fuel-efficient and costeffective, this family of high-performance solutions includes TegraCore™, an easy to process structural
 foam based on Radel® polyphenylsulfone (PPSU). Solvay's booth will display a heavy duty sandwich panel
 fabricated from TegraCore™ PPSU foam and designed to deliver superior resistance to damage, fire, and
 liquids including water.
- Vacuum bagging process materials: Solvay's broad selection of kitted materials for vacuum bagging processes enable aerospace OEMs and Tier 1 suppliers to improve process control and therefore part quality and repeatability while also streamlining labor costs, production times and waste. Solvay's booth at CAMX will feature several process materials for prepreg and infusion processing.





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About Solvay Composite Materials

Solvay's new global business unit Composite Materials is a global provider of technologically advanced light-weighting material solutions that enable our customers in the aerospace, automotive and other demanding industries to design, develop and efficiently manufacture high-quality, high-performance and complex composite structures. Composite Materials has the most extensive product portfolio, including prepregs, resin systems, adhesives and surfacing films, carbon fiber, textiles, tooling and vacuum bagging consumables, thanks to its leadership in advanced materials science, chemistry and application engineering. Solvay Composite Materials combines the former Cytec Aerospace Materials and Industrial Materials businesses.

About 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, aromatic ultra-high performance polymers, high-barrier polymers and cross-linked high-performance compounds – for use in aerospace, alternative energy, automotive, healthcare, membranes, oil and gas, packaging, plumbing, semiconductors, wire & cable, and other industries.

About Solvay

An international chemical and advanced materials company, Solvay assists its customers in innovating, developing and delivering high-value, sustainable products and solutions which consume less energy and reduce CO2 emissions, optimize the use of resources and improve the quality of life. Solvay serves diversified global end markets, including automotive and aerospace, consumer goods and healthcare, energy and environment, electricity and electronics, building and construction as well as industrial applications. Solvay is headquartered in Brussels with about 30,900 employees spread across 53 countries. It generated pro forma net sales of € 12.4 bn in 2015, with 90% made from activities where it ranks among the world's top 3 players. Solvay SA (SOLB.BE) is listed on Euronext in Brussels and Paris (Bloomberg: SOLB.BB - Reuters: SOLB.BR).

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