Solvay and Magneti Marelli display jointly developed thermoplastic composite automotive component at JEC World 2019

Alpharetta, Georgia, USA March 13, 2019 --- Solvay is displaying a thermoplastic composite automotive component on its stand at JEC World 2019.

The component, a steering knuckle prototype designed and manufactured by Magneti Marelli, is the result of a close collaboration between both companies.

The steering knuckle’s complex geometry was designed to maximise the properties brought by Solvay’s thermoplastic composites and injection molding materials. It showcases compression molding and overmolding processes and the combination of Solvay’s Amodel® PPA thermoplastic compound and Evolite™ PPA thermoplastic composites - temperature capable products developed specifically for automotive functional applications. This development highlights how novel high-performance materials, short cycle time processing methods and a smart part design can be combined to result in structural performance, function integration and weight saving.

“We are proud of our contribution to this prototype. This is a successful application of Solvay thermoplastic composite technologies which meets the rate and process flexibility expected by automotive manufacturers” said Gerald Perrin, Global Automotive Director at Solvay Composite Materials Global Business Unit.

“This prototype is the first of its kind in the field of suspensions. By using promising materials and processing technologies we were able to combine high performance thermoformed laminates with injection molding to create complex and non-conventional geometries. This combination enabled the design of a functionally integrated component including co-molded structural sleeves. Magneti Marelli led the project from concept - using advanced design methodologies, to prototyping and benefited from Solvay’s materials science application and process tuning expertise” said Marco Goia, Head of Product Development at Magneti Marelli Ride Dynamics.
About Solvay Composite Materials
Solvay’s new Global Business Unit Composite Materials is a global provider of technologically advanced lightweighting 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.

Solvay is an advanced materials and specialty chemicals company, committed to developing chemistry that addresses 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 lightweighting 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 26,800 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.BE) 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. Financial figures take into account the announced divestment of Polyamides.

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