e-Xstream and Solvay win the 2017 JEC Innovation Award

NEWPORT BEACH, CA--(Business Wire – January, 2017) – e-Xstream engineering, an MSC Software Company and co-winners Solvay Performance Polyamides and Solvay Specialty Polymers have been recognized with a JEC Innovation Award for launching Digimat Additive Manufacturing. Awarded in the software category, the launch was recognized for its innovation and market potential.

The JEC Innovation program was created in 1998 to help identify, promote, and reward the most innovative composite solutions worldwide. The selection criteria for the JEC Innovation Awards are technical excellence, exemplarity of the chain of partners, market potential and originality. The ultimate goal is to recognize the efforts being made towards the advancement of the composite industry.

“We’re honored to be recognized as an industry innovator by JEC, and look forward to continuing our modeling leadership with Digimat Additive Manufacturing to help address the global industry’s need to transition from prototyping to actual manufacturing” said Roger Assaker, Chief Executive Officer, e-Xstream. “With solutions for materials development, process simulation, and printed part performance, Digimat Additive Manufacturing is a completely innovative solution that’s fully dedicated to reinforced plastics and composites, allowing its users to ‘print it right the first time.’”

Because of the manufacturing specificity, new high performance plastics and composites need to be engineered specifically for the Additive Manufacturing industry. Today the development time for one such grade is very long, because the as-printed material properties are closely related to the process conditions and the process-induced microstructure, such as printing direction and porosities distribution. By applying multi-scale material modeling techniques to the additive manufacturing of polymers (unfilled and reinforced), Digimat’s virtual material compounding and characterization is a key enabler for customers developing new materials. They are now able to significantly reduce their physical tests, understand the key parameters driving the material’s behavior and easily create new material systems, such as lightweight lattices, and open the door to even more innovative designs.

For printer manufacturers and end-users, the part fidelity is the top challenge to overcome. With simulation tools that enable optimizing the process and minimizing the part deformation, the technology reliability and the integration of its use into the industry are at the engineer’s fingertips. Virtual engineering is the solution to minimize printing trials and errors because it enables the user to explore the process sensitivity to manufacturing parameters.

“Being part of the launch of Digimat Additive Manufacturing aligns with our strategy to play a leading role in enlarging the portfolio of available high performance materials.” said Brian Alexander, Head of Additive Manufacturing for Solvay’s Specialty Polymers Global Business Unit. “By working closely with e-Xstream and leveraging its modeling platform, the Digimat solution combined with Sinterline® Polyamide 6 offer opens new technological horizons and fully takes advantage of the potential for light-weighting and complex design.” said Dominique Giannotta, Sinterline® Program Leader for Solvay’s Performance Polymides Global Business Unit.

At JEC World 2017, meet Solvay on booth L42 and e-Xstream engineering on booth C68 in Hall 5A.
Figure 1 Predicting the failure indicator distribution due to burst pressure of a printer polimotor plenum using Sinterline® Techynyl® Polyamide 6 offer material. Courtesy of Solvay Engineering Plastics.

About Solvay

An international chemical and advanced materials company, Solvay assists its customers in innovating, developing and delivering highvalue, 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).

About e-Xstream engineering

Founded in 2003, e-Xstream engineering, an MSC Software Company is a software and engineering services company 100% focused on the multi-scale modelling of composite materials and structures. The company helps customers, material suppliers, and material users across many industries. They aim to reduce the cost and time needed to engineer innovative materials and products using Digimat, the nonlinear multi-scale material and structure modelling platform. Since September 2012, e-Xstream engineering is a subsidiary of MSC Software Corporation.

About MSC Software

MSC Software is one of the ten original software companies and a global leader in helping product manufacturers to advance their engineering methods with simulation software and services. As a trusted partner, MSC Software helps companies improve quality, save time, and reduce costs associated with design and test of manufactured products. Academic institutions, researchers, and students employ MSC’s technology to expand individual knowledge as well as expand the horizon of simulation. MSC Software employs 1,200 professionals in 20 countries. For additional information about MSC Software’s products and services, please visit: www.mscsoftware.com

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