

# New Digimat 6.0 Release Delivers Time & Cost Savings for Material Characterization of Composites

*New release introduces Digimat-VA to compute virtual allowables*

NEWPORT BEACH, CA -- (Business Wire – July 6, 2015) – [e-Xstream engineering](#), an [MSC Software Company](#), and developer of [Digimat](#), the leading nonlinear multi-scale material and structure modeling platform, announced the release of Digimat 6.0, the leading material modeling platform for material and structural engineers.

This latest release brings a series of new features and improvements in composite materials for Short Fiber Reinforced Plastics (SFRP) to Discontinuous Fiber Composites (DFC) and Continuous Fiber Reinforced Composites (CFRP).

The key highlight of Digimat 6.0 is the introduction of JEC Innovation Award winner [Digimat-VA](#), a unique software solution dedicated to accurate and efficient virtual characterization of CFRP, that dramatically cuts the cost and time associated with material characterization and qualification. For example, generating a B-basis value without extensive experimental work is now just a few clicks away. True coupon strength distribution is finally accessible. Full layup design space can be explored at the fraction of the usual cost. Root cause analysis of early failure can now be understood thanks to the variability modeling integrated in Digimat-VA. New material systems can be explored virtually. Any engineer, whether in the aerospace or the automotive industry, concerned with characterizing a new composite material, exploring the design space or better understanding mechanical properties will find Digimat-VA to be a productive, efficient and accurate solution to save time and money.

## **Additional release highlights include:**

### **Continuous Fiber Reinforced Plastics**

Digimat 6.0 offers engineers working on CFRP new curing models (curing state and shrinkage) as well as new progressive failure models and significant speedup during coupled analysis of unidirectional (UD) and woven materials.

### **Short Fiber Reinforced Plastics**

The short fiber reinforced plastic (SFRP) world also benefits from the latest Digimat improvements and features. e-Xstream engineering maintains its dedicated focus on the advanced modeling of SFRP and provides new interfaces to FEA codes in Digimat-RP, namely Pam-Crash and MSC Nastran SOL101 and SOL103. Automatic mapping procedures have been made more robust with an improved mesh superposition algorithm. Calibration of tension/compression failure indicators such as Tsai-Wu 3D Transversely Isotropic is now available in Digimat-MX, helping material engineers to build a Digimat failure model. Finally, material properties evaluation in

Digmat-FE is made easy with automated procedures to run all necessary simulations and compute material engineering constants.

To learn more about the new developments and see how key industry players (material suppliers, Tier1s and OEMs from worldwide) use Digmat, join us at the Digmat Users' Conference in Barcelona on September 29-October 1, 2015! Meet our experts and network with your industry peers. Agenda and registration [here!](#)

### **About e-Xstream engineering**

Founded in 2003, [e-Xstream engineering](#) is a software and engineering services company 100% focused on the multi-scale modeling of composite materials and structures. The company helps customers, material suppliers, and material users across many industries reduce the cost and time needed to engineer innovative materials and products using Digmat, the nonlinear multi-scale material and structure-modeling platform. Since September 2012, e-Xstream engineering is a wholly owned subsidiary of [MSC Software](#). The e-Xstream engineering corporate logo and Digmat logo are trademarks or registered trademarks of e-Xstream engineering SA. For additional information about MSC Software's products and services, please visit: <http://e-xstream.com/>

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