

MSC Nastran 2018.0 Delivers Extended Modeling Capabilities and Up to 5x Faster Solver Performance

NEWPORT BEACH, CA, November 17th, 2017 – [MSC Software Corporation](#), a global leader in simulation software and services, today announced the release of MSC Nastran 2018.0.

[MSC Nastran](#) is the world's premier FEA solver that enables simulation of various multidisciplinary engineering problems for aerospace, automotive, defense, energy, manufacturing, and other high-tech industries.

Today's industry requirements call for design of complex structures that consist of multiple components, parts, and assemblies. Each component represents a section of the overall structure and can come from different departments or suppliers. MSC Nastran 2018.0 delivers new assembly modeling techniques that allow engineers to easily create, combine, and manage multilevel assemblies for complex structural models.

With the rise of industry standards, engineers are shifting towards novel designs that utilize lightweight and high strength materials for Noise, Vibration, and Harshness simulations. Most of these materials share similar characteristics in which their damping and stiffness properties can change with frequency. Some examples include:

- SFRP (Short-Fiber Reinforced Plastics) Laminates
- Laminated Glass Windscreens
- Laminated Metals (two sheets of steel with a viscoelastic damping layer)
- Carbon Fibers

In order to capture the true behavior of these laminates, it is important to account for their frequency and spatial dependent properties during the analysis. Engineers can now expand the depth of their simulations by accurately implementing the frequency

dependent material properties of MSC Nastran 21018.0 for design and noise abatement of automotive and aerospace vehicles.

Most complex structures have very large model sizes thus, requiring an extended period of time to solve. MSC Nastran 2018.0 features High Performance Computing (HPC) methods that are enhanced to provide optimal solution and deliver a faster turnaround for large simulation models. The efficient calculation methods of MSC Nastran 2018.0 can accelerate your simulation and result in up to 5x performance gain for many models.

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 1,300 professionals in 20 countries. For more information about MSC Software's products and services, please visit: www.mscsoftware.com

MSC Software is part of Hexagon (Nasdaq Stockholm: HEXA B; hexagon.com), a leading global provider of information technology solutions that drive productivity and quality across geospatial and industrial landscapes.

The MSC Software corporate logo and MSC are trademarks or registered trademarks of MSC Software Corporation and/or its subsidiaries in the United States and/or other countries. NASTRAN is a registered trademark of NASA. All other brand names, product names, or trademarks belong to their respective owners.

Press Contact:

Press & MARCOM Specialist
Nicole Drake
Nicole.Drake@mscsoftware.com