DEP MeshWorks is a revolutionary CAE platform that helps leading companies around the globe transform their product development process, reduce their development time, and get to market faster, thus saving considerable time and money. MeshWorks is an integrated CAE platform for pre and post processing, involving rapid concept CAE and CAD model generation. With in-built features of advanced meshing, process automation, concept modeling and CAD/CAE Morphing, it is now an industry standard tool for faster & smarter parameterization and optimization. Since its release in 2001, MeshWorks has been simplifying tedious time consuming processes associated with design changes, and helping engineers develop future-ready products across industries.

The latest version of MeshWorks, utilizes several advanced algorithms/methodologies & Al/ML technologies in the backend, to give a powerful and rich front end experience to the user. This new version gives the user the power of CAE at your fingertips to:

- TRANSFORM: Transform your product development cycle with the Next Generation CAE/CAD Morphing, Concept Modeling and CAE Parametrization which results in significant time reduction while at the same time yielding an optimized product.
- AUTOMATE: Automate your tedious repetitive meshing, model assembly & analysis processes using our advanced meshing functions (tet, quad, mid-plane, hex), comprehensive assembly tools & highly automated Process workflows.
- ACCELERATE: Accelerate your CAE process with technologies like Reduced Order Modeling(ROM), and Multi-disciplinary Optimization (MDO) saving 30-70% of time.
- INNOVATE: Innovative modules like the electrification module (eMoD) help you to keep innovating and design new and optimized products rapidly.

Detroit Engineered products (DEP), is an engineering services, product development, software development, consulting and talent acquisition company. Since its inception in 1998 in Troy, USA, DEP is now a global company with footprints in Europe, China, Korea, Japan, and India. DEP uses the accelerated and transformed product development process, accomplished by utilizing our proprietary platform, DEP MeshWorks, which rapidly reduces the development time of products across industries.



The power of CAE to









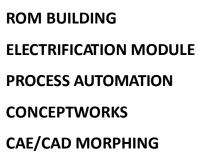










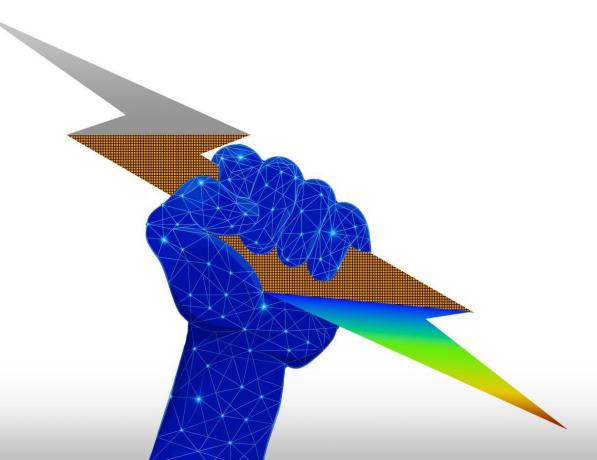


POST-PROCESSING

**CAE PARAMETRIZATION** 

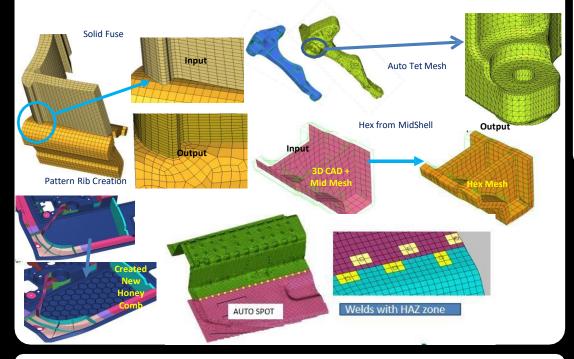
**MESHING & MODELING** 

**MULTI-DISCIPLINARY OPTIMIZATION** 



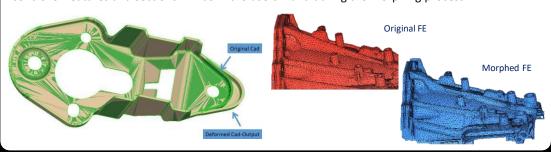
### **Rapid Meshing & Modeling Tools**

MeshWorks has a powerful CAE meshing engine that allows users to create 2D and 3D meshes rapidly from complex CAD data - Tetra, Sheet Metal, Mid-plane & Hexa. Highly automated meshing functions available creating exceptional quality meshes with minimal to no CAD clean-up. MeshWorks generated models produce higher geometric accuracy due to its comprehensive AI/ML based feature recognition engine.



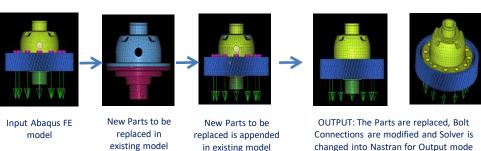
## **Advanced CAD/CAE Morphing**

With MeshWorks, user can achieve any new shape by treating the parts/assembly as if they were clay, zero thinking and planning needed even for very complex aspects of full system level morphing. All the models can be morphed within 100th of a millimeter precision and enormous control of features and sections will be in the users' hand during the morphing process.



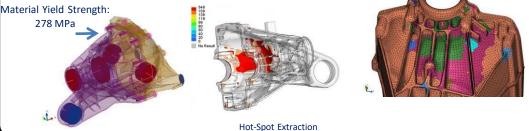
### **Highly Automated Process Workflows**

Repetitive CAE processes can be rapidly automated using a fast Record > Create-GUI > Plumb > Publish process using MW Process Automation function. Very complicated geometry and mesh creation processes can be automated with virtually no scripting or programming expertise. The process automation can be performed in as simple of way of just 'drag & drop' action to create GUI and plumb it to the recorded process.



# Advanced Post Processing

Post processing module in MeshWorks, provides a rich set of post processing functionalities such as animations, contouring, cut sections and ISO plotting of results and many more such powerful features. With the use of robust tools in MeshWorks Post Processor, designers can do comprehensive study of their models & its effects, leading to design optimization at rapid pace.



### **Cutting-edge CAE Parametrization**

Regular FE/CFD models can be converted to intelligent parametric FE/CFD models. Multiple runnable CAE models can be generated automatically by exercising the parametric CAE models. Parametric CAE engine of MeshWorks is the most comprehensive that is out there which can also be applied across multidisciplinary CAE models such as Crash, NVH, Durability etc.

