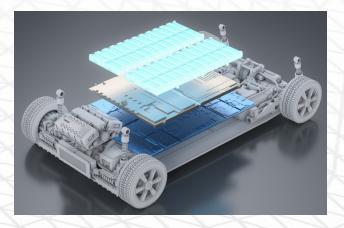


BATTERY MODELING

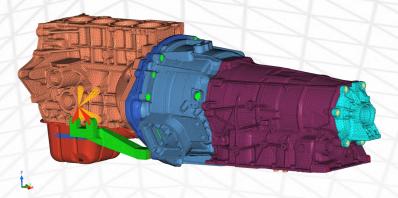
DEP MeshWorks has extensive automatic time saving tools for battery components, with a versatile tool set for structural, thermal and safety modeling aspects of battery system.

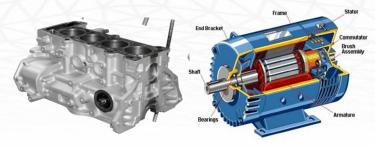
- Battery cell level modeling
- Battery stack-model assembly tools for safety and evaluation HEXA modleing tools for battery frame
- Mesh modeling and optimization for battery frame/tray
- Contact definition and input deck creation
- Battery model checking tools
- Skin mesh tools for cell level and mini channel thermal modeling
- Process automation tools for battery system modeling and assembly





E-Powertrain solutions





INTEGRATED ELECTRIC DRIVE UNITS

DEP MeshWorks has a good set of tools for modeling complex housing, motor sub system, gear train, carrier and parking system parts.

It has parametric modeling functions, connection to solvers and optimizers, as well as process automation tools to accelerate the virtual validation phase for such complex assemblies.

- Modeling stator, rotor, shaft and casing for mechanical and electromagnetic performance
- Modeling for motor thermal analysis
- Parameterization of geometry for stator and magnet slot
- Wrapper model building tools for motor NVH and acoustics
- Process integration and automation for optimization

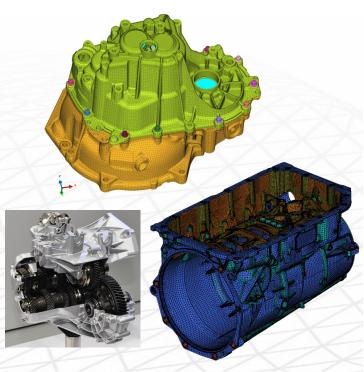


MOTORS MODELING

DEP MeshWorks has toolsets for modeling complex powertrain assemblies and electric vehicle motor systems.

Typically powertrain/motor durability, NVH and electromagnetic performance assessment require good quality FE models.

- Modeling engine, transmission ans axle system for durability and NVH performance
- Modeling stator, rotor, shaft and casing for mechanical and electromagnetic performance
- Mount and accessory bracket tuning
- Topology optimization and RIB optimization
- MDO studies
- Shell modeling, solid HEXA and TETRA modeling to capture complex motor sub components
- Model assembly tools and process automation for electric motor virtual validation





DEP MeshWorks is a reference for morphing and design directly at the FE level on the market for 20 years.

DEP MeshWorks is an integrated CAE platform that accelerates the product development process. It contains a meshing engine combining performance and user-friendlyness for an overall gain in productivity. It is a specialized software for rapid concept modeling, automated morphing at FE and CAD level, parameterization and optimization, involving rapid concept CAE and CAD model generation.

DEP MeshWorks is edited by Detroit Engineered Products.

More information at depeurope.com







Dynas+ Engineering Products is **DEP** MeshWorks Europe Technical Centre.

Dynas+ Group is a technical engineering group specialized in numerical modelling, which provides its customers (automotive, defense, aeronautics, space, consumer goods, etc) digital solutions to support and optimize the studies and development of their products.

Dynas+ Group choose **DEP** MeshWorks for its engineering departement, ensuring drastic time savings in all modelling workflows.





