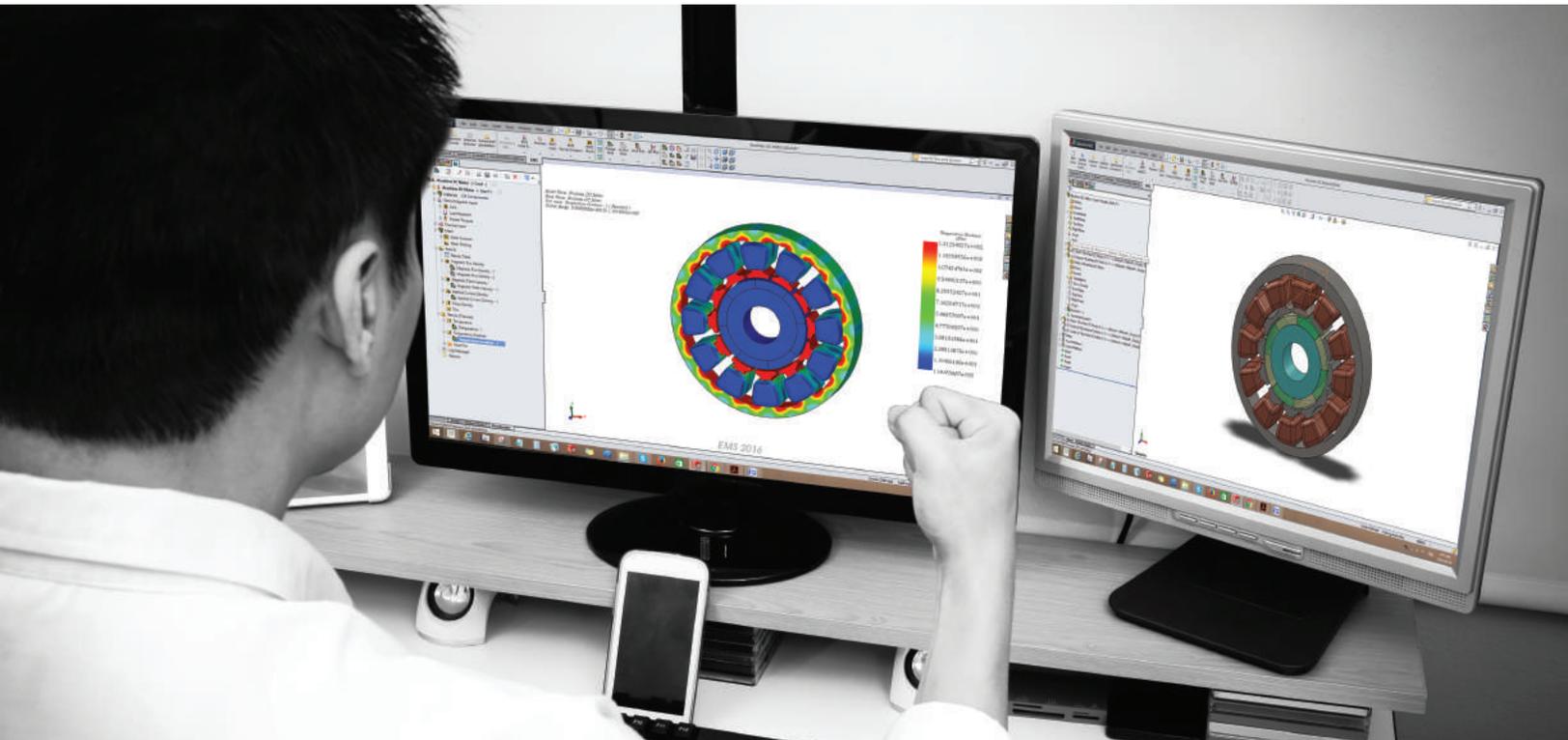


# EMS

Electro-Thermal-Mechanical Simulation



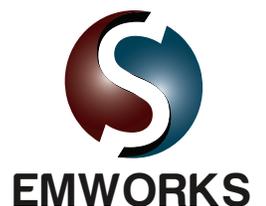
Accurate, Powerful, Easy-to-use  
The ultimate workbench to test your design ideas!

Available For:

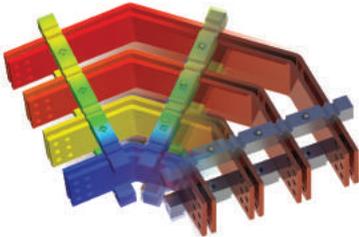


ElectroMagneticWorks, Inc

7709 Corder  
LaSalle, Québec  
H8N 2X2, Canada  
Toll free: (800) 397-1557  
sales@emworks.com



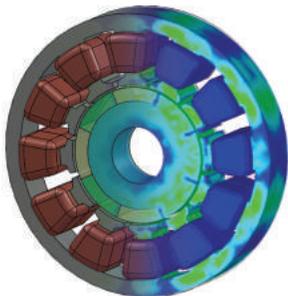
## CAD Embedded Simulation



Electric stresses in a bus bar assembly

### Electric simulation *(Electrostatic, AC Electric and Electric Conduction)*

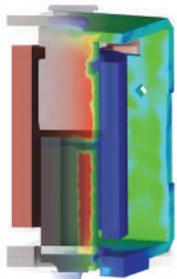
- Predict and prevent dielectric breakdown and electronic discharge issues
- Accurately model and simulate the electric behavior of biological tissues
- Design MEMS based devices based on electrostatic actuation
- Study the impact of conductivity on your power budget



Magnetic flux density distribution in a BLDC motor

### Magnetic simulation *(Magnetostatic, AC Magnetic and Transient Magnetic)*

- Study performance of your motors and linear actuators
- Compute the forces acting on components due to magnetic field
- Build and study the working of innovative products using permanent magnet arrays
- Design and study the performance of transformers and inductors



Forces driving the plunger of a solenoid valve

### Multi-physics *(Thermal, Motion and Structural)*

- Analyze complex moving machine with coupled EM and Motion simulation
- Compute thermal stresses and identify vulnerable areas in my designs using coupled EM and thermal simulation
- Design electrical components like motors, generators, transformers etc where thermal management is a key issue

## Benefits

- Fully embedded inside SOLIDWORKS, Inventor and SpaceClaim
- Avoid needless import/export of geometry
- Quickly compare multiple design configurations to select the optimal design
- Perform multi-physics EM simulation with motion, thermal and structural

Advanced Features		
Design Tables	Parameterization	Multiconfigurations
Motion	Thermal	Structural
Network License		