

oersted*

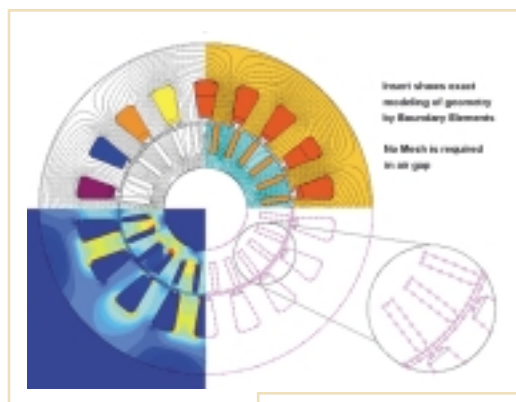
2D/RS Time-Harmonic Electromagnetic Design Software



Reducing a company's design and manufacturing overhead is key to staying on top in today's competitive market. OERSTED, a 2D/RS time-harmonic eddy current field solver from Integrated Engineering Software delivers the power and performance needed to accomplish this goal. Using our innovative Boundary Element Method (BEM) technology, OERSTED distinguishes itself in magnetic design problems that require large open field analysis, exact modeling of boundaries and in applications where dealing with small skin depths are critical.

Design engineers depend on OERSTED for the design and analysis of electric/electronic equipment and components such as:

- MRI
- non-destructive testing systems
- bus bars, charging fixtures
- induction heating coils
- magnetic recording heads
- magnetic shielding
- coils and transformers
- induction motors



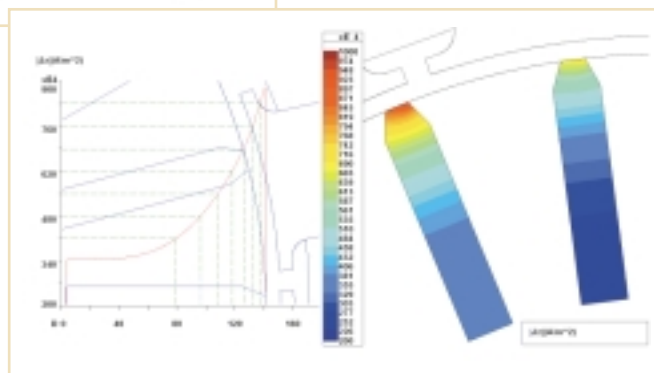
Angular periodic model of a squirrel cage induction motor

- top right: Field line plot with material underlay
- top left: Field lines showing phase current underlay
- bottom left: Contour plot of flux density
- bottom right: Element distribution

"Using OERSTED, I was able to solve an international eddy current benchmark problem in one hour from start to finish. The results realized were accurate with less than 1% error from analytical solutions."

Dr. Kent Davey
American Maglev
Florida, USA

Color contour plot of current density in rotor bars under locked rotor condition. Graph shows the magnitude of the current density in rotor bars.



Speed, accuracy...
plus reduced costs

OERSTED maximizes productivity by allowing for the simulation of virtual prototypes on the computer. OERSTED significantly reduces design and prototype costs and provides engineers far greater insight into design optimization and verification.



INTEGRATED
ENGINEERING SOFTWARE

www.integratedsoft.com

oersted at a glance

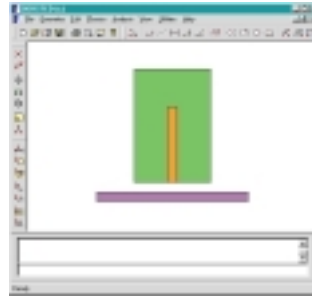
- Time-harmonic, 2D and rotationally symmetric eddy current solver for a diverse range of applications
- Powerful Windows® native toolbar interface for easy data and geometry manipulation
- Wide array of post processing options for design evaluation and optimization
- Industry standard CAD import/export utilities offering time saving convenience for model design creation
- Comprehensive technical support services from the best in the industry

As easy as one, two, three

OERSTED provides fast, accurate results, exact modeling of boundaries, easy analysis of open region problems and exceptional accuracy when modeling small skin depths. No Finite Element Mesh (FEM) is required. OERSTED delivers a powerful, easy-to-use design and analysis tool right to your desktop.

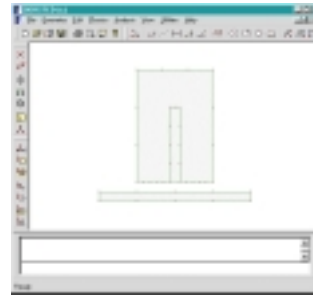
OERSTED goes to work in just three easy steps.

Step 1



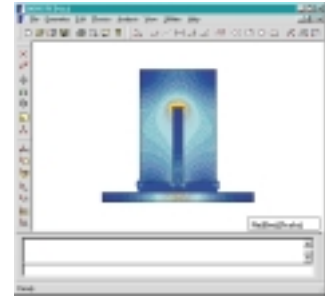
Create your design through our geometric modeler or import from your CAD program.

Step 2



Assign the physical attributes of the model.

Step 3



Analyze the model, display the results and optimize for performance.

OERSTED'S advanced technical features

- Intuitive and structured tool-bar interface maximizes productivity for experts or beginners
- Static (DC) and phasor (AC) analysis modes
- Simulation of non-linear materials
- Simulation of permanent magnet materials (DC mode)
- Simulation of lossy magnetic materials
- Calculation of displacement current
- Periodic and symmetry features minimize modeling and solution time
- Solution of current induced in conductors and skin effect current impressed in conductors
- Force, torque, flux linkage, induced voltage, power and impedance parameters
- Display forms for plotting scalar and vector field quantities include: graphs, contour plots, arrow plots, color maps and vector loci plots
- High quality graphics and text utility for preparation of reports and presentations
- Data exportable to formatted files for integration with spreadsheets and other software packages
- Batch function allows unattended solution of multiple files
- Powerful parametric feature allows definition of variable parameters to be stepped through allowing the analysis of multiple "what-if" scenarios and facilitating design optimization

Try OERSTED for 30 days!

Discover how easy OERSTED is to learn and use. All full version software is available for a 30-day evaluation. Verify and compare the results. Call for an OERSTED evaluation and start improving productivity today.



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