

"ELOTHERM GmbH is the leading European manufacturer of induction heating systems. We use OERSTED and FARADAY to design and prototype our heating systems. The software's ease of use enables us, in a very short period of time, to accurately simulate our heating process. The software enhances our understanding of the heating process and the layout of such systems."

Robert Jurgens ELOTHERM GmbH (formerly AEG ELOTHERM)



faraday

3D Time-Harmonic Eddy Current Design Software

Producing a more cost-effective, faster to market product is an ever-increasing challenge. FARADAY, a 3D time-harmonic eddy current field solver from Integrated Engineering Software gives you the advantage you need to meet this challenge head on. Using our innovative Boundary Element Method (BEM) technology, FARADAY is the only clear choice for applications requiring large open region analysis, exact modeling of boundaries and problems where dealing with small skin depths are critical.

Design engineers can depend on FARADAY for the design and analysis of magnetic equipment and components, including:

- MRI
- non-destructive testing systems
- bus bars, charging fixtures
- induction heating coils

- induction motors
- magnetic recording heads
- magnetic shielding
- coils and transformers



Speed up product development without sacrificing quality design

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

faraday

faraday at a glance

- 3D time harmonic eddy current field solver for a diverse range of applications
- Powerful Windows® native toolbar interface for easy data and geometry manipulation
- A wide array of post processing options for design evaluation and verification
- Industry standard CAD import/export utilities offering time saving convenience for model design and creation
- Comprehensive technical support services from the best in the industry

As easy as one, two, three

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

FARADAY goes to work in just three easy steps.



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



Assign the physical attributes of the model.

Step 3



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

FARADAY's advanced technical features

- Intuitive and structured tool-bar interface maximizes productivity for experts and beginners
- Static (DC) and phasor (AC) analysis modes
- Simulation of non-linear materials
- Simulation of permanent magnet materials (DC mode)
- Periodic and symmetry features minimize modeling and solution time
- Force, torque, flux linkage, power and impedance parameters
- Solution of current induced in conductors and skin effect current impressed in conductors
- 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 FARADAY for 30 days!

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



220 - 1821 Wellington Avenue, Winnipeg, Manitoba, Canada R3H 0G4 Tel: (204) 632-5636 Fax: (204) 633-7780 E-mail: info@integratedsoft.com www.integratedsoft.com

*© 1985-2004. All software programs are copyright of Enginia Research Inc. All rights reserved. Printed in Canada

