

INTEGRAL MINING

ADVANCED NUMERICAL MODELING



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ELECTRONIC SYSTEM DESING (ESD)

Smart connected devices are everywhere, in homes, in transportation, and at work. This means electronic system design (ESD) is having a greater influence on almost every type of product requiring new simulation tools to help achieve electronic, electrical, mechanical, thermal, and connectivity goals. Altair's simulation-driven design tools enable your team of specialized engineers to collaborate across all aspects of printed circuit board development from concept to manufacturing. Our products streamline your process, eliminate design iterations, and reduce time-to-market.

ALTAIR FEKO

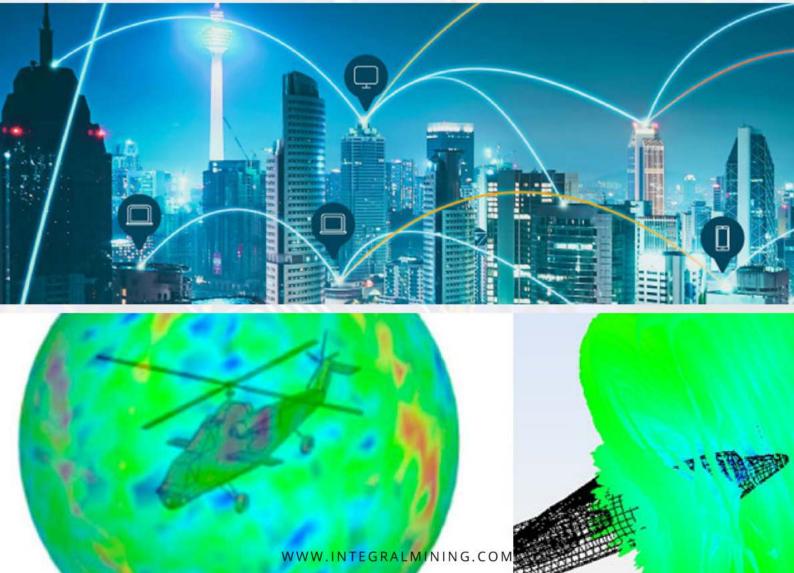
Feko has been a leader in high-frequency electromagnetic simulation for over 20 years. Building on this strong legacy it now delivers a cost-effective package of parallelized solvers to design products for an increasing connected world.

Feko is used globally across multiple industries including aerospace, defense, automotive, communications and consumer electronics to reduce the time-to-market.

Feko customers achieve improved connectivity and functionality through robust simulation driven product design and deployment strategies.

Feko addresses the broadest set of highelectromagnetics frequency applications allowing wireless teams optimize connectivity, including 5G, ensure electromagnetic compatibility (EMC), perform radar cross section (RCS) and scattering analysis.

Complete Connectivity Workflow



ALTAIR FLUX

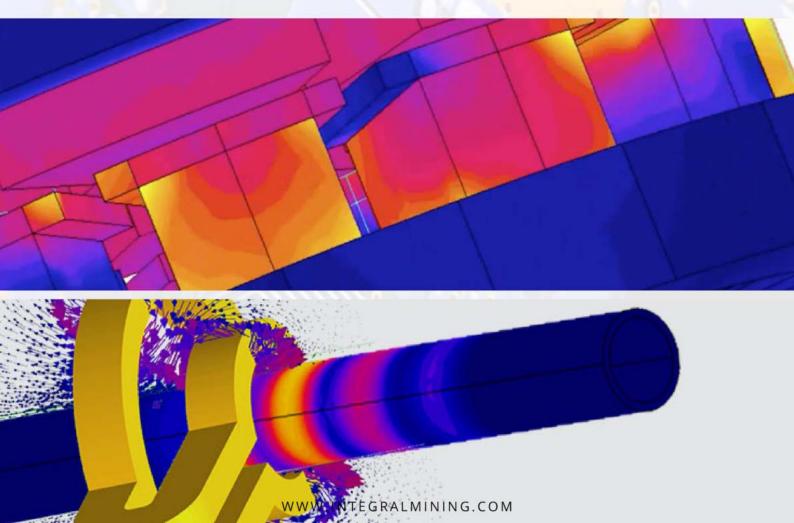
Flux captures the complexity of electromechanical equipment to optimize their performance, efficiency, dimensions, cost or weight with precision, bringing better innovation and value products to end users. Flux simulates magneto static, steady-state and transient conditions, along with electrical and thermal properties.

For over 35 years, Flux simulation software has been the reference worldwide within leading industries. With its continuously improving technology, Flux has become a versatile, efficient and user-friendly tool that helps designers to generate optimized and high-performance products, in less time and with fewer prototypes.

Design efficient, silent and robust machines via the seamless connections to the global creative environment HyperWorks platform to perform multiphysics optimizations.

Connecting physics in a single multiphysics optimization loop, sharing models, design variables and mesh, automating the process gives the best view of complex phenomena fast

Powerful Modeling Techniques



ALTAIR FLUXMOTOR

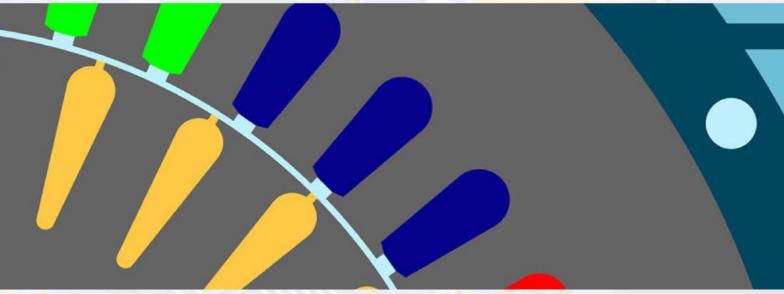
e-Motor Topology Exploration and Multiphysics Optimization

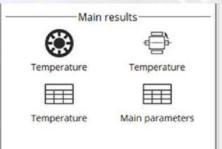
FluxMotor is dedicated to addressing the global design of electric motors. It enables engineers to accelerate the design of machines, quickly explore a variety of configurations while considering multiphysics constraints, and select the most promising options within minutes.

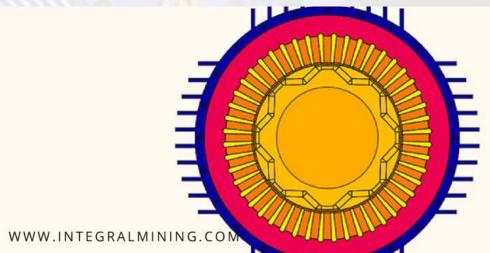
FluxMotor's intuitive environment allows users - from generalist to experts - to efficiently create, analyze, report, and optimize their electric motors.

Within a single environment, the new multiphysics capabilities enable designers to not only predict the electromagnetic performance of the motor, but also to optimize the cooling strategies and the NVH performance.

Fast, Accurate, and Comprehensive







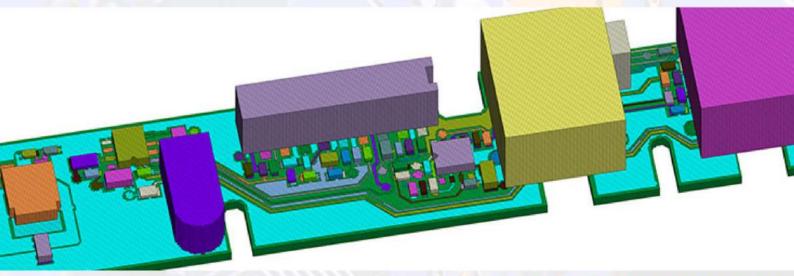
ALTAIR SIMLAB

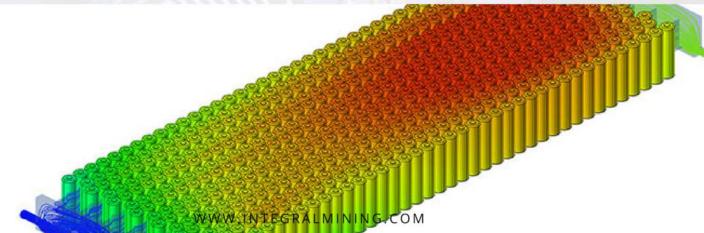
SimLab is a process-oriented multidisciplinary simulation environment to accurately analyze the performance of complex assemblies. Multiple physics including structural, thermal and fluid dynamics can be easily setup using highly automated modeling tasks, helping to drastically reduce the time spent creating finite element models and interpreting results.

An intuitive and self-explanatory graphical user interface covers all aspects of the modeling process. Instead of tedious geometry clean-up, work is performed directly on the geometry – imported and updated via the bi-directional CAD coupling - by defining mesh specifications for individual regions.

Increase efficiency of simulation cycles with shareable, robust, and repeatable simulation workflows. Eliminate manual solid meshing, model setup, solver execution, and post-processing for high accuracy and consistency across the organization.

Robust, Repeatable Simulation Workflows







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