



"HOOPS/3dAF, Parasolid and InterOp have proven to be a powerful combined solution, accelerating our development and helping us deliver better software. Getting these world-class components and technical assistance from a single vendor has been of significant value in our development process."

*Gronum Smith, Director Sales/Marketing and
Isak Theron, Director and GUI Development Manager*

Business Profile

Product Using HOOPS
FEKO

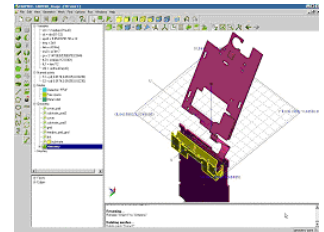
More Info
www.feko.info

Industry
EM/CAD

TS3D Products
HOOPS/3dAF
Parasolid
InterOp

Company Brief

EMSS was founded in 1994 to consult in electromagnetic (EM) engineering and solve complex real-world problems specific to reducing both the simulation time and the time spent setting up the simulation. FEKO, EMSS' flagship product, is a full 3D EM field simulator extensively used in the aerospace, automobile, defense and communications industries in the areas of antenna design, antenna placement and electromagnetic compatibility (EMC).



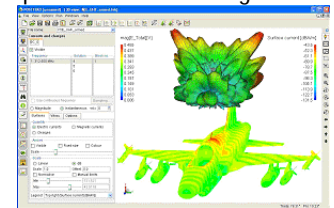
The Challenge

Before the development of the new GUI for FEKO, geometry was described using primitive "card" commands in a text editor. Although powerful and fully parametric, the process was very time consuming. It was clear the majority of EMSS' customers required an advanced, easy to use WYSIWYG CAD program. To better serve their markets, FEKO needed a customized CAD program with data import, modeling and rich graphical interaction.

EMSS' aim was to develop a high-performance multi-platform pre- and post-processor, which could interface with the existing solver kernel running on high-end workstations and clusters.

The Solution

TS3D was able to offer a complete development platform combining the power of two leading components - the HOOPS 3D Application Framework (HOOPS/3dAF) with the Parasolid Kernel Modeler. HOOPS/3dAF's tight link to the Qt UI development toolkit added further benefits. With this integrated set of multiplatform libraries for rendering, modeling and UI creation, EMSS was able to produce a commercial-grade solution very quickly. The high-level nature of these tools also enabled the EMSS development team to focus on specific customer requirements, saving an enormous amount of development time. Later, as the need for CAD data import arose, EMSS was again able to select from TS3D's suite of leading components and integrate the InterOp translators developed by TS3D partner Spatial - all with the assistance of the knowledgeable TS3D technical team.



The Results

- The HOOPS Framework, combined with Qt, enabled the development of a GUI that makes EMSS' EM simulator extremely easy to use and popular with end users.
- By using the HOOPS toolkits alongside Parasolid, EMSS was able to add value to their product, which is now recognized as one of the leading EM simulators.
- As EMSS's needs evolved, they could continue to rely on their established relationship with TSA and rapidly increase their products capabilities using TS3D's high-value components.

About Tech Soft 3D

HOOPS toolkits from Tech Soft 3D (TS3D) dramatically simplify the design, development and maintenance of high-performance, interactive 2D/3D engineering software. HOOPS components are part of over 175 commercial software applications that run on millions of desktops worldwide. Headquartered in Berkeley, CA, TS3D is on the web at <http://www.techsoft3d.com>. For more information, contact Ron Fritz, Managing Partner: 510.883.2180 x 201 or ron@techsoft3d.com.