HFWorks
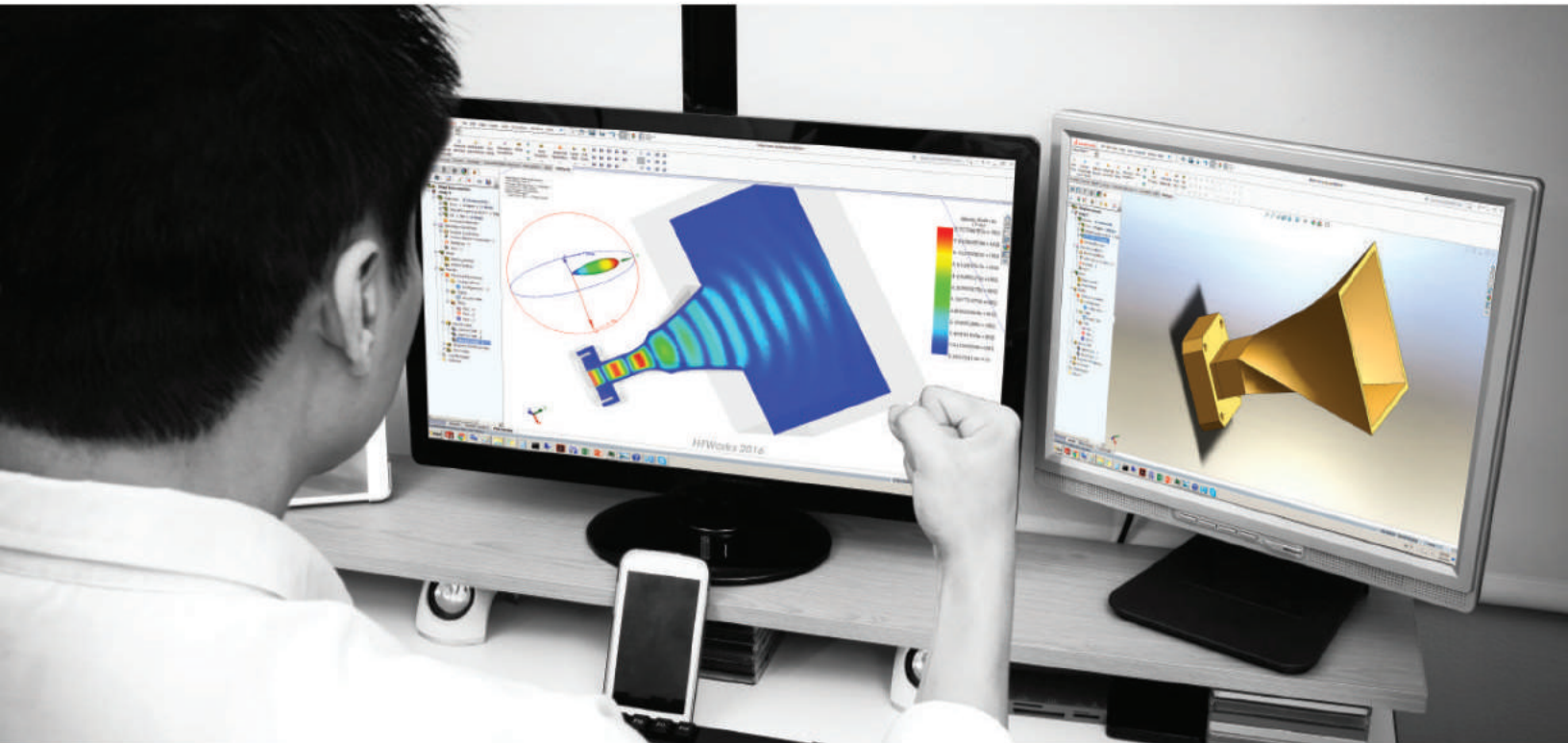## High Frequency Simulation

Hf

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

Available For: *3S* **SOLID**WORKS

EMWORKS

High Frequency Simulation

The premier high frequency field simulation package fully embedded within **SOLIDWORKS** and **ANSYS SpaceClaim**

Now coupled with Thermal analysis

CERTIFIED Gold Product
DS SOLIDWORKS

Antennas


Antenna analysis — human head

- How well does your antenna radiate?
- What is its radiation pattern and how does it vary over frequency?
- Do you need to reduce the side lobes?
- What are its gain, directivity and input impedance?
- What is its radiation resistance?
- What about polarization, axial ratio and front/back ratio?
- Do you need to make sure your design meets EMI/EMC norms?
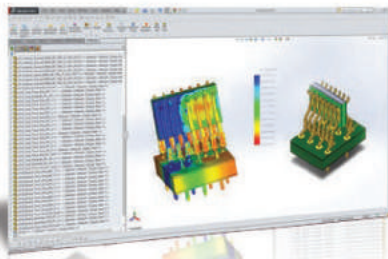
S-Parameters

S-parameter analysis — Connector

- Do you need to know the input impedance of your structure ?
- How does the return loss vary over frequency?
- Is the insertion loss acceptable?
- Are you concerned about coupling / isolation in your design?
- Do you want to make sure that you do not have mode conversion in your structure?
- What about cross-talk and signal integrity ?
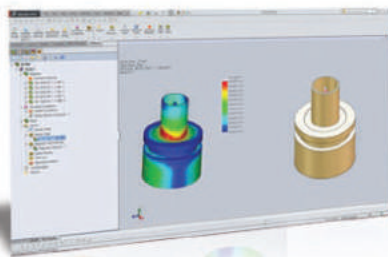
Resonance

Resonance analysis — Resonator

- Does your design require careful attention to resonance?
- Are you designing a resonator?
- Do you need to know the quality-factor of your resonant structure?
- Do you need to separate conductor and dielectric losses?
- What about optimizing pole-zero placement for your filter design?
- How does changing materials/geometry impact your resonator/filter design?

Benefits

As HFWorks is fully embedded inside SOLIDWORKS and ANSYS SpaceClaim, it enhances your designing experience as well as productivity.
With such a powerful tool at your disposal, you will be able to:

- Construct complex 3D models in record time.
- Import designs in a wide range of popular CAD formats.
- Exploit advanced visualization and rendering technologies that bring unprecedented realism to your models.
- Generate engineering drawings and CAM-ready files quickly and automatically and share your designs with your mechanical engineers.
- Shorten product design time and lower design cost.

Advanced Features

Design Tables	Parameterization	Multicongurations

- Quickly and efficiently compare alternative designs and choose the optimal one for final production.
- Drag and drop to create and clone analysis studies.
- Easily model air parts and gaps using features like molds and cavities.
- Easily apply metallization in printed circuit boards using split surfaces.
- Share your HFWorks models with mechanical, thermal and fluid flow analysis packages inside SOLIDWORKS for multi-physics applications.