# A better way to work

With LensMechanix, optomechanical engineers can load optical assemblies from OpticStudio into SOLIDWORKS and within minutes start designing the mechanical components from actual lens data. After analyzing and validating the complete optomechanical system by running ray traces, they can send an OpticStudio file of the complete system to an optical engineer to review. No more guesswork or frustrating file exchanges.
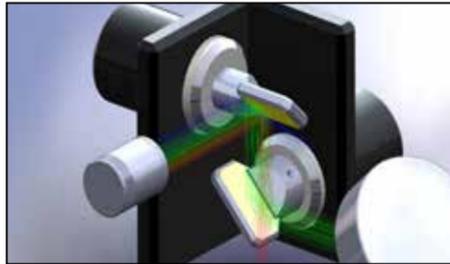

Using both the SOLIDWORKS platform and the powerful Zemax physics core, optomechanical engineers can run a ray trace in LensMechanix to quickly see how light interacts with the optical system and each optomechanical component in the system.

LensMechanix is the first SOLIDWORKS add-in that supports both sequential and nonsequential designs. For the first time, optomechanical engineers can validate designs directly in SOLIDWORKS for products across a broad range of categories.
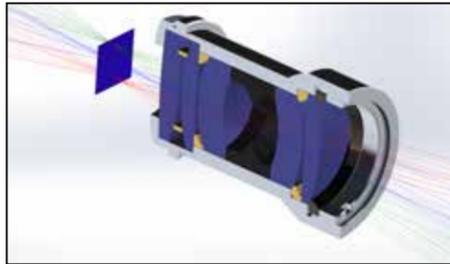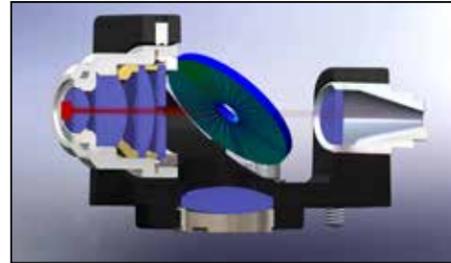
LensMechanix simplifies the design workflow with traditional imaging systems like this 26 mm double Gauss. No more cumbersome file importing and exporting, or time and money spent iterating on designs or building early physical prototypes to find problems.

Zemax
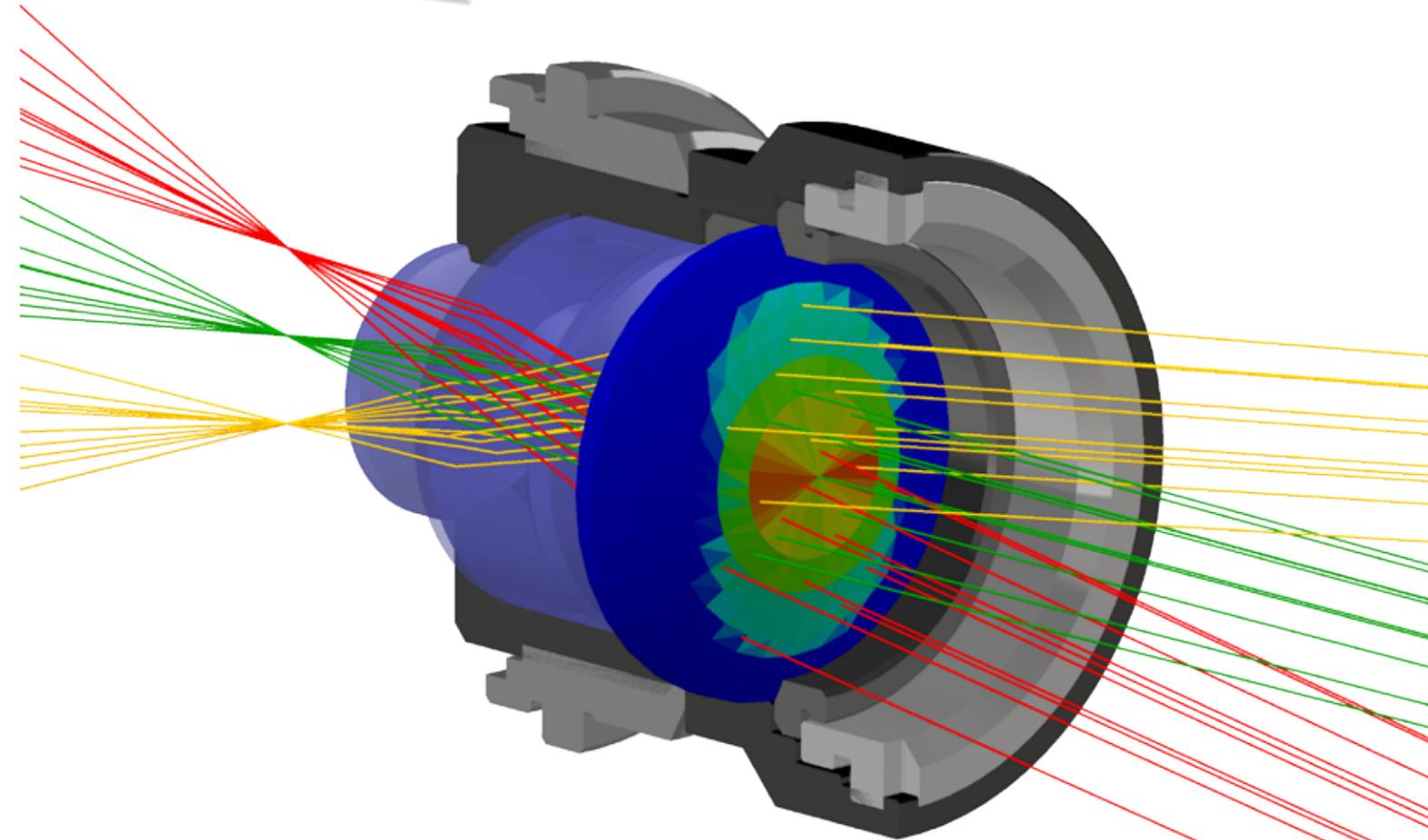
LensMechanix™

A SOLIDWORKS add-in for optomechanical engineers

Eliminate STEP files and reduce development iterations

Streamline optomechanical development and speed time to market.

LensMechanix ™

Until now, the design process for optomechanical engineers has been time consuming, costly, and prone to error. Zemax is changing this with LensMechanix: ray tracing software that simplifies optomechanical product development. Save time, save money, and improve efficiency by packaging, analyzing, and validating designs directly in SOLIDWORKS.
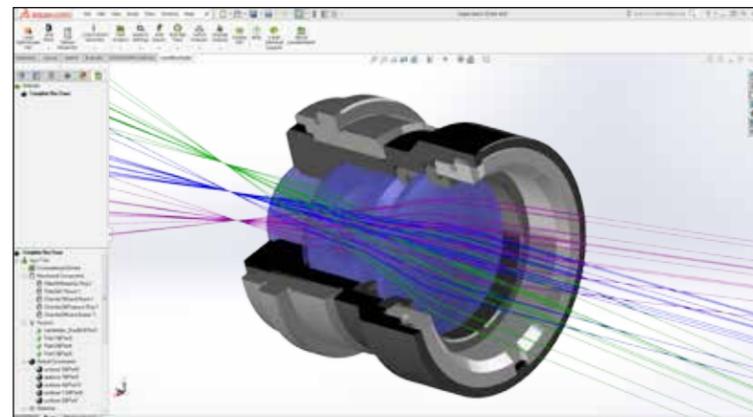
"LensMechanix allows me to focus on a great design and spend less time explaining it. Our mechanical engineers love designing optomechanical products in LensMechanix."

Robert Mentzer, Optical Engineer, Global Surgical Corp.

Eliminate STEP files

- No need for STEP, IGES, STL files or ray bundles – automatically load your optical components as SOLIDWORKS parts.
- Build mechanical geometry with actual lens dimensions.

Catch errors early

- Verify that mechanical components do not interfere with the light path or introduce stray light.
- Correct mechanical design errors early in the process before building physical prototypes.
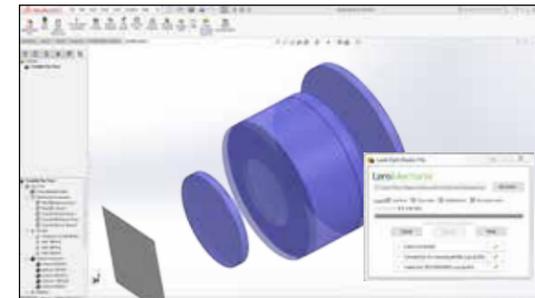
Improve efficiency

- Reduce development iterations, while improving communication and collaboration.
- Alleviate workflow bottlenecks and collaborate more efficiently.

How LensMechanix works

Package: Load OpticStudio files directly

Avoid the hassles of STEP files and the wasted time rebuilding the optical geometry.

"LensMechanix is the tool the industry has needed for 20 years. It is a game changer for companies across the optics industry. It's going to change the way people design their products, and get products to market faster at a lower cost."

Ken Moore, Founder, Zemax

Analyze: Run ray traces to view how light travels through the system

Analyze mechanical designs in SOLIDWORKS to identify their impact on the optical performance.

"Now I have a way to analyze mechanical designs on my own. I wish I'd had LensMechanix 20 years ago. You've increased my value immeasurably and made my life a lot easier."

Dave Rook, Mechanical Engineer, CSA Group Seattle
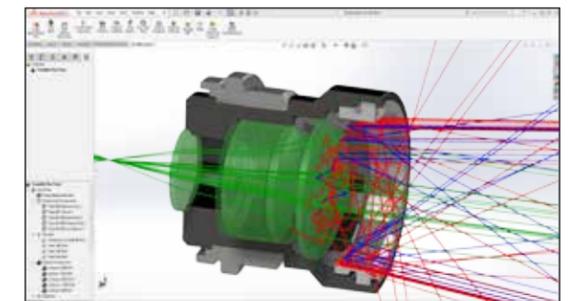
Validate: Get instant pass/fail results

Use the Optical Performance Summary to compare measurements to the original optical design and to find stray light.
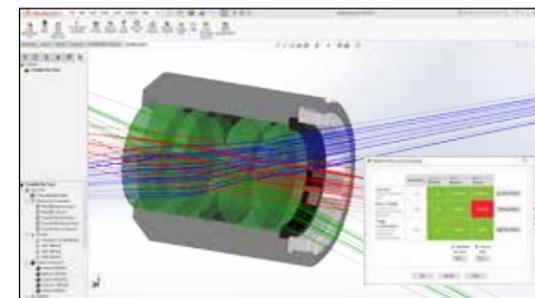
"Because LensMechanix is easy to learn, I can give more of the optomechanical work to engineers who are good with SOLIDWORKS but don't have an optical background."

Harold Brunt, Vice President, Optomechanical Engineer, LumenFlow Corp.

Simplify optomechanical product development

Download a free 2-week trial today! Zemax.com/LensMechanix