

Creating Today's Innovative Solutions



TracePro

Gives you the ability to take an idea and create an outstanding design that is also manufacturable. The program's simple, intuitive interface and short learning curve creates a user-friendly design environment for designers and engineers of all disciplines.

Compatible with almost all CAD software, SolidWorks®, AutoCAD®, and ProENGINEER®; with a built-in healing husk to verify imported CAD geometry. The healing husk simplifies, stitches and checks geometry before simulation to create perfect solid geometry for errorless and faster ray tracing.

Catalogs of commercially available materials – plastics, glasses, metals, epoxies, and paints.

TracePro is highly differentiated from other design and analysis software by its ease of use, accuracy and high level of productivity.



TracePro

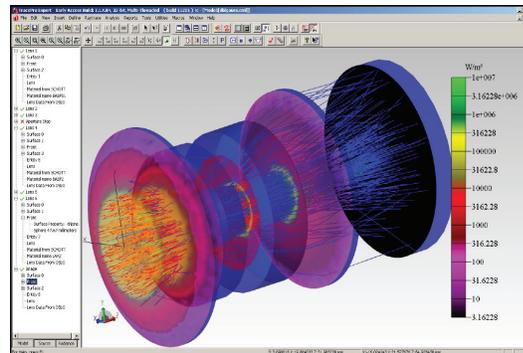
Opto-Mechanical Software for Aerospace & Defense Applications

Unparalleled Design and Analysis Capability

Design and analysis of Aerospace and Defense applications requires an opto-mechanical program with the capability to import, merge, build and modify optical and mechanical designs into one complete model. TracePro gives you this capability with a full system tree, 3D CAD system view, and enough horsepower and analysis capability to model various system performance criteria, including stray light, ghost, and narcissus and thermal emission analysis. If you are trying to achieve the ultimate design performance, TracePro's ease of use, visualization and analysis capabilities will enable you to find problematic design flaws easily and intuitively. TracePro was originally written under a NASA SBIR contract to analyze stray light in optical systems in hours instead of weeks. It is renowned in the scientific community for the accuracy of its simulations, which affords aerospace and defense designers the confidence that the performance of finished products will match the simulated design without costly prototype iterations.

TracePro Ease of Use and Capabilities

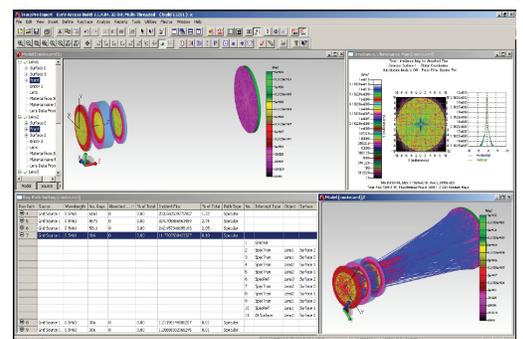
If you need to find problem areas in your system, TracePro's ease of use and one level deep menus create a 3D virtual environment to track down critical design flaws in your system before manufacture. Users benefit immediately from the program's design and analysis capability by paying for the product in the first few uses when compared with standard trial and error prototyping.

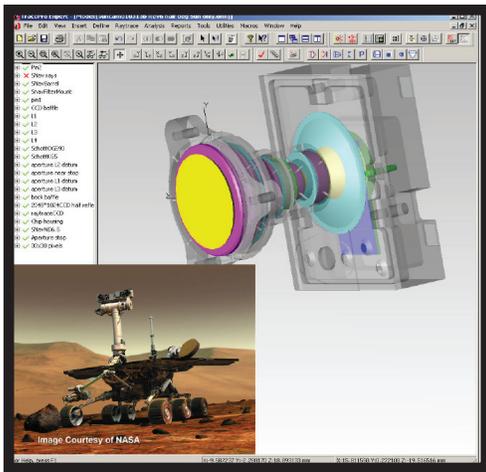


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www.lambdares.com/trials

From the model, analyze:

- Stray light, narcissus, ghost and thermal effects
- 2D & 3D irradiance on any surface, planar and curved
- Optical efficiency, luminance and radiance metrics
- Ray Path Sorting
- PST calculation
- Baffle and Vane Structure
- Scatter effects





TracePro

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More Reporting And Visualization Tools Than You Thought Possible

Flux Reports, incident ray, ray path and ray histories tables are essential to understanding where light is being absorbed, lost, scattered, reflected, or refracted. TracePro's reports enable you to do detailed stray light analysis as well as optical and illumination analysis. TracePro excels at reporting how light reached each and every surface in your model, using Incident Ray Tables for any selected surface, Ray History Report for complete detailed information on every ray intersection, ray path sorting to see how every ray path can contribute and a Flux Report which details, surface by surface, where energy is lost or absorbed. All of this information is available for post-processing by saving to a text file or copying and pasting into your favorite Microsoft compliant package, like Excel, for further investigation.

TracePro has several viewing options to let you see inside objects, and visualize problem areas; and energy propagation through any optical or illumination system. Large and readable irradiance/illuminance and candela plots have profiles, enhanced scales, and 3D viewing options. Using the mouse, you can zoom in on problem areas and use incident ray tables, ray path tables or ray histories to understand how unwanted energy propagated from, or to, specified targets.

NEW 3D Irradiance plots

Seeing irradiance in the system view in any orientation and on multiple selected surfaces is the best way to find problem areas. TracePro's 3D Irradiance plot visualizes both power and color on any surface including curved and planar surfaces, with multiple options, including contour plots, log scale, pixel resolution, pseudo coloring, lighting effects, transparency and smoothing.

NEW Ray Path Sorting

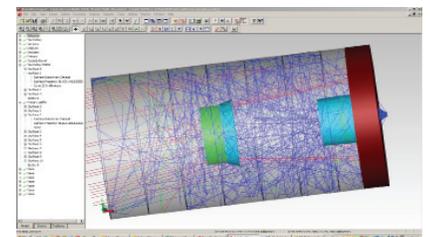
If you are trying to find out how power is getting to any surface in your design, TracePro's new ray path sorting will let you investigate problematic areas while listing every possible ray path in your design both quantitatively and visually. This new capability is perfect for analyzing every ghost image path in your system.

Narcissus and Thermal Effects

Do you need to model infrared or thermal effects? TracePro's capabilities include modeling blackbody, greybody, and thermal effects on every surface.

TracePro Bridge

The TracePro Bridge is an add-in to SolidWorks that allows you to apply and save optical properties directly to the SolidWorks model via the TracePro System Tree. To insure data integrity, a single model is used by both TracePro for ray tracing and optical analysis, and by SolidWorks for mechanical design. With the Bridge, users significantly accelerate the iterative design process - all without sacrificing performance or functionality.



Maintenance & Support

Sustain the competitive advantage that TracePro delivers with an Annual Maintenance and Support Subscription. TracePro's ongoing innovations are provided throughout the year in software downloads that include a variety of updates and enhancements.

Training Classes

Training classes assist current and prospective users with their optical design and analysis challenges. Explore the power and versatility of TracePro, maximize the investment, and draw on the technical expertise and industry-specific knowledge of TracePro instructors.

Webinars & Videos

Lambda Research engineers are now posting webinars and videos on key topics to help you better use TracePro. Visit our webinar and videos section at www.lambdaresearch.com to view our latest presentations.

TracePro
BRIDGE
For SolidWorks®