

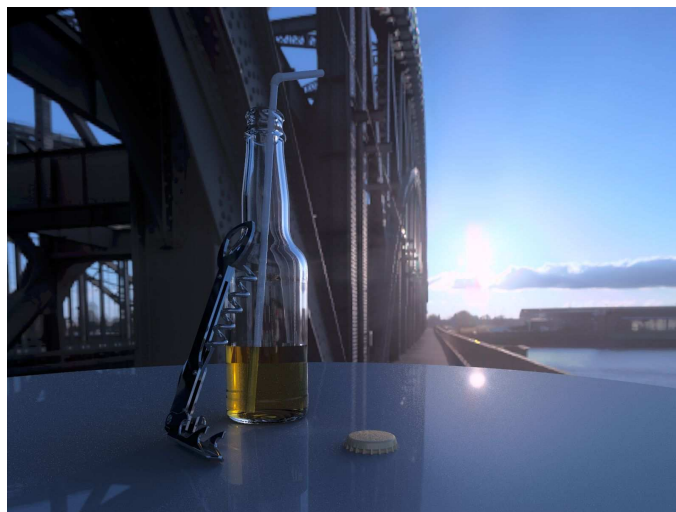
Between Geometry and light

To simulate the "light chain" from A to Z:

Light source - material - volume - material - human eyes

OPTIS is a company specialized in light simulation . Its CAD software for light, SPEOS, allows you to simulate and analyze any light system and to replace a phase of traditional prototyping by virtual modeling. These solutions can serve to optimize the lighting performance of a lit object, or to simulate what a future product will look like to the human eye, or else optimise the legibility of an information screen in a control room, dashboard, cockpit...

Created in 1989, the company became leader in CAD for light, thanks to a long series of world firsts. The offer of Optis, based on 4 areas of competency (Modeling Light, Visual Ergonomics, Optical Design, Photo-realism), includes the services of a consulting department that is ready to propose concrete answer to meet specific needs, a full range of training courses (from the use of the products to the most highly specialised fields such as colorimetry, laser propagation...) and also light measurement equipment.



The 1000 customers of Optis, above all, rely on its ability to master and integrate the physical properties and behavior of materials and light, in order to work from real optical measurements data and not just from approximations. Initially destined for makers of optical components and research laboratories, OPTIS' SPEOS family of solutions is now used by many industries where optics plays an increasingly important part : the automotive, aerospace, consumer electronics, lighting, LCD display industries are the most commonly represented in Optis customer base.

Furthermore, its successful coupling with electronics, mechanics and data processing has helped open the doors into space, industrial and medical instrumentation, defense fields, biological and medical sciences... At the present time, Optics intervenes in our daily life, thanks to the enormous progress made, in particular, in the representation of image, distances and zooms, industrial instruments for measurement and alignment.

Optis is at the peak of knowledge in this field and perfectly shows its know-how at the CEA (French Atomic Energy Agency) where its software helped to design the Mégajoule laser. Companies Dassault Aviation, Saint Gobain, Magneti Marelli, NOKIA, Valeo, Thorn Lighting, SLI... also chose software and services of OPTIS to optimize their lighting systems design.

Aware of users' needs to easily reach specific information of SPEOS, the company decided, in 2002, to give the users of SolidWorks, then later of Catia V5, the possibility to work in one single

environment. This enables the company to push its software as a complementary tool to the CAD of its customers' engineering and design departments. Thus, it proposes CAAV5 BASED and OPTISWORKS in addition to its stand alone version, SPEOS. The applications are 100% integrated within the environment of Catia V5 or SolidWorks.

In parallel, it approaches Datakit at the end of 2001, to enable its users to benefit from a good recovery of all CAD models. Mr D CHABAUD, Manager of R&D department specified: "we wished to have one sole supplier able to deliver all the translators our customers requested. The tests carried out with Datakit convinced us". Optis proposes Datakit native translators to the companies equipped with Unigraphics including version NX3, Catia V4 or Pro-Engineer.

It is of great importance for SPEOS to be compatible with the major mechanical CAD software. Whereas the CAD provides the geometry, SPEOS informs the user about the physical behavior of the light and allows simulation from real measurements. The virtual library of materials, textures, sources, gives the user the means of refining his design and the guarantee of working with components characterized by OPTIS's in-house laboratory or by the supplier. In the case of a headlight design, for example, SPEOS will make it possible to optimize the headlight's light results as well as to give it a more attractive design. The realism of this simulation will also make it possible to decrease the number of prototypes necessary, to improve visual comfort for the motorists and to facilitate the intervention of the marketing and commercial services in the phase of design.