

# C3D monolithic kernel

Is there room for a new player  
in the PLM components market?

Can a CAD kernel be made  
somewhere outside of Cambridge?

What do you know about  
the Russian school of mathematics?

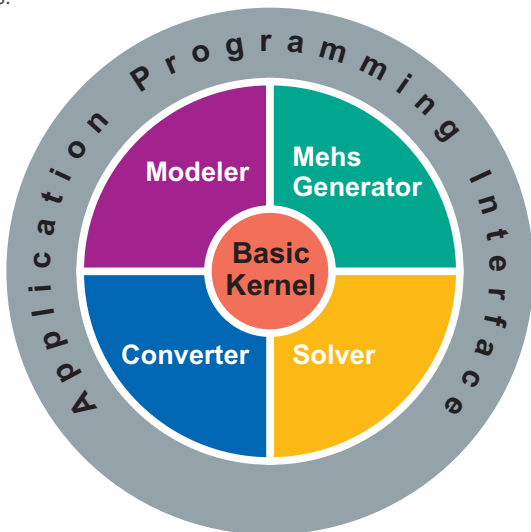
The **C3D technology** developed by ASCON allows you to combine 3D and 2D modelers, 3D and 2D parameterizers and all the necessary converters in one product. One product designed for all your tasks.

There aren't many products on the CAD market that can equally well tackle both 3D and 2D tasks. Do you wonder why it is so hard to build a universal solution? Maybe it is just because incorrect components are chosen? For 23 years ASCON has been working on a unified 3D/2D solution based on its monolithic kernel. Our CAD system KOMPAS-3D built based on the **C3D kernel** has become the most popular CAD solution in Russia and former USSR countries. And now we would like to open our doors to all developers of CAD applications and make our kernel available for licensing in early 2013.

## What are we developing?

The developed kernel consists of three closely related components:

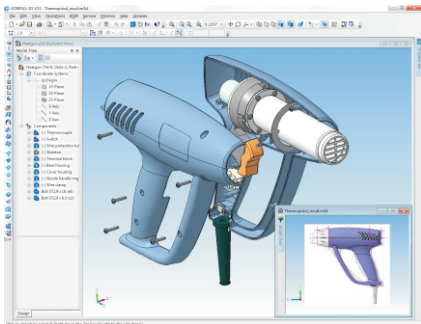
- Geometric modeling module **C3D Modeler** is a geometric modeler that provides an adequate range of options for solid and hybrid modeling, sketching and 2D drawing,
- Parameterization module **C3D Solver** is a parametric constraint solver that allows parametric constraint adding or solving for both 2D and 3D geometry,
- Data transmission module **C3D Converter** is a converter module allowing reading/recording of a geometric model in major exchange formats.



## Kernel functionality

### C3D Modeler

- Body modeling,
- Surface modeling,
- Sheet body modeling,
- Rounding, smoothening, chamfering,
- Additional operations,
- Triangulation,
- Model analysis,
- Creation of plane projections of the model.



### C3D Solver

- 2D constraint solver for 2D drawing and 3D sketches,
- 3D constraint solver for creation of assemblies and performance of kinematic analysis.

### C3D Converter, supported formats:

- STEP (read/write), Parasolid (read/write), ACIS (read/write), IGES (read/write), STL (write), VRML (write).

### Development platform

At the moment, the kernel works under the following operating systems:

- Windows XP 32/64-bit, Windows Vista 32/64-bit, Windows 7 32/64-bit, Linux 32/64-bit.

## We want your feedback!

What kind of functional capabilities do you expect from the kernel of the XXI century?

What platforms should it support?

How much should it cost and how should it be licensed?

### Who we are?

ASCON was founded in 1989 as a private company, becoming one of the first CAD/AEC/PLM developers in Russia. Our software solutions address key engineering design issues, such as accurate 3D modeling, preparation and release of drawings and design documentation, business process development, and engineering data management. Today, ASCON is a dynamic company employing 600 highly qualified specialists. The company operates 60 offices and dealer centers in major industrial regions worldwide.

The number of ASCON installations exceeds 40,000 seats in automotive, heavy machinery, aerospace and defense, agriculture, oil production and power generation, manufacturing and construction, electronics and engineering industries.

### Contact us:

+7 (812) 703-39-34 [c3d@ascon.ru](mailto:c3d@ascon.ru)

