Comparing Cobalt™ to SolidWorks

ASHLAR·VELLUM™
Software that works the way you think.

Intended Use

Cobalt is created especially for product and industrial designers going to traditional manufacturing processes. It is specifically for design engineers requiring a high degree of stylization, efficient design variation, and precision engineering.

SolidWorks is aimed at mechanical engineers creating industrial products that don't necessarily require a high degree of style. SolidWorks has only recently decided to move into the industrial design market.

Cobalt's Advantages in a Nutshell

Cobalt takes you from initial concept and visualization, through rapid prototyping, to precision engineering, into marketing presentations, and finally to precision output for CAM. It has the ability to create any shape imaginable and the power to precisely manufacture it. The natural workflow of Ashlar-Vellum's award winning interface gives you all the power to design without the software impeding the creative process. Not only does Cobalt provide an interactive hybrid of surface and solid modeling, on-demand dimensional constraints, drafting, rendering and animation, all in one package, but it does so on both Mac and Windows. Cobalt brings real productivity with the power to create what you want, in the manner you wish to work, through an interface that works the way you think.

Why would anyone Buy SolidWorks?

While Cobalt shines in concept and complex 3D modeling, SolidWorks is currently slightly stronger in handling large assemblies. If you're planning to do mechanical assemblies with parts or subassemblies in auxiliary files, SolidWorks, Inventor, Pro/E, CATIA or Solid Edge are all worth considering. If, however, you are just now growing into using large assemblies, Cobalt is quickly catching up with these functions.

Cobalt's Benefits

- Cobalt lets you think through an idea in 3D, not just document an idea that's already developed.

- Creating multiple concept ideas in Cobalt is extremely easy because its dimensional constraints are used on-demand. SolidWorks' constraints are required at all times, slowing the initial idea stage.

- Cobalt accommodates multi-part assemblies in one file, unlike SolidWorks, where each part must be parametrically defined in separate files from conception.

- Cobalt is so easy to learn and use that it is accessible to everyone needing 3D surface and solid modeling. Unlike SolidWorks, Cobalt can be deployed much further throughout an organization, making it a more accessible standard.

- Cobalt runs on both Mac and PC providing cross-platform compatibility. SolidWorks is limited to the PC.

- Cobalt provides a unified surface and solid modeling environment for seamless use of one tool and then another. While SolidWorks' solid modeling compares favorably with Cobalt's, SolidWorks has about half of the surface modeling functionality offered by Cobalt, making it difficult to create complex shapes.

- Cobalt contains everything in one package. SolidWorks requires additional modules to be comparable.

- Cobalt provides the best tools and interface for fast design with a higher degree of style. As one user put it, "Last night, I successfully accomplished a modeling task with Cobalt in hours that *days* of struggling with SolidWorks only resulted in frustration." Charles Gallup.

Comparison at the 40,000 Foot Level

This chart represents a broad-brush comparison of Cobalt to SolidWorks. Each column represents a full complement all features available across all 3D modeling and CAD products on the market. The filled dots represent the percentage of that category's features covered by that product. This is a subjective analysis not a scientific survey, but if you add the feature scores for each product and then compare the price, you'll find the superior value of Cobalt.

Feature	$$$	Unified Design Environment	Integrated Solids	Integrated Surfaces	Integrated Wireframe Creation	2D Drafting from 3D Model	2D Drafting NOT from Model	Rendering/ Animation	Think thru Problem in 3D	Repurpose Geometry	Easy Learning Curve
Cobalt v7	$3995 complete	●●●●●	●●●●●	●●●●○	●●●●●	●●●●○	●●●●●	●●●●○	●●●●●	●●●●●	●●●●●
SolidWorks Office	$5490	○○○○○	●●●●○	●●○○○	●◐○○○	●●●●●	○○○○○	●●●◐○	●●○○○	●●○○○	●●●○○

The Concept to Manufacture Continuum

Another way to compare Cobalt and SolidWorks is to see how strong each one is at certain steps along the path from product concept, through visualization, clear to final manufacturing.

Sketching | Concept Design & Visualization | Rapid Prototyping | Detail Design & Visualization | Marketing Presentations | Assemblies | Precision Drawings | Precision Output to Manufacture

Cobalt $3995

SolidWorks + Office $5490