

# Arbortext® IsoDraw CADprocess

**Automatically create and enhance technical illustrations and animations from 3D designs**

Automate the process of creating high-quality 2D and 3D technical illustrations and animations directly from design data. Automatically update illustrations and animations when engineering designs change.

Today, using general purpose graphics tools, the illustration process often includes the time-consuming activity of redrawing geometry that was created in the design process using CAD. Arbortext IsoDraw CADprocess is a must-have complement to your CAD toolset. This powerful application reduces the CAD designer's workload by providing illustrators with an easy-to-use, special purpose tool for processing the 3D model and creating high-quality technical illustrations directly from CAD models. By maintaining a link to the original 3D model, and by automatically updating illustrations and animations as designs change, Arbortext IsoDraw CADprocess enables companies to leverage their rich CAD data to develop documentation faster, reduce risk, and shorten time-to-market.

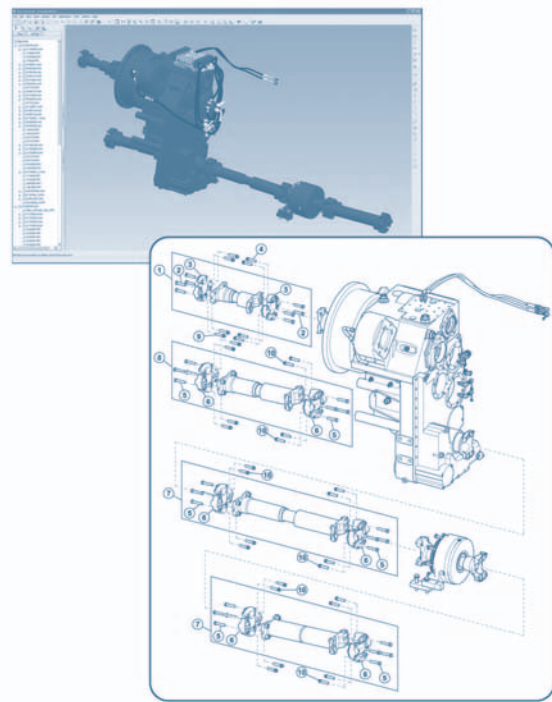
## Key Benefits

### Increase Productivity

- Eliminate the need to create illustrations from scratch; create high-quality technical illustrations directly from CAD
- Reduce resource drain on Engineering; illustrators can orient the model in as many positions as necessary to communicate their intent without relying on the CAD designer
- Enable technical illustrators to be self-sufficient with an easy-to-use tool for processing the 3D model
- Use a single tool for all technical illustration and animation needs

### Lower Costs

- Reduce the time needed to create high-quality technical illustrations from hours to minutes
- Lower the cost of supporting and managing legacy illustrations
- Minimize training cost and ramp-up time through an intuitive user interface; new illustrators are fully productive within days



Arbortext IsoDraw CADprocess creates high quality technical illustrations directly from CAD data.

### Speed Time-to-Market

- Eliminate process bottlenecks by empowering illustrators to manipulate 3D CAD data for the purpose of the illustration rather than relying on the CAD designer for all 3D data manipulation
- Enable concurrent development of technical publications and engineering designs; link technical illustrations and animations to engineering designs, and automatically recreate both illustrations and animations when CAD files change through direct integration with Pro/ENGINEER and/or ProductView or transfer in multiple supported formats
- Automatically prepare illustrations for publishing in multiple formats and for delivery in both print and electronic media

## Key Benefits (cont.)

### Interoperable With Your Existing Tools

- Direct Integration with Pro/ENGINEER. Support for a wide variety of CAD data through common formats such as IGES, DWG, VRML, OBJ, STEP, VDA, SAT, or Parasolid. Additional support for ProductView formats oled, pvs, pvz, eds, and edz
- Supports all established industry standards for technical illustrations, including: S1000D (aerospace and defense) ATA, J2008 (automobile), and CALS (defense)
- Supports the standards defined by W3C (Worldwide Web Consortium) for the use of illustrations on the Internet (WebCGM, WebCGM 2.0, SVG, and PNG)

## Features

### 3D Design Data Import

Arbortext IsoDraw CADprocess supports native Pro/ENGINEER files, ProductView files, as well as other 3D CAD data through multiple supported formats including: IGES, DWG, DXF, VRML, OBJ, STEP, VDA, SAT, or Parasolid. A CAD designer can export a complete assembly in one file, which is imported with Arbortext IsoDraw CADprocess. The illustrator can decide which assemblies or components to include. The 3D file can be gradually broken down into individual spare parts illustrations. Previously, this work had to be done by the CAD designer.

### Manipulating 3D Data

Arbortext IsoDraw CADprocess offers a number of tools for manipulating the 3D data: explosion along any axis, cutaways, rotations, reflections, copying, scaling, etc. The user interface is highly intuitive and very easy to learn, even without prior design knowledge. Newly trained illustrators can be fully productive within just a few days.

### Automatic Creation of 2D and 3D Illustrations from CAD Data

Arbortext IsoDraw CADprocess deletes hidden lines, sets line thickness as required, and optimizes the elements of the CAD model. It also connects and smoothes individual line segments to Bézier curves or ellipses in order to both reduce file size (required for electronic delivery) and make elements more compact and easier to edit. Arbortext IsoDraw CADprocess maintains assembly structure information to enable users to identify components directly from the illustration.

### Create 2D and 3D Animations

Quickly create 2D, 3D, or a mix of 2D and 3D animations with a simple user interface. Import and leverage existing 2D and 3D animations to create high-quality animations using a simple user interface.

### Automatic Illustration Updates

Illustrations created from one or more CAD files can be automatically updated as the original designs change. This allows you to start documentation work at an earlier stage because illustrations are updated with any design changes.

### Preparation for Electronic Delivery

Callouts created using Arbortext IsoDraw CADprocess are automatically converted into hotspots to aid graphic navigation. Hotspots enable readers to immediately jump to the relevant assembly list or part list simply by checking on an assembly in an illustration. Arbortext IsoDraw CADprocess automatically creates object information with a hotspot for each component. Readers can then click on the assembly in the electronic spare parts catalog and see the corresponding parts list information.

### High-Quality Filters for all Major Graphic Formats

Arbortext IsoDraw CADprocess supports all major graphic formats: WebCGM, CGM, SVG, PNG, JPEG, DWG, IGES, DXF, HPGL, Adobe Illustrator, WMF, EPS, TIFF, PICT, PCX, BMP, CALS Raster, Text excerpt, Interleaf ASCII, and FrameMaker MIF.

### Full Set of Arbortext IsoDraw Foundation Tools and Capabilities

Arbortext IsoDraw CADprocess contains the full set of Arbortext IsoDraw Foundation capabilities for creating from scratch, and/or editing high-quality technical illustrations, including specialized tools for drawing in perspective, automatic thick/thin line technique application, standard parts library, and high-quality filters for all major graphic formats, among others.

### Integral Solution for Technical Publication

Arbortext IsoDraw CADprocess is a key component of the PTC Product Development System and the PTC Dynamic Publishing System. PTC's integral systems, built on an architecture that is easy to deploy and easy to integrate, offer extensive capabilities covering the full technical publishing process.

### Seamless Upgrade from Arbortext IsoDraw Foundation

Seamlessly upgrade to the full set of Arbortext IsoDraw CADprocess capabilities using the Arbortext IsoDraw 3D Extension.

## Learn More

For more information about Arbortext IsoDraw, as well as other Arbortext products, the PTC Product Development System or the PTC Dynamic Publishing System, please visit:  
[www.ptc.com/go/arbortextproducts](http://www.ptc.com/go/arbortextproducts)

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