



concepts2D

Product Overview

Precise Conceptual Drafting

Concepts 2D is a powerful yet easy to use design, drafting and technical illustration tool. Concepts 2D has a comprehensive set of drafting and annotation tools making it the perfect choice for producing anything from simple sketches to fully dimensioned, standards compliant, production ready drawings.

Usability

Whether your designing a new floor plan for your house or creating a 2D mechanical drawing, Concepts 2D provides an environment that lets you focus on the design and not the software. The innovative user interface allows you to work freely with the intuitive snaps and alignments. Combined with the innovative tool prompts, hints, and online help, even the novice designer can quickly get up to speed with Concepts.

Comprehensive Drafting Tools

Concepts 2D supports a wealth of curve creation and editing tools including access to over 275 tools. Creation tools include numerous methods for constructing points, lines, splines, arcs, circles, ellipses, and rho valued conics. Editing tools exist for changing parameter values of curves, localized and global edits using transformations such as translating, rotating, and scaling. Additional utilities are available for filleting, filling, smoothing, chamfering, trimming, breaking, elevating, and extending.

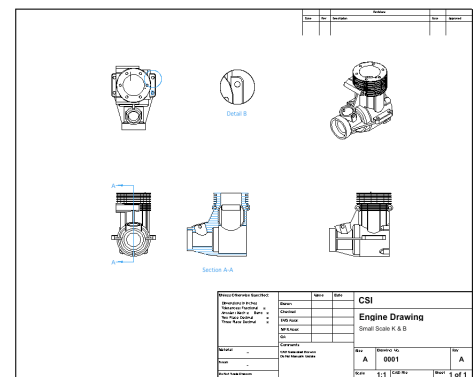
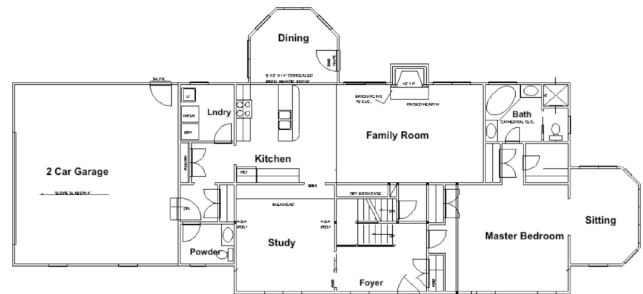
Drawing & Annotation Capabilities

Concepts 2D is one of the industry's first 2D drafting tool that is capable of assimilating 3D data in a meaningful manner. Concepts 2D can automatically create precise wireframe and hidden line drawings from any 3D component or assembly, including direct support of CATIA v4 and PRO/E Wildfire parts and assemblies. This unique functionality almost entirely eliminates the laborious and time consuming task of generating production ready drawings manually. Our drawing tools will not only create accurate 2D drawing views from 3D imported parts but provides support for the creation of auxiliary, detail, and section views.

Share Data with MCAD/Enterprise Solutions

Unlike other conceptual drafting tools, Concepts 2D uses an industry standing precise kernel that facilitates the sharing of design information using SAT, IGES, STEP, CATIA v4™, PROE™, and DXF/DWG industry standard file formats.

Bring your idea to market faster with Concepts 2D, the new standard in Conceptual Computer Aided Design (CCAD). Explore new product concepts with unprecedented ease and precisely share data with traditional MCAD and Enterprise solutions.



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Technical Features

Usability

- Same intuitive user interface as Concepts 3D and Unlimited
- Snaps for intelligently locating x, y coordinates, tangents, and perpendiculars
- Customizable user preferences and work environment
- Customizable key short cuts
- Prompt Window for prompting designer through commands
- Data Entry Window for explicit creation and modification of geometry.
- Object show/hide tools
- Layers and Sub Layers
- Tool Tips
- Object Info Window for geometry and display parameters

2D Creation

- Point Tools
 - Point at location
 - Point along curve
- Line Tools
 - Line Two Points, Connected
 - Midpoint
 - Parallel
- Arc Tools
 - Start, End, On
 - Center Point, Start, End
 - Start, On, End
 - Start, Tangent, End
- Circle Tools
 - Start, On, End
 - Opposite Points
 - Center, On
 - Tangent 3 Curves
 - Tangent 2 Curves
- Conic Tools
 - 2 Point Start, End
 - 3 Point (Start, End, Slope, Rho)
 - 4 Point (Start, End, Slope, On)
- Ellipse Tools
 - Center, Diagonal
 - Two Diagonals
 - Opposite Points
 - Center 3 Points
 - Major Axis 3 Points
- Polygon Tools
 - Rectangle
 - Inscribed
 - Circumscribed
 - Arbitrary Points
 - From Curves
- Spline Tools
 - Fit Through Points
 - Control Polygon
 - Bezier
 - Sketch
 - Add/Remove Point
 - Smooth
 - Elevate
 - Modify/Set Slope
 - Change Type

- Text Tools
 - Horizontal
 - At Angle
 - Within Box
 - Along Curve

2D Editing & Utilities

- Dynamic modification of positions and tangencies
- Fillet and Spline Fill
- Chamfer and Corner
- Trim, Extend, Segment
- Divide, Break At
- Connect, Join
- Offset By Value or To Location
- Transformations
 - Translate, Rotate, Mirror
 - Scale (and Non Uniform)
 - Linear Duplicate
 - Polar Duplicate
 - Translate Along Path
 - Align, Stretch
- Verify
 - 2 Point Distance & Angles
 - Minimum Distance
 - Curve Lengths
 - 2D Planar Properties (Area, Centroid, Principle Moments)
 - Dynamic Curvature Plots

Annotation/Detailing

- Pen Weights, Patterns, Styles
- Dimension Tools
 - Smart Dimensions
 - Horizontal, Vertical, Parallel
 - Chain & Baseline
 - Ordinates
 - Radial & Diameter
 - Center Marks
 - Leaders and Callouts
 - Angular
 - Tolerances & User Settings
 - Stacked, Dual, Fractions
- Hatching and Fill Patterns
- Bill of Materials
- Generate drawings automatically from 3D models using templates

Precision Kernel

- ACIS kernel from Spatial provides precise foundation for 2D drafting and data exchange solutions.

Data Exchange

- Concepts 3D and Unlimited
- DXF/DWG
- ACIS SAT
- IGES & STEP
- CATIA™ v4 (Import Only)
- Pro/E™ (Import Only)
- Adobe Illustrator
- Rhino™ 3DM (Import Only)
- STL
- BMP
- PICT (Mac Only)
- CGM (Import Only)
- 3D Studio™ (Import Only)

Part Library

- 26,000+ Part Library
- Drag and Drop Parts
- Dynamically Position
 - Electrical
 - HVAC
 - Mechanical
 - Construction
 - Bathroom
 - Kitchen
 - LAN
 - CMOS
 - Doors
 - Windows
 - Basic Home Design
 - Office Furniture

System Requirements

- PC
 - Microsoft Windows XP Professional, Windows 2000, or Vista
 - Intel Pentium or AMD Athlon class processor
 - 512 MG RAM or greater
 - Mouse Point Device
 - CD-ROM Drive
- Mac
 - OSX 10.4
 - OpenGL
 - G4 Processor
 - 512 MB RAM
 - CD-ROM Drive
 - Mouse (recommend 2 button mouse)



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