

3D-Tool V12 Quick Reference: 3D-Mode

The Ribbon Menu in 3D-Mode

The ribbon menu is divided into several functional areas:

- Open/Export files:** File, 3D-Mode, 2D-Mode, Options
- Mode:** 3D, 2D
- Zoom:** Zoom All
- Display:** Change render mode and display settings
- Orientation:** Change the orientation of the model in the display
- Tools:** Cross Section, Measure Markup, Painter, Explode
- Toolbox:** Placement, Tooling Analysis, Model Info, Model Compare, Wall Thickness Analysis, More Tools
- Presentation:** Animation, Full Screen, Custom View Show, Play Animation
- Model Tree:** Hide menu, Help

The Quick Access Toolbar

- Open file
- Close scene
- Save
- Publish Viewer (*.exe)
- Publish 3D-PDF file (*.pdf)
- Print
- Create JPEG Picture (*.jpg)
- Capture to Clipboard

Mouse Actions

- Rotate
- Move
- Zoom
- Context menu
- Select Parts (Shift + Selection in tools)
- Multi-Select

Touch Gestures

- Rotate
- Move
- Zoom
- Context menu
- Select Part

3D Mouse

- Button function: Fit View

The Model Tree

Hide and show assemblies and parts and select them for further actions.

- Active model / Inactive
- Expand assembly / collapse
- Shown assembly / hidden
- Shown part / hidden

Change Selected Parts

Hide/Show the parts and assemblies selected in the Model Tree and change their display mode.

- Show Parts
- Hide Parts
- Show Selection Only
- Undo Show/Hide
- Show All
- Hide All
- Search in Model Tree
- Change Color of Parts
- Shaded Parts
- Shaded Parts with Edges
- Wire Frame Parts
- Reset Part Display
- Part Transparency On
- Part Transparency Off

Lighting / Background

Change the lighting direction to improve the contrasts.

Switch the color of the background between White and Normal.

Custom Views

Save the position and orientation of the model along with all display settings.

- Master View (Show all)
- < Previous Custom View
- > Next Custom View
- Save Custom View
- Previous view

Other Callouts:

- Switch between 3D and 2D
- Zoom in and out of the model in the display
- Change render mode and display settings
- Change the orientation of the model in the display
- Cross Section, Measure/Markup, Painter and Explode Tool
- Toolbox for Placement Analyses, Model Compare and Repair
- Create, play animations and present in full screen mode
- Commands and functions for the models, assemblies and parts on the Model Tree
- Double the width of the info panel
- Hide and show the info panel
- Change width

Cross Section

Move the section in small steps

Move the section in big steps

Select the section plane

Pick position/orientation on the model

Enter position

Move the section position

Rotate the section plane

Move the section in small steps

Move the section in big steps

Enter angle

Select the side to be shown

Close

Angle x: 0.000

Angle z: 0.000

Side 1

Side 2

Cross section

Show only the section

Cross Section options

Cross section options

- Show all parts sectioned
- Export cross section as DXF
- Show cross section controls
- Fill section
- Section line

* To display a part uncut right-click the part and choose Cross section on/off.

Measure / Markup

Add dimensions, markups, and pictures.

Measure and Markup

Distance/Angle

Distance

Distance in x-direction

Distance in y-direction

Distance in z-direction

Dist./Angle to xy-plane

Dist./Angle to xz-plane

Dist./Angle to yz-plane

Edge length

Box

Wall thickness

Clearance

Radius

Diameter

Note

Model info note

Part info note

Background image/text

Distance: 4.00

Radius: 1.500

Pre-selected reference

Selected dimension

Painter

Change the color of models, parts, and planes.

Painter

Auto color

Models

Parts Surfaces

One model All models

Manual color

Color

Single object select

Marquee select

Close

Manual color

- Pick color from the palette
- Pick color from the model

Directly coloring by single selection

- Surfaces, curves, and PMI
- Single triangles
- Plane surface
- Connected triangles
- Of same color

Coloring by marquee selection

- Triangles
- Curves
- PMI
- Color selection
- Reset selection

Auto color

Models Assign different colors to all models.

Parts Assign different colors to all parts.

Surfaces Assign different colors to all surfaces.

Explode

Create an exploded view of the model.

Assembly Explode

Selection mode

Mouse Model Tree

Move direction

x y z

Move

Close

Assembly Explode

Auto explode all

Assembly only

X Y Z

Include subassemblies

Move/Reset selection

-X +X -Y +Y -Z +Z

To center To origin

Close

Manual explosion

Selection mode

Select parts in the 3D-View or in the Model Tree

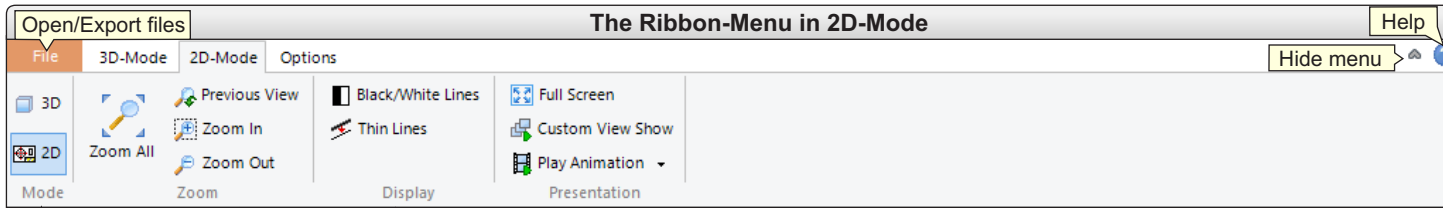
- Move parts
- Rotate parts
- Copy position from another part
- Reset position

Auto explosion

Auto explode all or selected assembly only

- Explode selected assembly in X,Y, or Z - direction
- Move parts outside parent assembly
- Reset parts to common explosion center or to original position

3D-Tool V12 Quick Reference: 2D-Mode



- Switch between 3D and 2D
- Zoom in on and out of the drawing in the display
- Change the display of line
- Play animations and present in full screen mode

2D Functions and Tools

View only

- View
 - Hide/Show layer
 - Show all layers
 - Hide all layers

Annotate

Measure

- Distance
- Angle
- Radius
- Diameter
- X-Distance
- Y-Distance
- Line length
- Angle by 4 points

Mark

- Arrow
- Sketch
- Circle
- Rectangle
- Oval
- Cloud
- Add text
- Add picture

2D Tools

- Delete the selected elements
- Change the color of the selected elements
- Move the selected elements
- Scale the selected elements
- Change text element

Background

Change the background of the 2D-drawing. Black color, White color or Custom color.

To choose the custom color click the button.

The Quick Access Toolbar

- Open file
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- Save
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The Layer List

Hide and show layers.

- 3D-Tool dimensions
- 3D-Tool redlining
- Shown layer / Hidden layer

Custom Views

Save the position and zoom of the drawing along with all display settings.

- Master View (Show all)
- < Previous Custom View
- > Next Custom View
- Save Custom View
- Previous view

Mouse Actions

- Move
- Zoom
- Select in 2D tools

Touch Gestures

- Move
- Zoom
- Select in 2D tools

3D Mouse

Button function: Fit view

Double the width of the info panel

Hide and show the info panel

Change width

3D-Tool V12 Quick Reference: 3D-NativeCAD Converter

Supported 3D-Conversions

CATIA, Pro/E, Creo, Inventor, SolidWorks, SolidEdge
 UG/NX, X_T, X_B, JT, STEP, IGES, VDA, SAT

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CATIA V4/V5, X_T, STEP, IGES, VDA, SAT, SAB, STL

Model Tree Functions

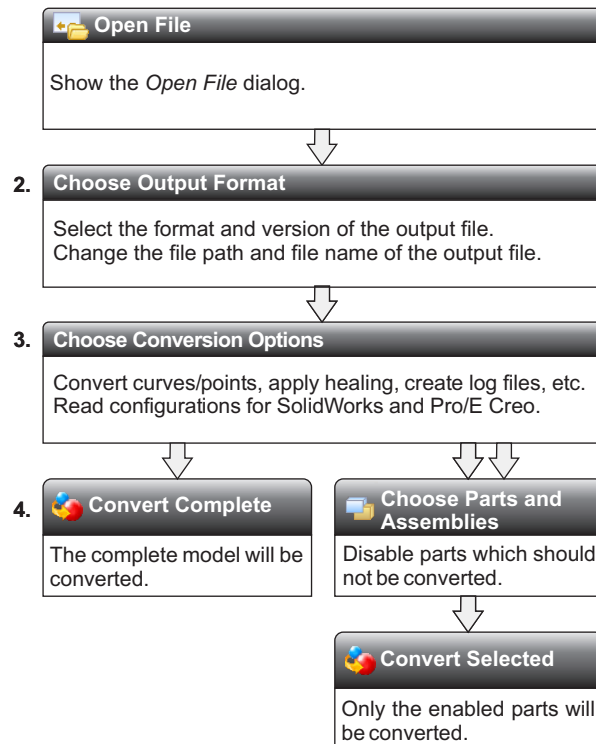
Functions that apply to all assemblies and parts on the Model Tree.

- Expand all assemblies
- Collapse all assemblies
- Enable all parts
- Disable all parts

The Model Tree

Disable and enable assemblies and parts by clicking on their icons:

- Enabled assembly
- Disabled assembly
- Enabled part
- Disabled part



3D-NativeCAD Converter

Options Help

Convert CAD part or assembly to a CATIA V5R20 file

File to convert: C:\3D-Tool\oem-825-8888_K0002.stp (Open file)

Output file: C:\3D-Tool\oem-825-8888_K0002.CATProduct (File path and file name of the output file)

Format: CATIA V5 (Output format)

Version: V5R20 (Output version for CATIA V5, SAT, SAB and X_T)

Format specific options:
 CatiaV5: Use Hybrid Bodies

Options:
 Output units: mm inch
 Convert hidden entities Convert curves Convert points
 Healing Create log file
 Read configurations and simplified representatons for SolidWorks + Pro/E Creo (Read Configurations)

Conversion options:
 (Convert all assemblies and parts of the file)

(Read the assembly structure and choose parts and assemblies which should be converted)

Model Tree:
 Select parts which should be converted
 Cancel the selection (Close button)

(Convert the enabled parts and assemblies)