3D-Tool V17 Quick Reference: 3D-Mode

www.3D-Tool.com

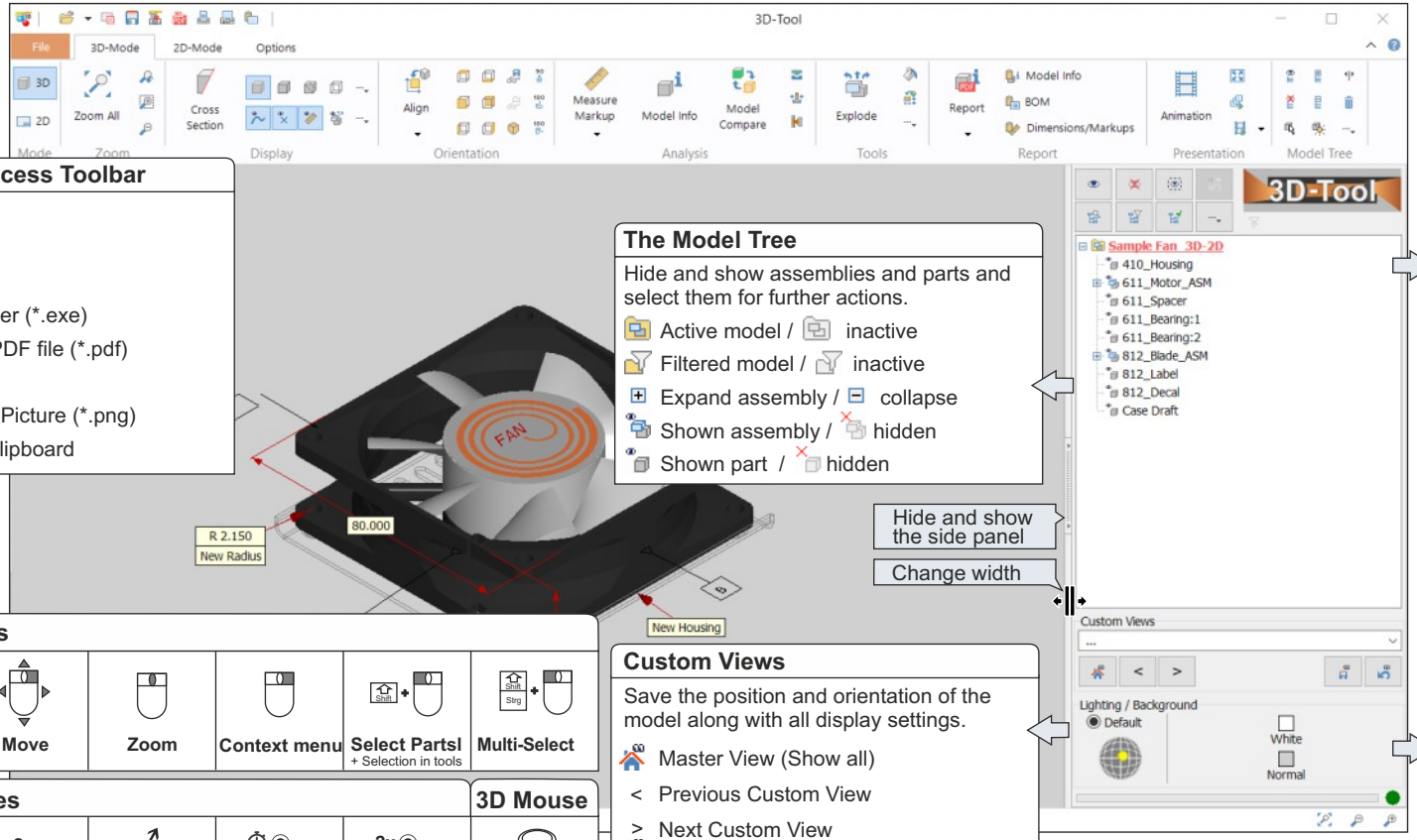
The Ribbon Menu in 3D-Mode

Open/Export files | Help | Hide menu

File | 3D-Mode | 2D-Mode | Options

Mode: 3D, 2D
Zoom: Zoom All
Display: Cross Section
Orientation: Align
Analysis: Measure Markup, Model Info, Model Compare
Tools: Explode
Report: Report, Model Info, BOM, Dimensions/Markups
Presentation: Animation
Model Tree

- Switch between 3D and 2D
- Zoom in and out of the model in the display
- Show cross section, change render mode and display settings
- Change orientation of 3D view
- Analysis tools: Measure/Markup, Model Info, Compare, Tooling, Wall Thickness, and Collision
- Toolbox for Explode, Painter, Placement, and More
- Create detailed reports, copy the Bill of Material
- Create, play animations and present in full screen mode
- Commands and functions for the models, assemblies and parts on the Model Tree



The Quick Access Toolbar

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

The Model Tree

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

- Active model / inactive
- Filtered model / inactive
- Expand assembly / collapse
- Shown assembly / hidden
- Shown part / hidden

Hide and show the side panel

Change width

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
- Search in Model Tree
- Filter Model Tree
- Select 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

Mouse Actions

Rotate	Move	Zoom	Context menu	Select Parts! + Selection in tools	Multi-Select

Touch Gestures

Rotate	Move	Zoom	Context menu	Select Part

3D Mouse

Button function: Fit View

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

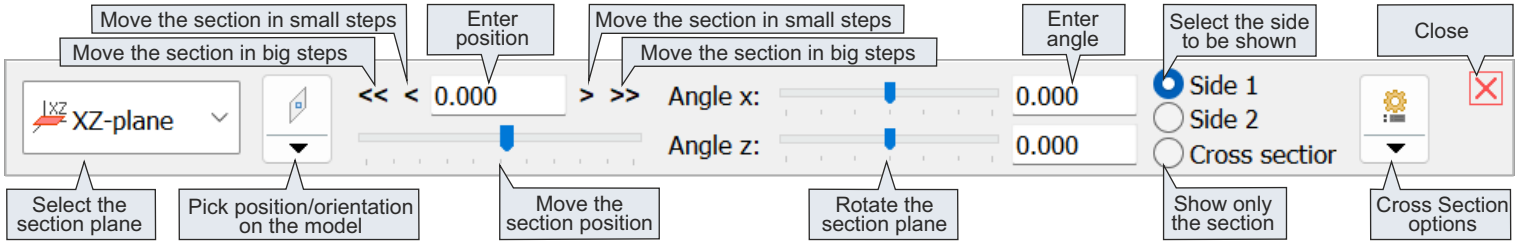
Lighting / Background

Change the lighting direction to improve the contrasts.

Switch the color of the background between *White* and *Normal*.

3D-Tool V17 Quick Reference: 3D-Tools

Cross Section



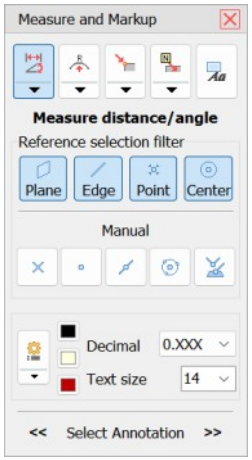
Cross section options

- 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.



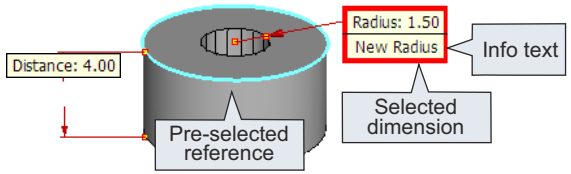
- Distance/Angle
- Distance only
- Distance in x-direction
- Distance in y-direction
- Distance in z-direction
- Dist./Angle to xy-plane
- Dist./Angle to xz-plane
- Dist./Angle to yz-plane
- Edge length
- Box
- Minimal box
- Wall thickness
- Clearance

- Radius
- Diameter

- Edge point
- Free point
- Center of a circle

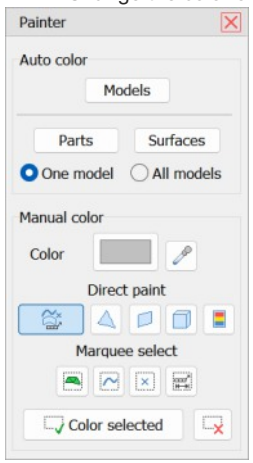
- Note
- Model info note
- Cross section note
- Center of mass note
- Surface area note
- Contour length note

- Background image/text



Painter

Change the color of models, parts, and planes.



Manual color

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

Directly coloring by single selection

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

Coloring by marquee selection

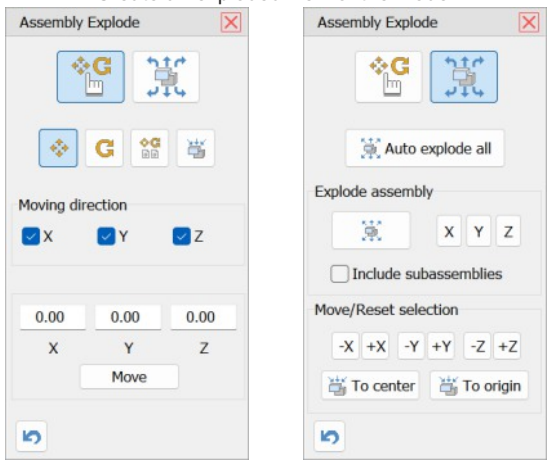
- Triangles
- Curves
- Reference points
- PMI
- Color selection
- Reset selection

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.



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

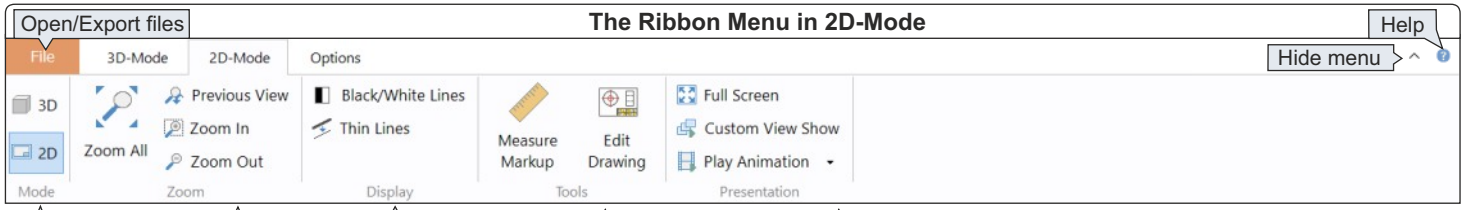
Auto explosion

- 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

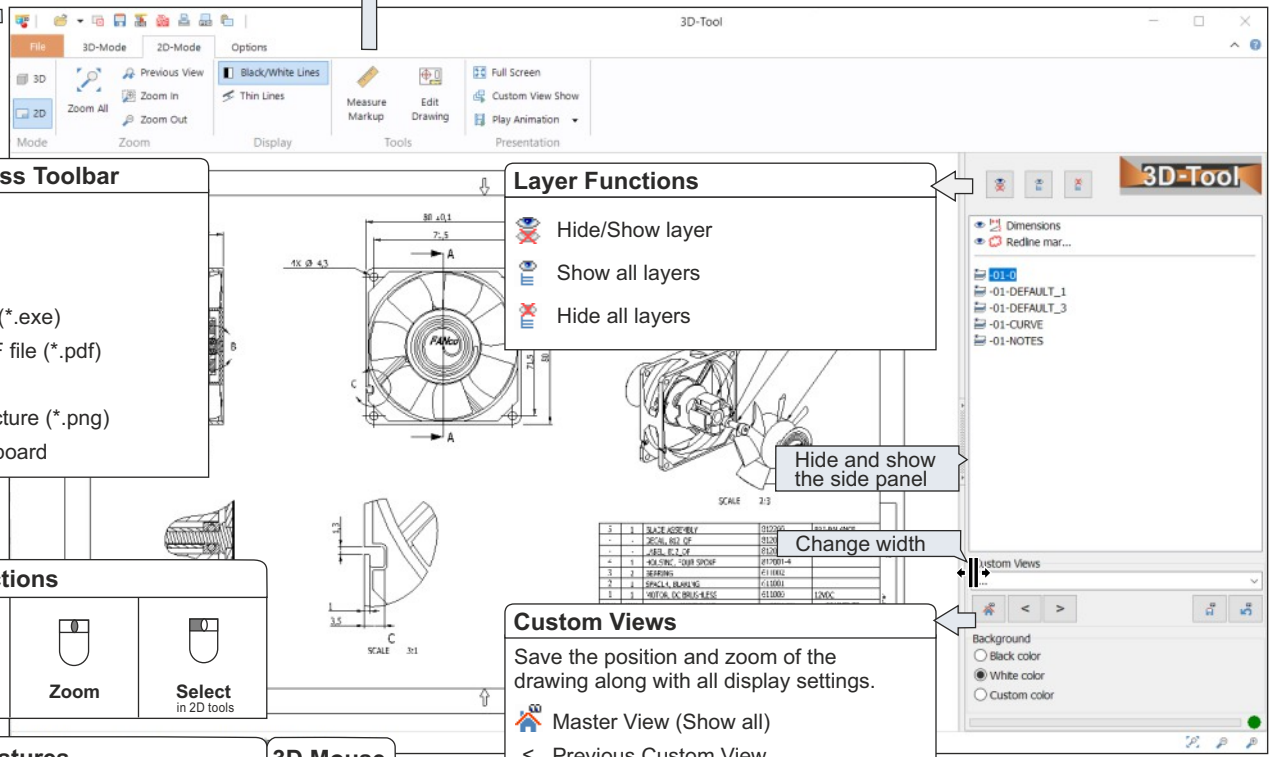
3D-Tool V17 Quick Reference: 2D-Mode

www.3D-Tool.com

The Ribbon Menu in 2D-Mode



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



The Quick Access Toolbar

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Layer Functions

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

Mouse Actions

Move	Zoom	Select in 2D tools

Touch Gestures

Move	Zoom	Select in 2D tools

3D Mouse

Button function: Fit view

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

Tools

Measure

Measure Markup

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

Markup

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

Edit Drawing

Edit Drawing

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

Layer Functions

Hide and show layers.

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

Background

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

To choose the custom color click the ▢ button.

3D-Tool V17 Quick Reference: 3D-NativeCAD Converter

www.3D-Tool.com

Supported 3D-Conversions

CATIA, Creo, Pro/E, I-DEAS, Inventor, Navisworks, Rhino, SolidWorks, SolidEdge, UG/Siemens NX, X_T, X_B, JT, STEP, IGES, VDA, SAT, DWG, DXF, DGN, IFC, Revit, Collada, FBX, STL, 3M, GLTF, VRML

⇩

IGS, JT, X_T, PRC, SAT, STEP, 3MF, Collada, FBX, GLTF, HTML, STL, PDF, U3D, VRML

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

1. **Open File**

   Show the *Open File* dialog.

2. **Choose Output Format**

   Select the format and version of the output file.
   Change the file path and file name of the output file.

3. **Choose Conversion Options**

   Convert curves, points, PMI, hidden entities, apply Sewing BREPs, create log files, Read configurations (SolidWorks)

4. **Convert Complete**

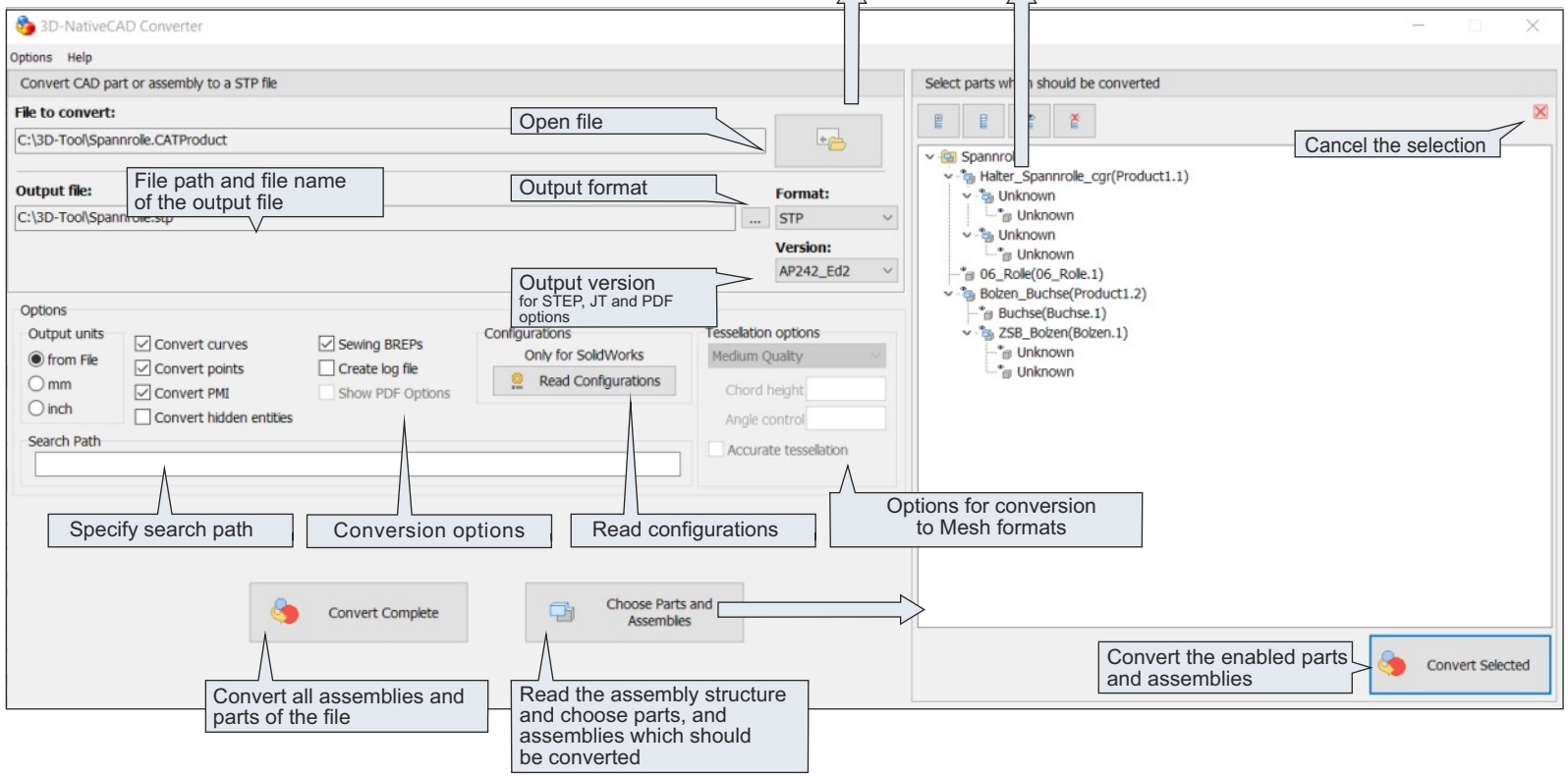
   The complete model will be converted.

   Choose Parts and Assemblies

   Disable parts which should not be converted.

   Convert Selected

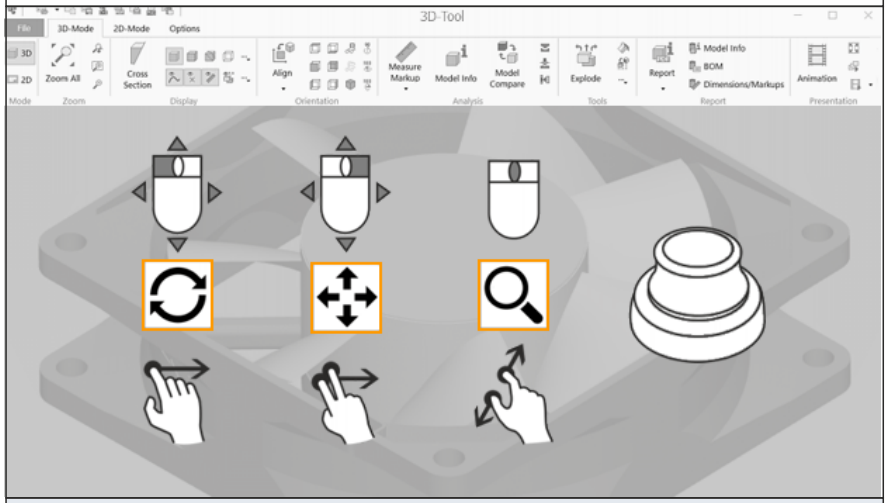
   Only the enabled parts will be converted.



3D-Tool V17 Quick Reference: Tips

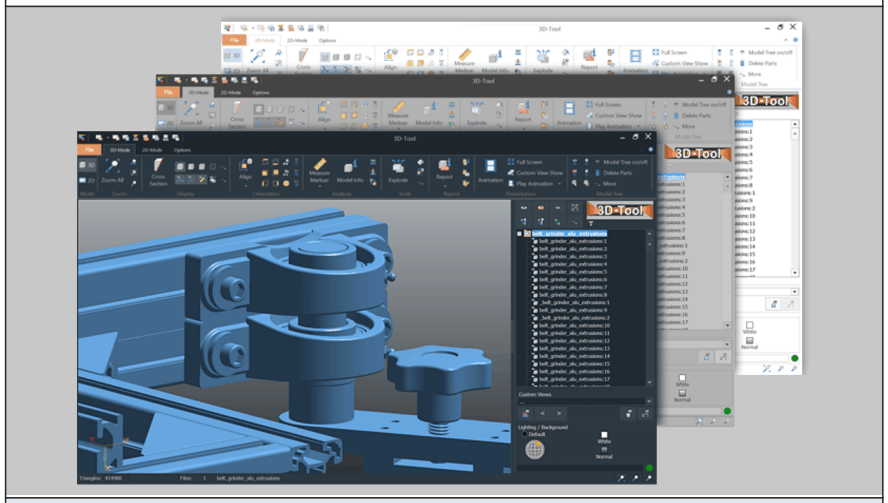
www.3D-Tool.com

Mouse Button, Touch Gestures, 3D-Mouses



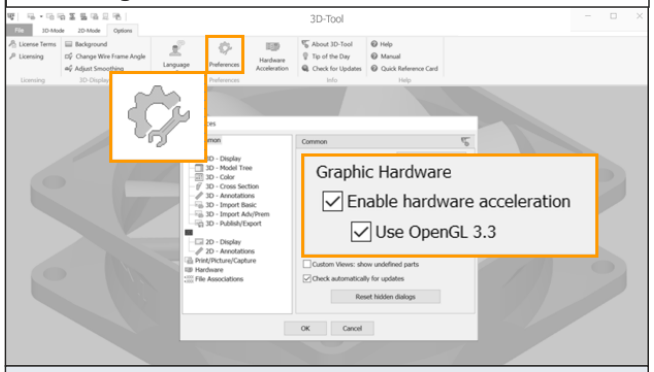
Use the left **mouse button** to rotate and the right mouse button to move the view. Use the **mouse wheel** to zoom in and out. 3D-Tool also supports 3Dconnexion **3D-mouses** and **touch gestures**.

Setting Program Style



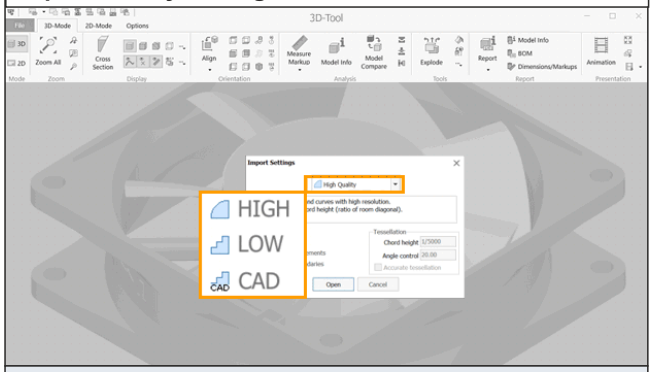
Use the Setting **Program Style** to select one of the 5 color styles for the 3D-Tool program interface. For the Free Viewer and 3D-Tool EXE files only the Windows10 Style is available.

Activating the Hardware Acceleration



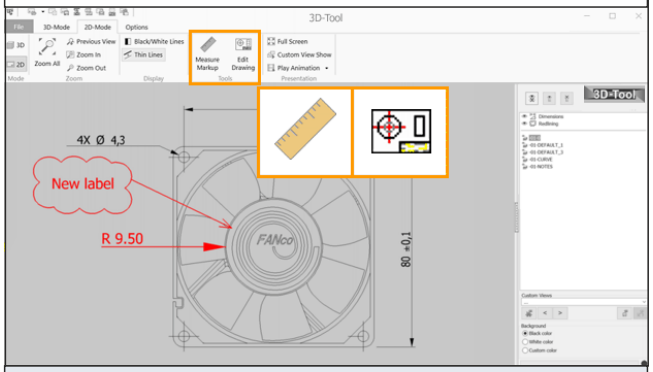
Optimize the 3D-performance by activating the **Hardware Acceleration** and the OpenGL 3.3 support in the 3D-Tool Preferences.

Import Quality Settings



For a smooth display of big models Advanced and Premium users can reduce the **import quality**. Additionally, the Premium version allows a fast import of graphical CAD data from native CAD models.

2D - Mode

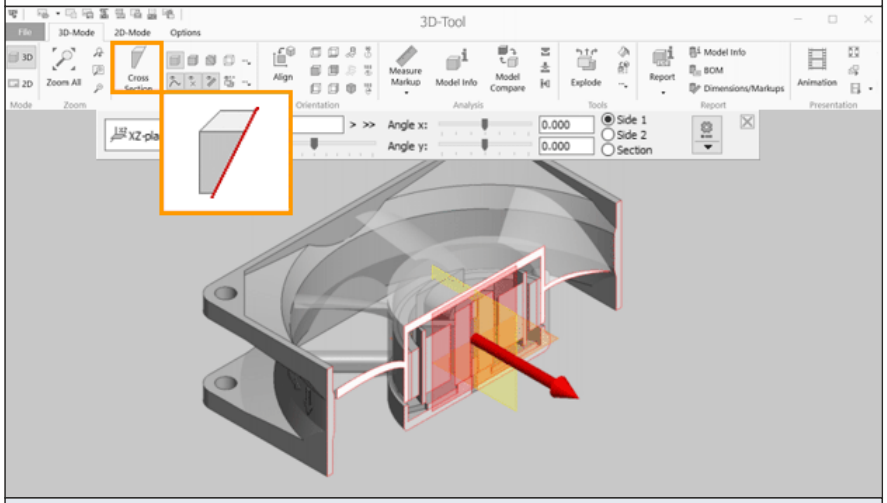


In **2D-Mode** use the Measure Markup tool to add dimensions, markups and pictures. Use the Edit Drawing tool to edit and delete elements of the drawing.

3D-Tool V17 Quick Reference: Tips

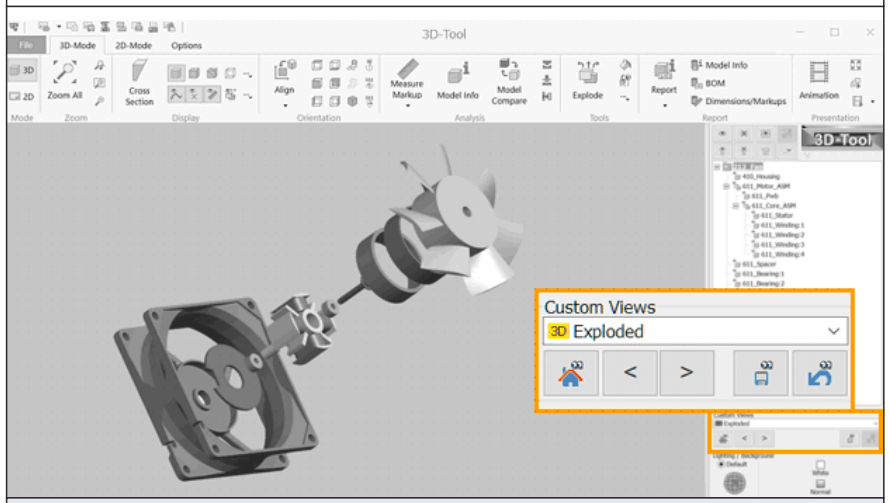
www.3D-Tool.com

The Cross Section Tool



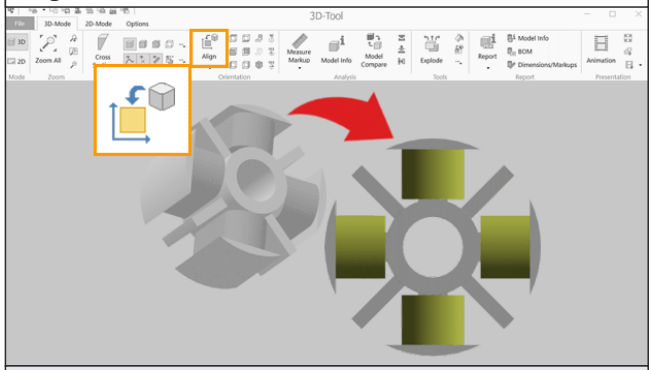
Use the **Cross Section tool** to access the internal parts of a model. The cross section controls offer multiple functions to align the cross section.

Custom Views



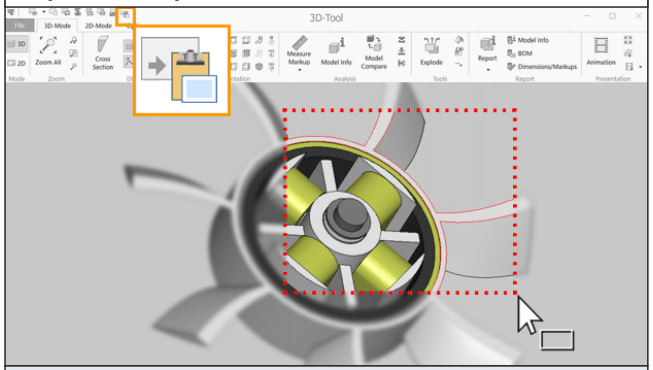
Use **Custom Views** to store the state of the display including exploded parts and cross sections. This allows to quickly switch between views and is useful for printing and creating pictures.

Align Views



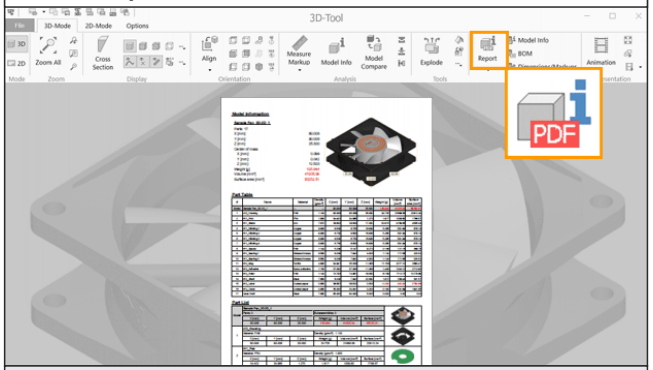
Use **Align View** to quickly rotate the view into the next matching default view. The views from left, right, top, bottom, back and front are also directly selectable.

Capture to Clipboard



Use **Capture to Clipboard** to copy a detail of the view to the Clipboard. A single click instead of the marquee select will copy the complete view.

Create Report

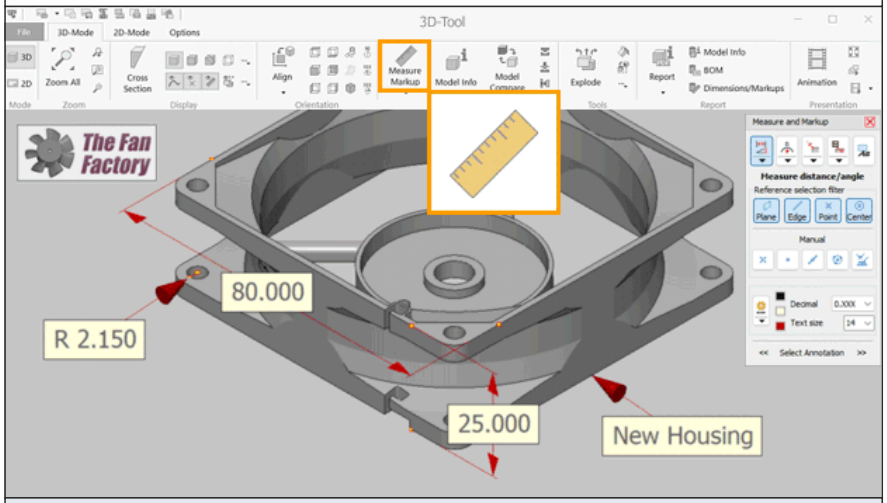


Use the **Report function** to create detailed reports with model information, part list and an overview of the Custom Views as PDF, RTF, HTML and JPG/BMP.

3D-Tool V17 Quick Reference: Tips

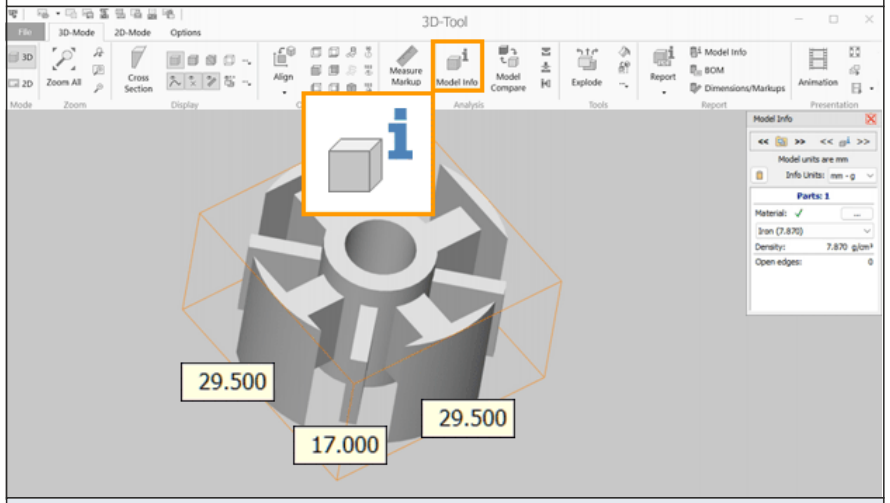
www.3D-Tool.com

The Measure and Markup Tool



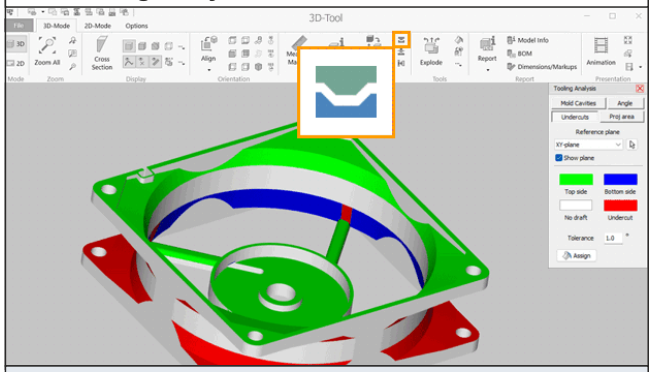
Use the **Measure and Markup tool** not only to add 3D dimensions and 3D notes. You may also add a background text or image, for example a company logo.

The Model Info Tool



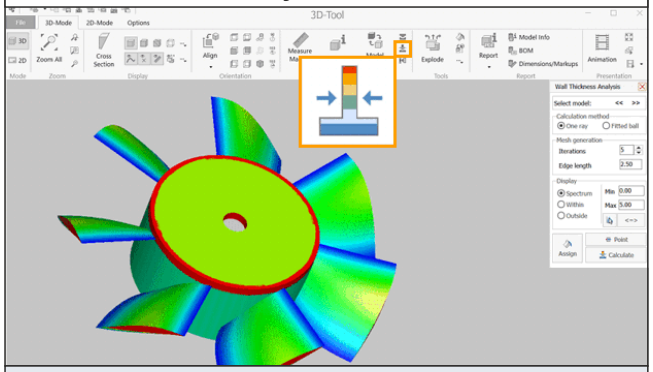
Use the **Model Info tool** to display the volume, surface area, dimensions and weight of parts and assemblies. All information can be copied to the Clipboard.

The Tooling Analysis Tool



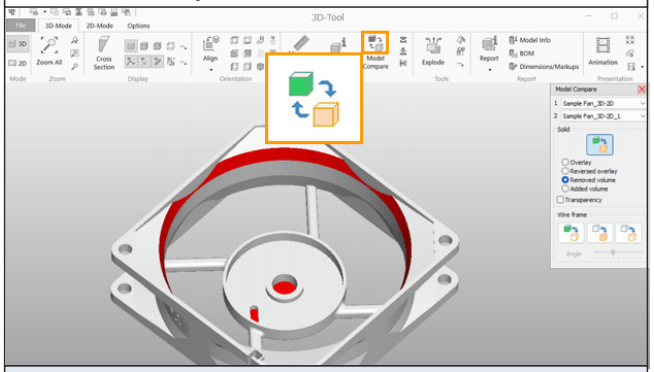
Use the **Tooling Analysis tool** to display drafts and their angles in different colors, to check for undercuts, and to calculate the projected area of the model.

The Wallthickness Analysis Tool



Use the **Wall Thickness Analysis tool** to show the wall thicknesses of a model in different colors and to identify thick and thin areas.

The Model Compare Tool



Use the **Model Compare** to identify differences between two models, as they are highlighted in color.