BP SOLUTIONS

pdfPost Tutorial

PDF 3D capabilities.

3D PDF gives users a number of useful tools to view and manipulate geometry. Some of them are intuitive visible from the start, some are hidden and need an introduction. This tutorial provides tips for best 3D PDF experience.

- how to effectively use components;
- how to effectively manipulate geometry with mouse and keyboard;
- how to change views and camera target;
- how to use cross-sections;
- how to measure and comment;

1. General information

Almost all options are available from toolbar positioned at the upper left corner of the 3D window.

Not all options are visible, because toolbar is collapsed. Picture below shows how to expand toolbar.
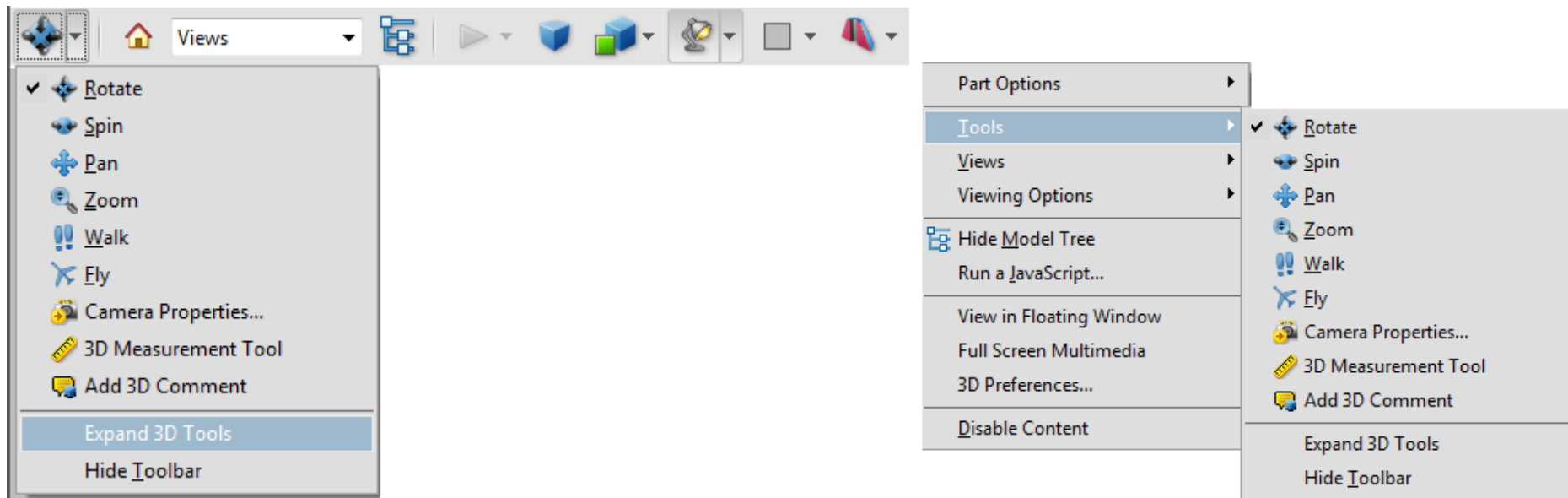
Toolbar options are also available from 3D window context menu (right-click on 3D window).

Toolbar can be completely hidden and everything can be controlled via context menu options. User can turn the "Full Screen Multimedia" mode on, and view model without distractions.

2. Working with model tree, model nodes (components), groups and views

Model tree is a very usefull feature of 3D PDF. pdfPost allows user to have full controll over model groups, subgroups and model nodes. Model tree button/menu item available on the toolbar and in context menu, controlls visibility of the model tree. When turned-on, model tree is visible on the left side of the application. Model nodes and group nodes are assembled together to create hierarhical tree.

Model nodes are also available from 3D window. User can click on desired geometry part it will be highlited in 3D window and selected on model tree (works both ways). Context menu is also available throuh both interfaces.

It is possible, to controll render mode and visibility (hide, isolate, transparency) of model and group nodes.

"Fit visible" allows user to fit visible geometry to 3D window. When working with large models, hidding big parts may cause problems with rotation. Using "Fit Visible", allows user to align center of rotation with center of selected geometry.

The same result may be achived with "Camera Properties" . User can use part, face or three-points to set desired camera target.

Below model tree, available views are referenced. User can click on view, to reposition geometry according to view settings. Views are also avaialble from toolbar. pdfPost exports basic views based on "Vertical Axis" setting. Views are based on geometry center and bouding box. It is also possible, to set starting view.

PDF 3D capabilities

3. **Using mouse and keyboard to manipulate geometry.**

Select rotate or spin from toolbar/context menu.

- hold LEFT MOUSE to rotate/spin;
- hold RIGHT MOUSE to zoom in/out;
- hold LEFT MOUSE + RIGHT MOUSE to pan;
- press and hold LEFT CTRL + hold LEFT MOUSE to pan;
- press and hold LEFT CTRL + hold RIGHT MOUSE to zoom to selection;
- press and hold LEFT SHIFT + hold LEFT MOUSE to zoom in/out;

4. **Using cross-section**
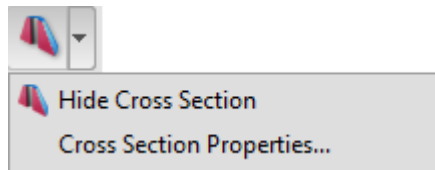
Cross Section can be activated by using its icon on the toolbar. When activated, Cross Section will cut model allowing user to "look inside". Clicking on Cross Section Properties will activate properties window allowing user to configure the section to its needs.

5. Measurements

Model can be measured with 3D measurement Tool . User can select snap and type of the measurement. Clicking the first point will start measure operation. If user will click for the second time, measurement will be saved together with corresponding view (automatically created by Acrobat). Modified PDF can be saved with all dimensions inside. All measurements are available from "Views".

Measurements can significantly slow Acrobat when working with big models. Pressing ESCAPE key may interrupt measure/snap process.

6. Comments

User can put comments inside 3D geometry . Comments are attached to specific geometry and saved with corresponding view (automatically created by Acrobat). User can set status, reply, delete and save comments.

7. Useful tips
- Using "Solid" render mode can improve performance with large models (solid models especially);
- Smart use of model tree and camera target may also improve viewing large models;
- User can change background color to improve contrast;
- CAD optimized lights are best for viewing FEA results;
- There is also perspective/orthographic button on the toolbar;

pdfPost
EVALUATION

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pdfPost converter 1.9

MESCO

ANSYS Channel Partner

ANSYS Mechanical Plug-in
in cooperation with MESco

Click to activate 3D content

N/A	(black)
0.020	(blue)
34.343	(light blue)
68.666	(cyan)
102.990	(teal)
137.313	(green)
171.636	(light green)
205.960	(yellow)
240.283	(orange)
274.606	(red)
308.930	