



3DXpert™ for SOLIDWORKS®

Adjust model for 3D Printing

Add options for automatic positioning

13,0600,1489,1604(SP6)

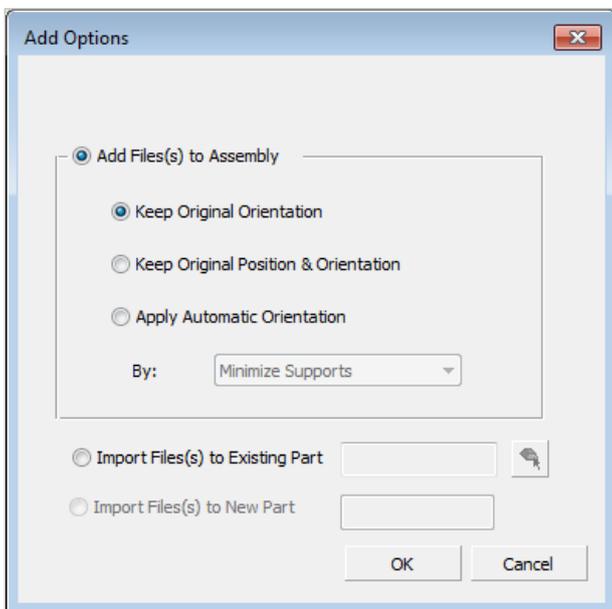
In this document, we will learn to use the **Add options for automatic positioning**.



While using the **Add 3DP component** it is possible to use some automatic options.

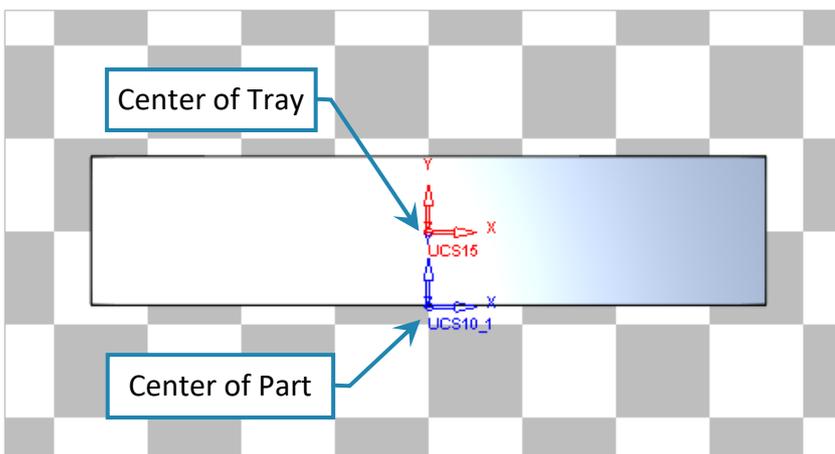
<p>! Notice/ Remember</p>		Left mouse button name is "pick"
		Middle mouse button name is "Exit"
		Right mouse button name is "Click"

After **picking** 3DP component from the **3DXpert for SOLIDWORKS Explorer** a new window will open:

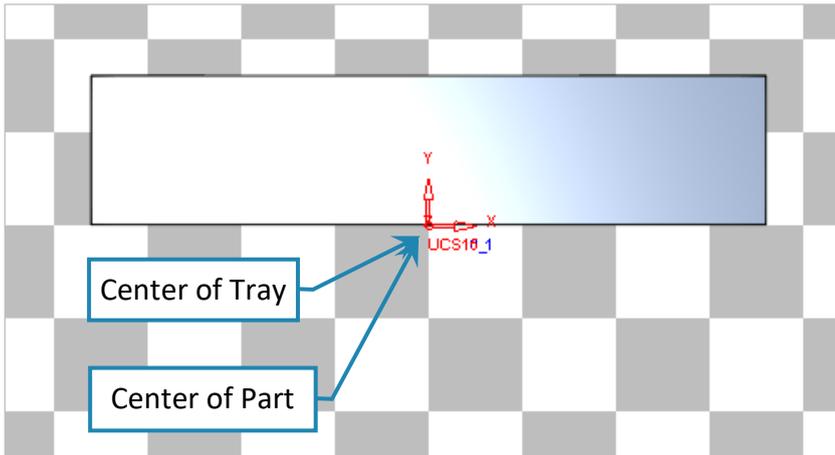


In this window we chose basic positioning Options or applying automatic Orientation of added component on the tray.

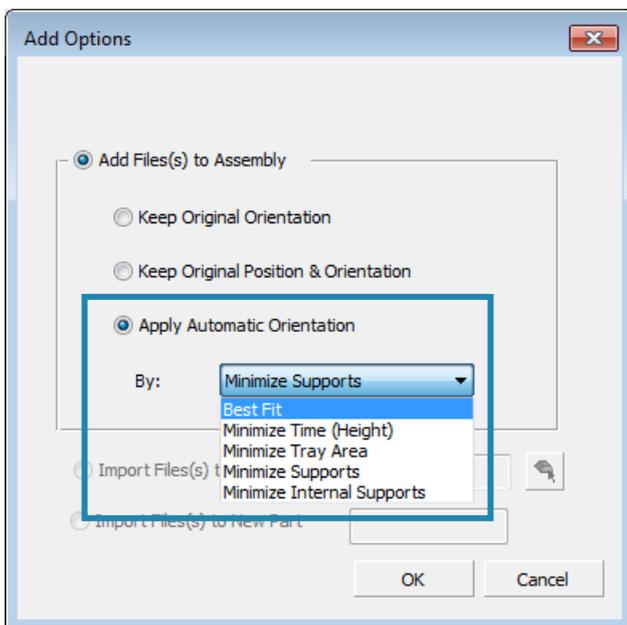
- **Keep Original Orientation** means that the part will not rotate to any direction - XYZ of the part will be parallel to the XYZ of the tray - but the center of the bounded silhouette will move to the center of tray.



- **Keep Original Position & Orientation** means that the part will not rotate to any direction - XYZ of the part will be parallel to the XYZ of the tray - but the center of the part (UCS 0,0) will move to the center of tray.



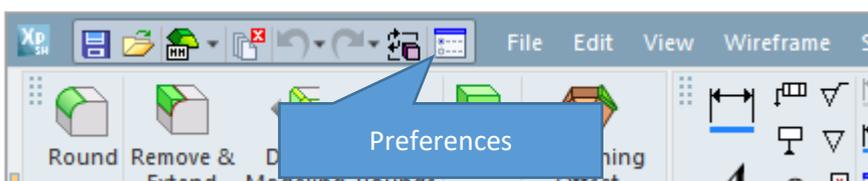
- **Apply Automatic Orientation** means that the part will rotate and move according to chosen analysis method:



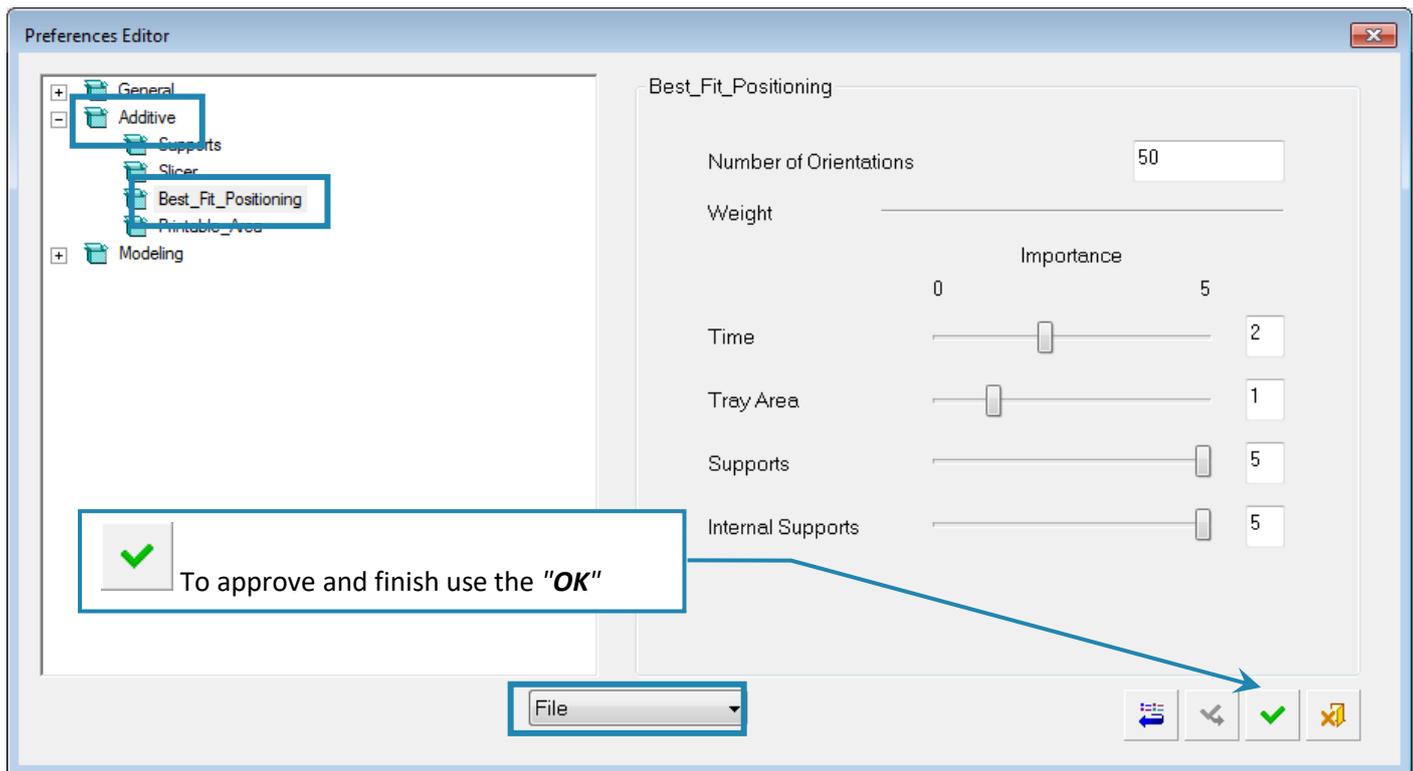
Best Fit

Best Fit will analyze the position and orientation according to the user's settings in the Preferences. Time, tray area, supports and internal supports having weight of importance taken in considerations.

While a 3DP Project is open, **pick** from the Quick Accesses Toolbar the Preferences  command,



As the Preferences Editor window opens up, browse as shown here to get the appropriate window – Best_Fit_Positioning.



Please notice:

! if is used, the changes will be applied only in this file,

! if is used, the changes will be applied in this file and all new documents.

Set parameters between 0 and 5 using the slider or edit box. The Best Fit analysis will run based on the Number of Orientations (50 is the default) and the best result will be displayed.

Minimize Time

Minimize Time will analyze a position and orientation according to minimum z height.

Minimize Tray Area

Minimize Tray Area will analyze a position and orientation according to a minimum tray area consumption.

Minimize Supports

Minimize Supports will analyze a position and orientation based on minimum number of supports needed.

Minimize Internal Supports

Minimize Internal Supports will analyze a position and orientation according to a minimum internal supports required (internal support may be hard to remove later).