3D PDF Help guideline
Working with 3D Drawings in PDF

HGZ1 / AEP1

22.12.2021

Required version pdf reader - Open the file

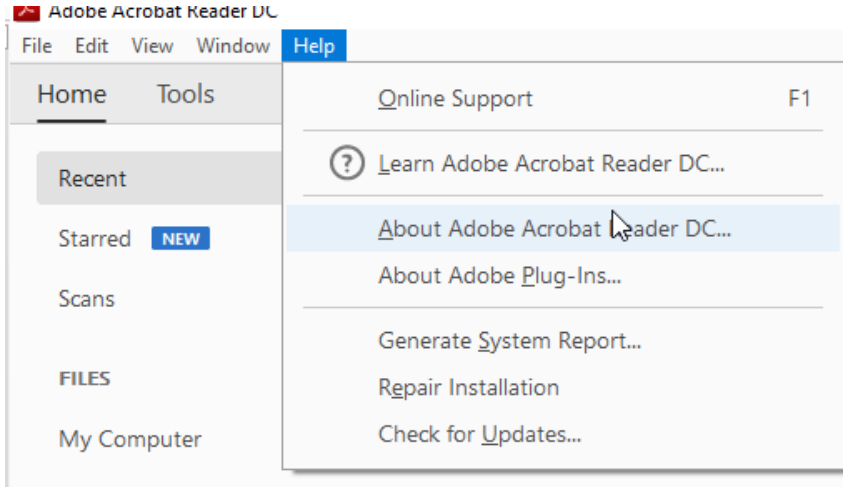
- As a minimum requirement, the Adobe Acrobat Reader should be installed on the PC in order to display the PDF files with all necessary functions

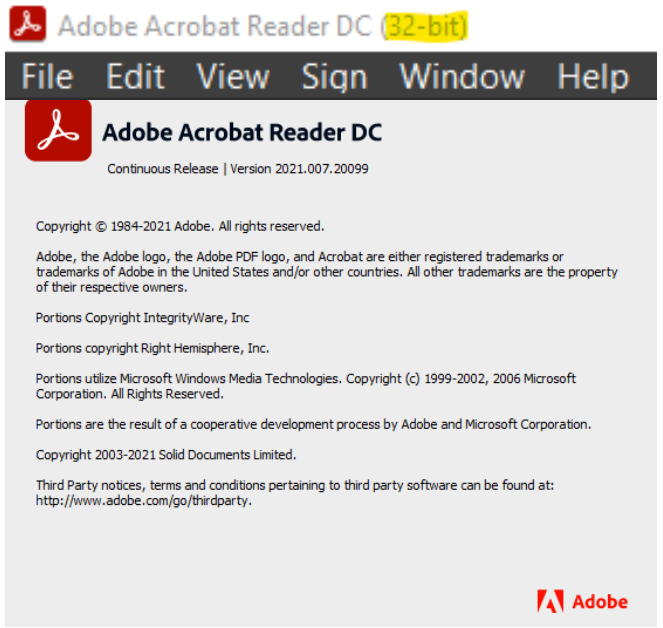
- The version can be checked by selecting the "About Adobe Reader " function from the "Help" menu in Adobe Acrobat Reader.

- In the pop-up window that then appears, the installed version is displayed under the program name.
  The version should be the 2021.007.20099 and **32-bit** or newer

- Please don‘t use the 64-bit version

When opening a 3D drawing, the drawing area must be clicked again to activate the viewer mode.

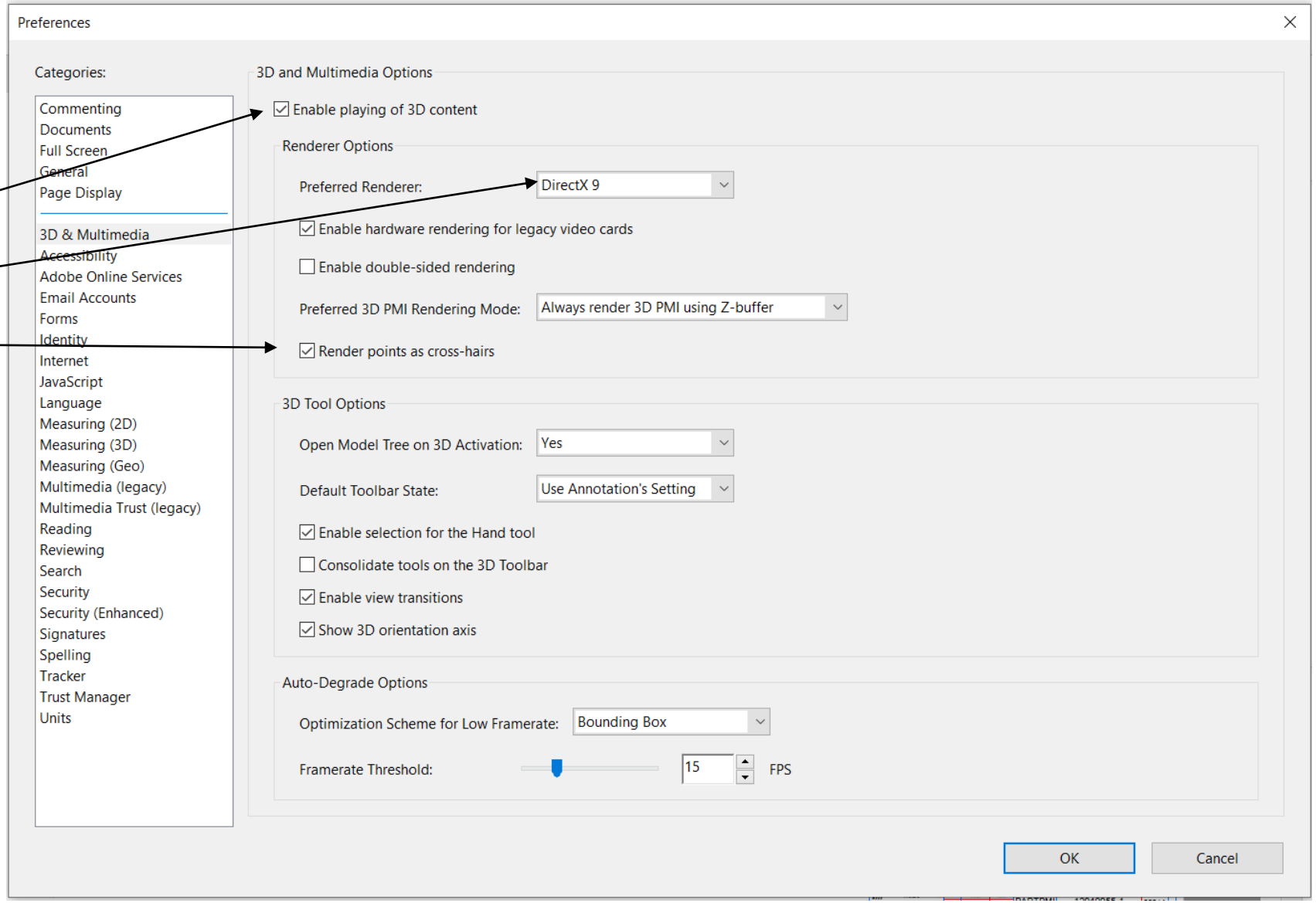




Default Settings

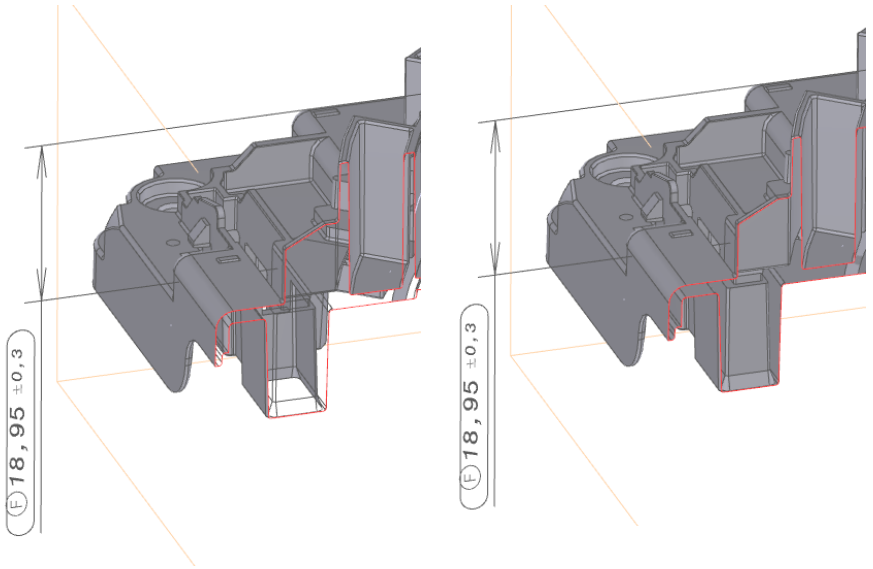
Default Settings

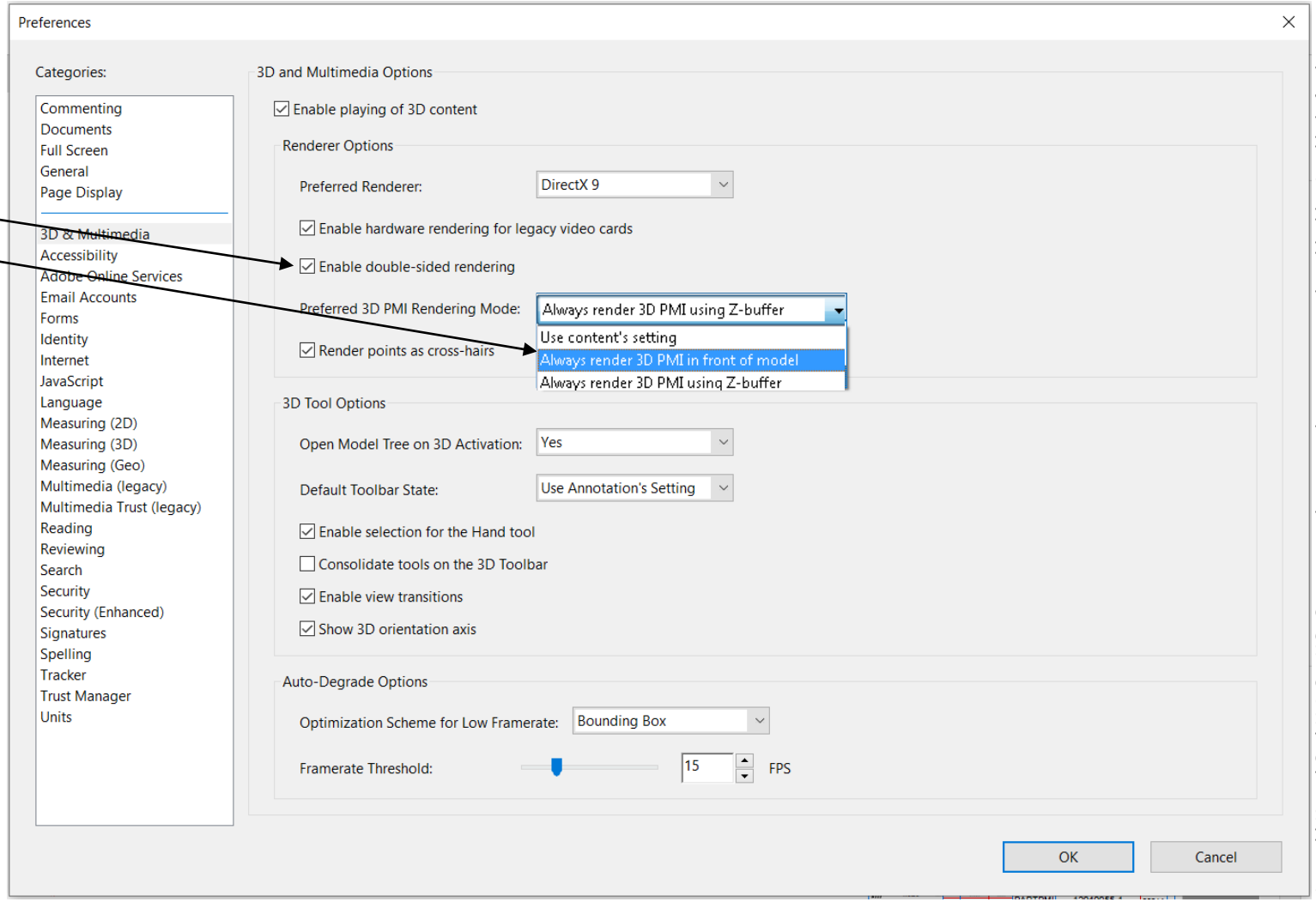
1. Right click on the 3D model
2. Select the “3D Preferences”
3. Mark “Enable playing of 3D content”,
4. Select “DirectX9”
5. Mark “Render points as cross- hairs”,



Default Settings

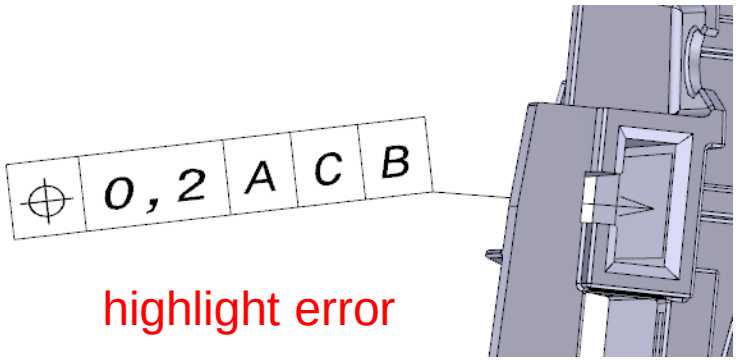
6. “Enable double-sided rendering” must be activated
7. Select “Always render 3D in front of model”



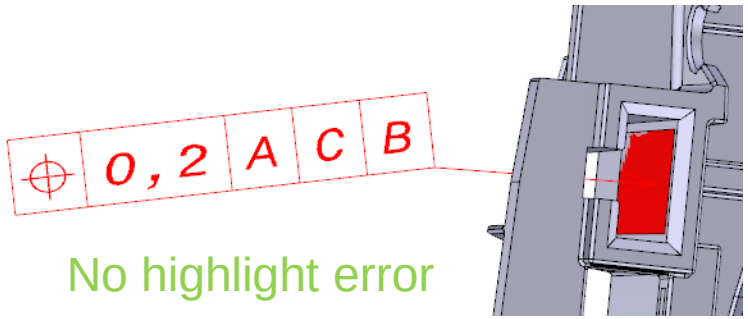


Default Settings (only relevant if an highlight error occurs)

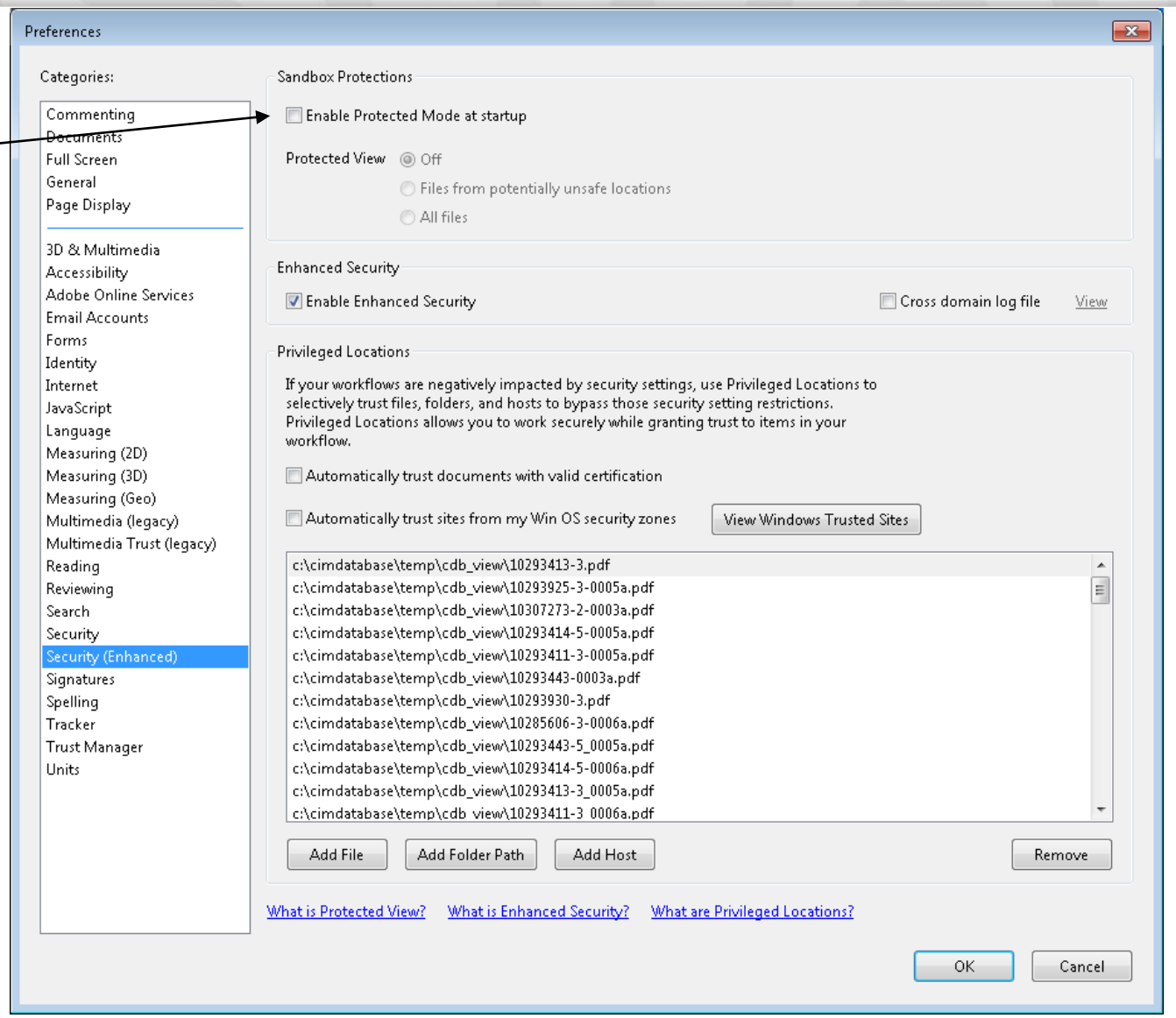
1. Right click on the 3D model
2. Select the “3D Preferences”
3. Deactivate “Protected Mode at startup” to highlight the areas with a click



highlight error

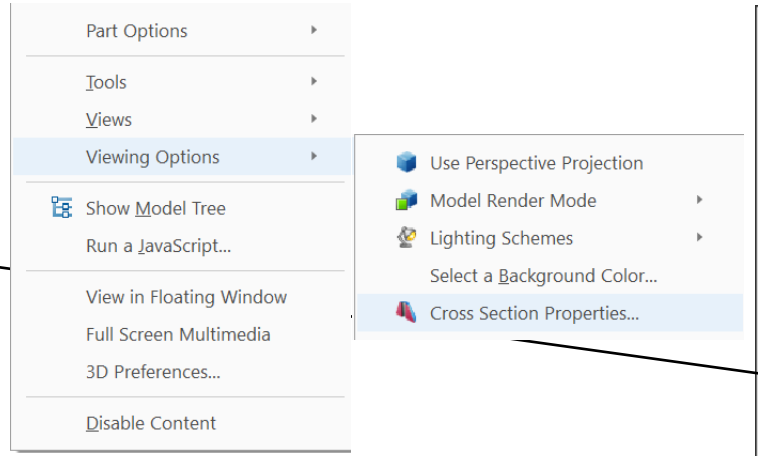


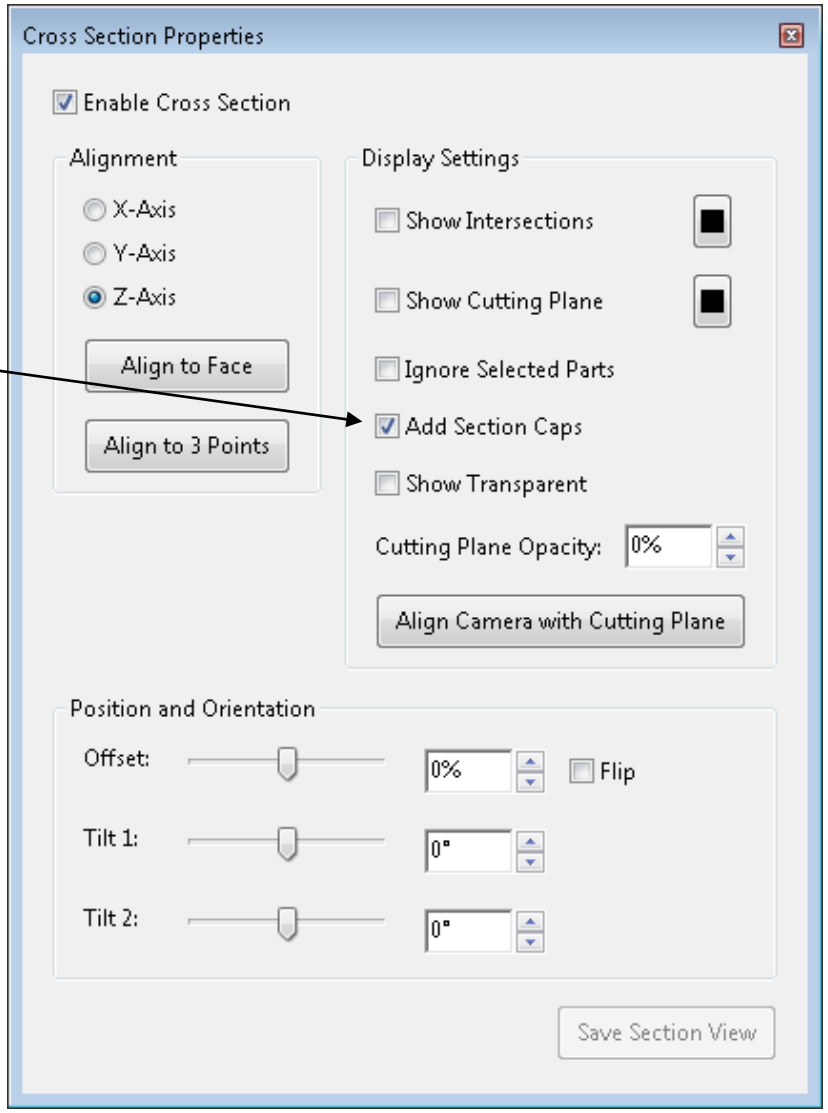
No highlight error

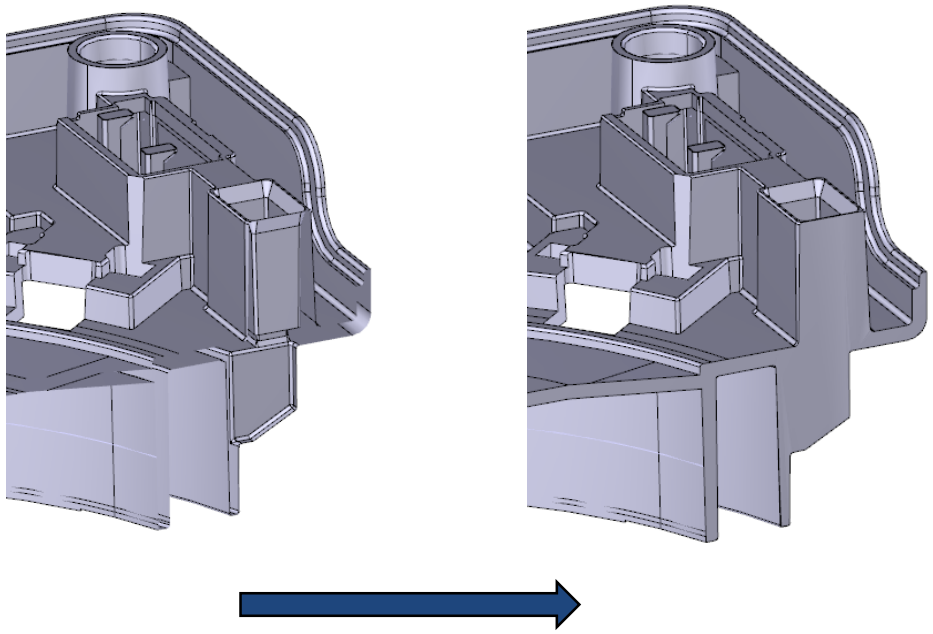


Default Settings

1. Right click on the 3D model
2. Activate Viewing Options / Cross Section Properties
3. Enable “Add Section Caps”

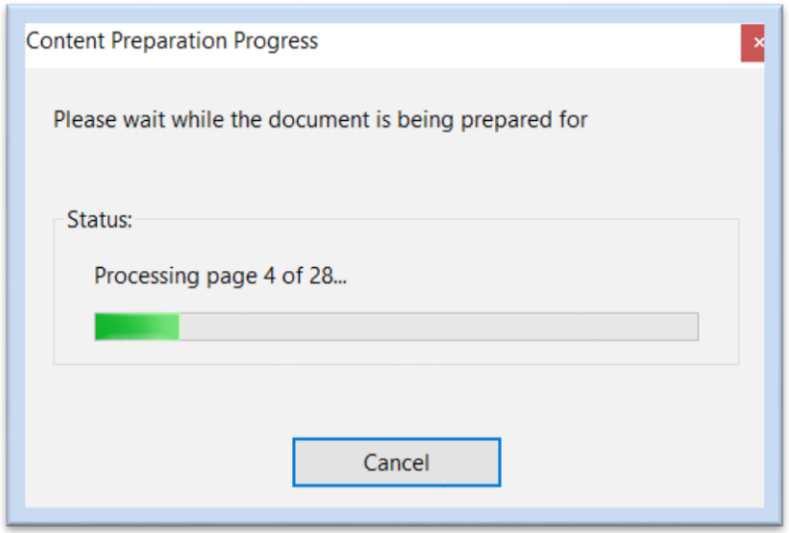


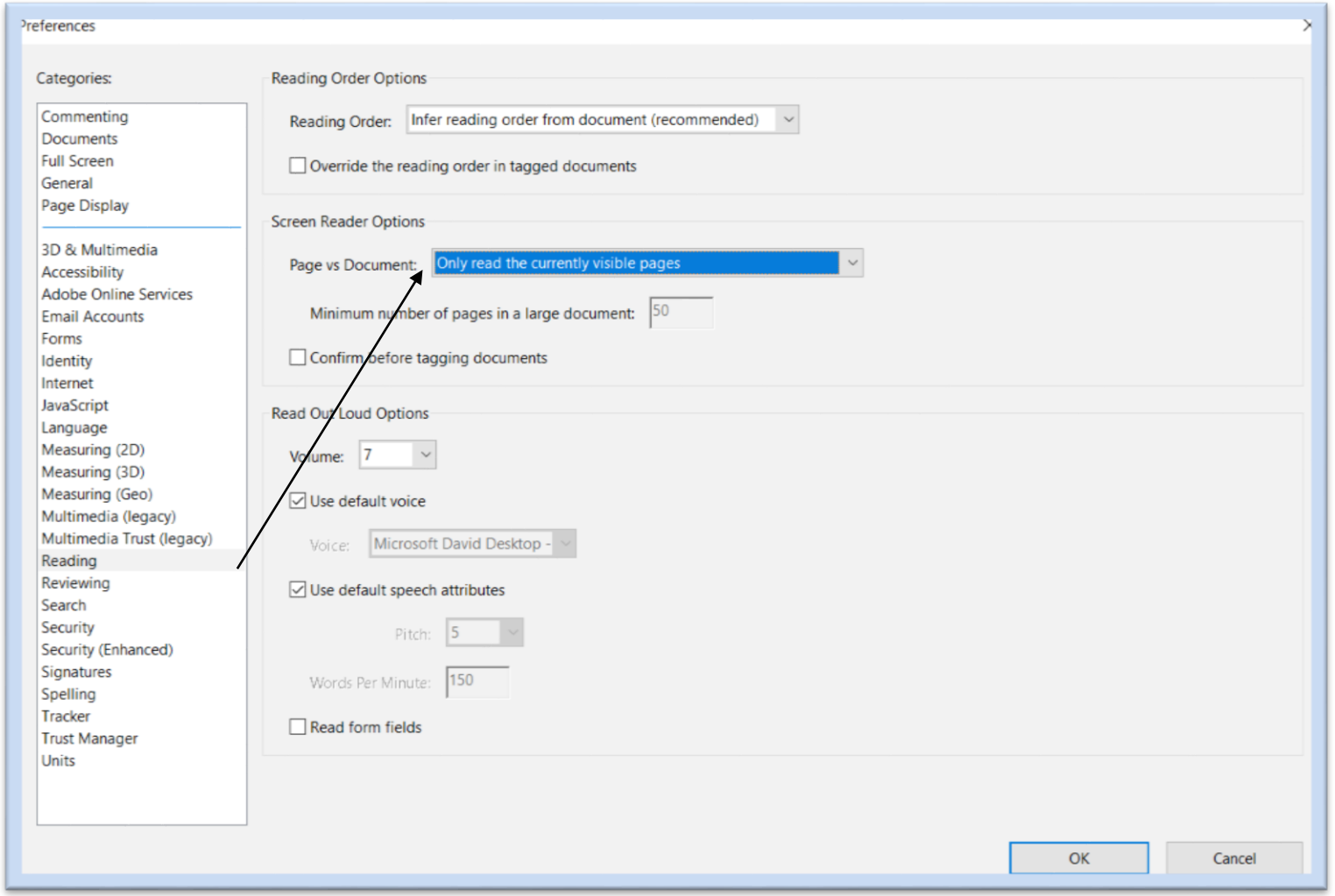




Settings (only relevant if you get the left window “Content Preparation Progress”)

1. Right click on the 3D model
2. Select the “3D Preferences”
3. Reading
4. Under Screen Reader Options select “Only read the currently visible pages”.





Functions

Rotate, zoom and move the view

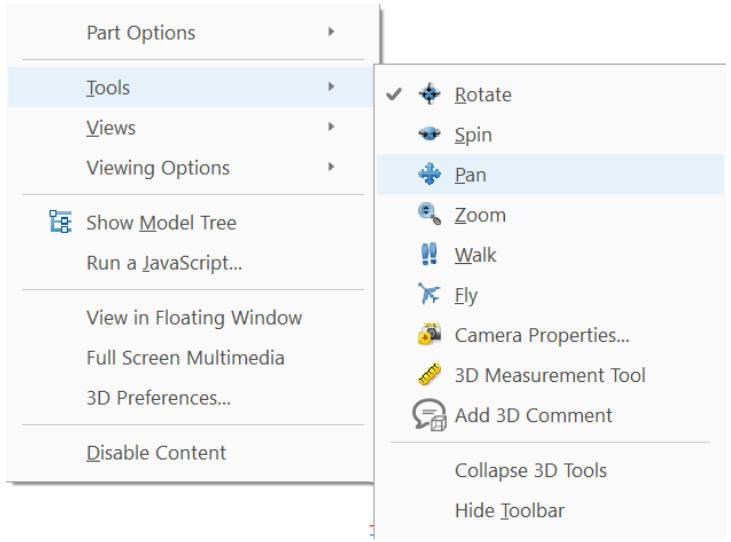
There are several ways to move and change the view.

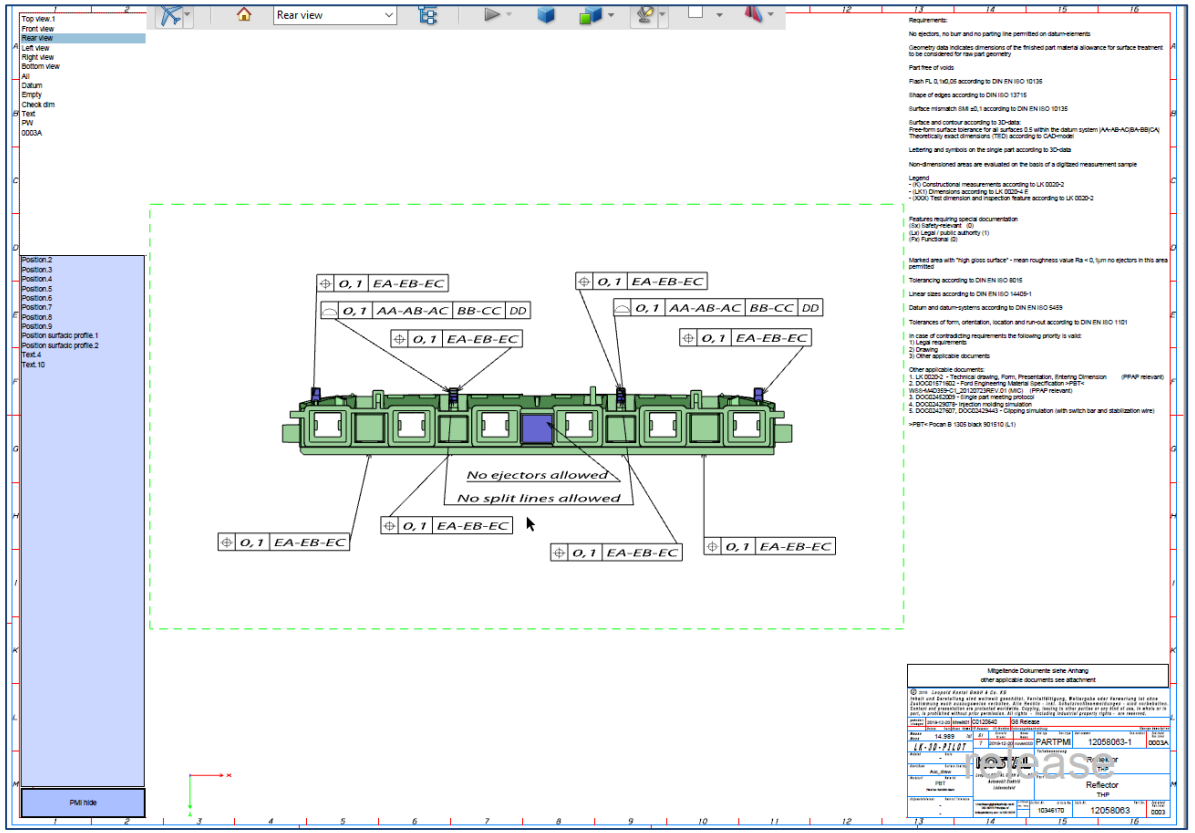
To perform the described actions, the mouse pointer must be in the area of the parts view.

Rotate: In the basic position  "Rotate (all directions)" the view can be rotated to all directions with the left mouse button pressed.

Zooming: With the scroll wheel on the mouse, the view can be zoomed in or out; alternatively press the right mouse button and move the mouse left or right.

Move: Hold down both mouse buttons and move the mouse accordingly; alternatively click the right the mouse button and choose the  “Pan" symbol in the toolbar.

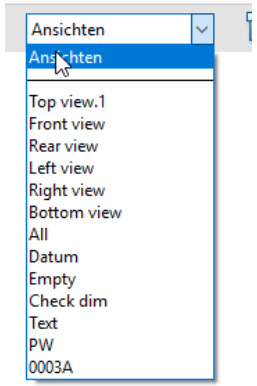


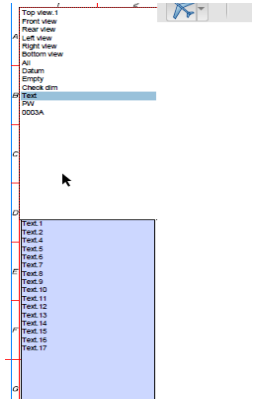


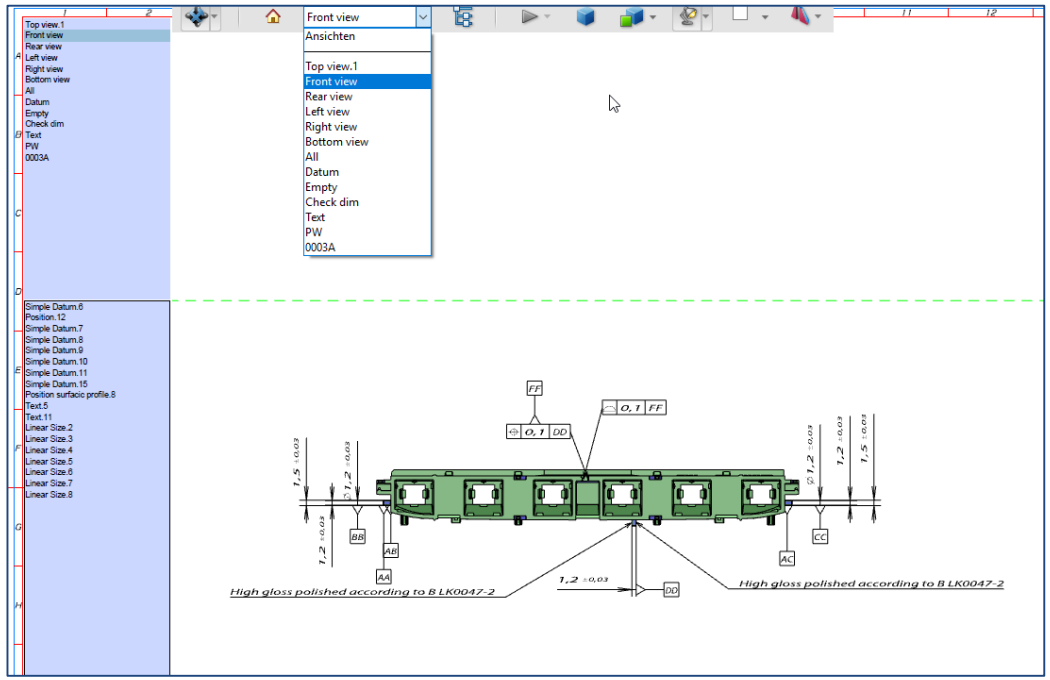
Select views, show and hide details

There are two ways to display the views specified in the file (example 1 and 2).
Via the pulldown menu of the toolbar (example 1) or via the model hierarchy on the left side (example 2).
The model hierarchy can be shown or hidden with the button .
With the button "standard view“ you can restore the original view.

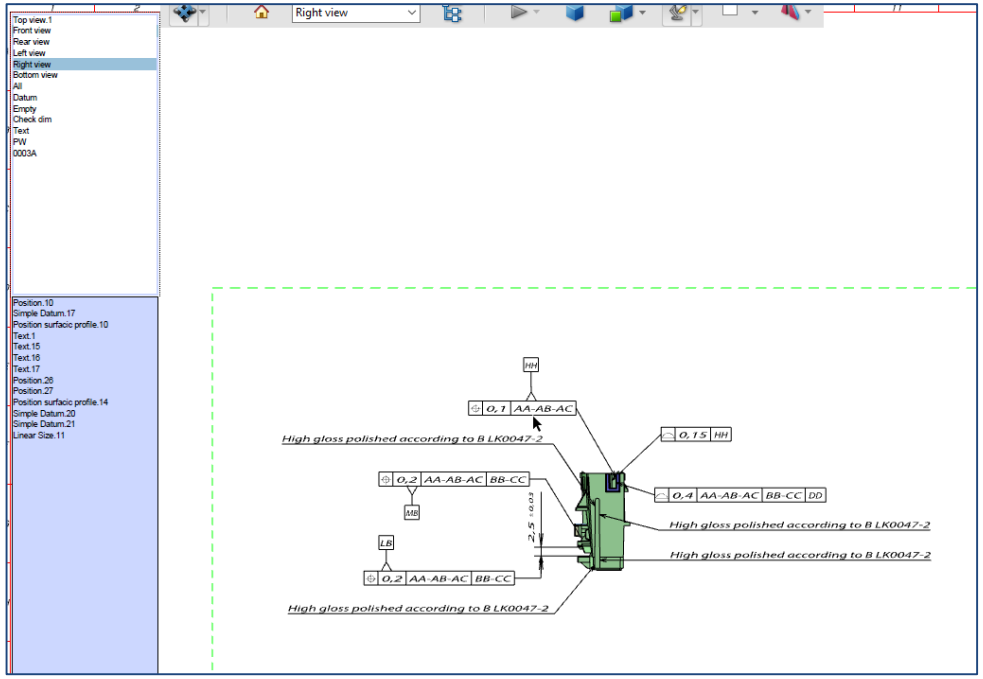
example 1:



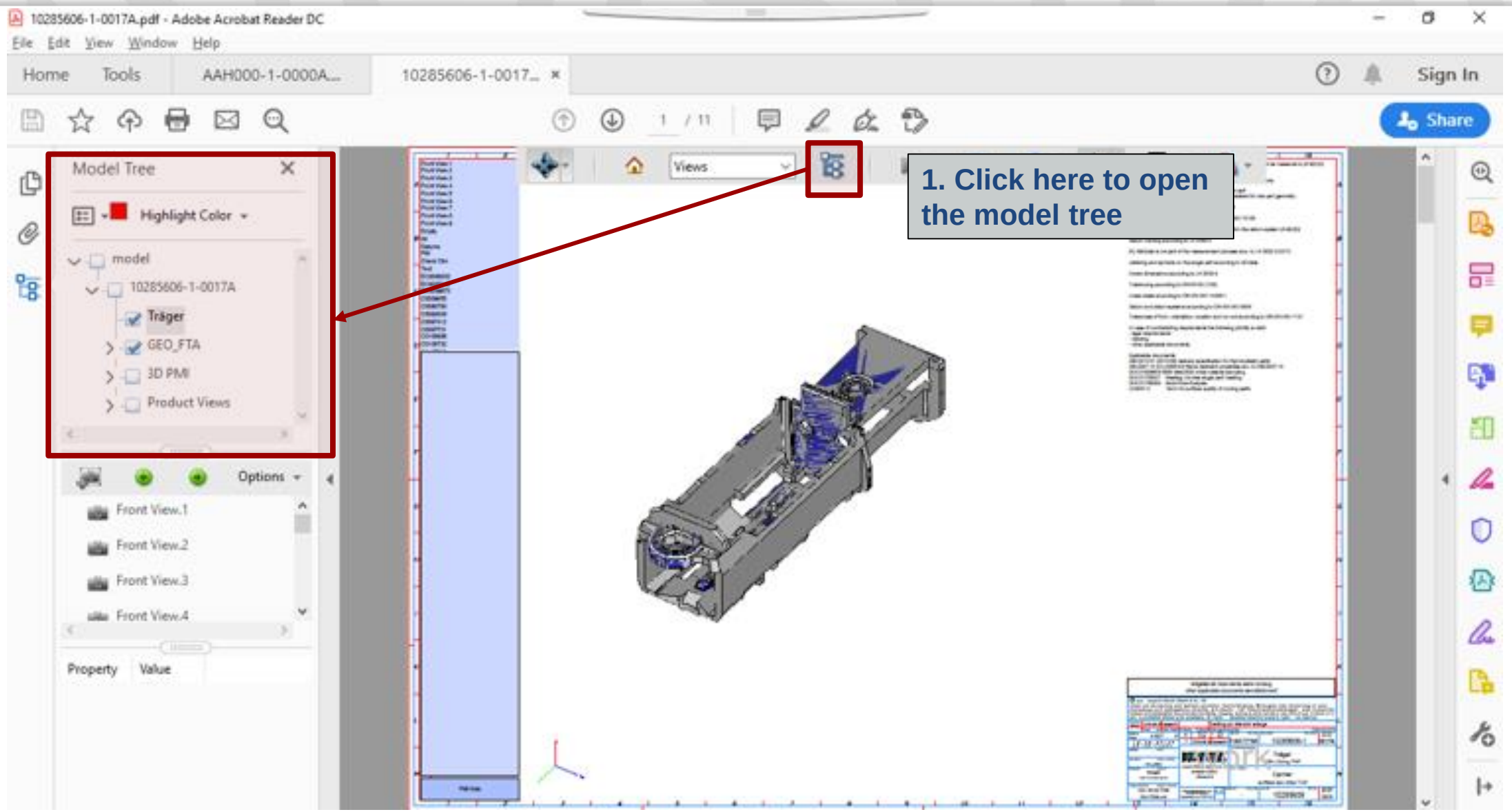




example 2



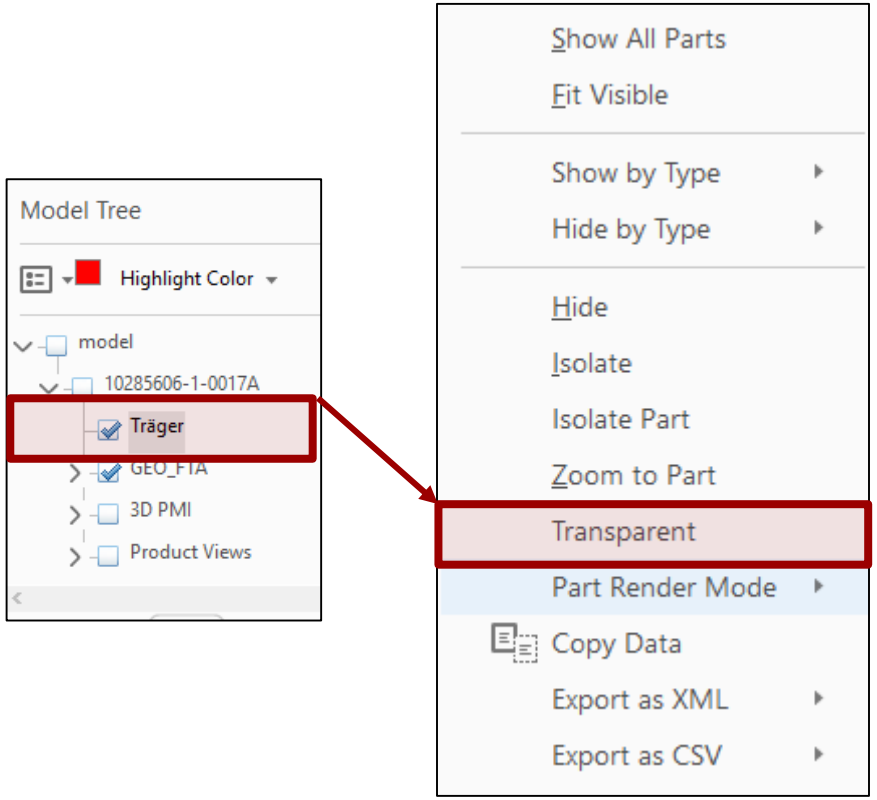
How to show all measure surfaces?

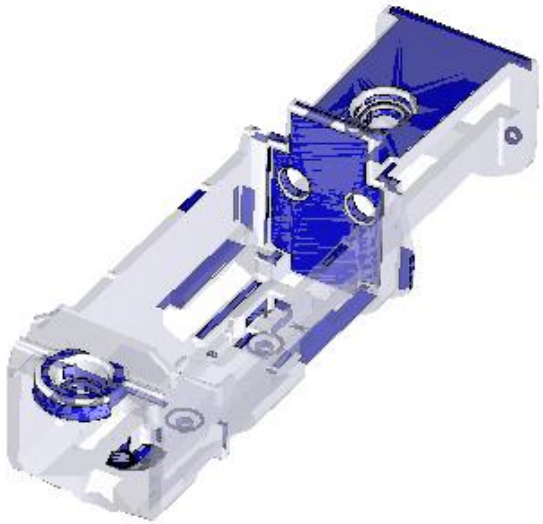


How to show all measure surfaces?

2. Right click to open the menu

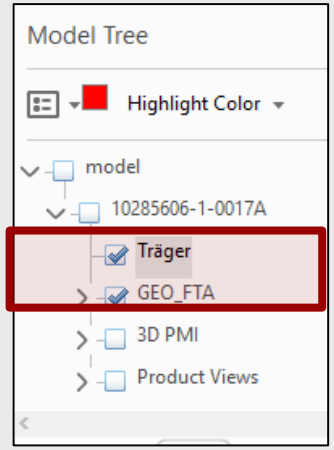
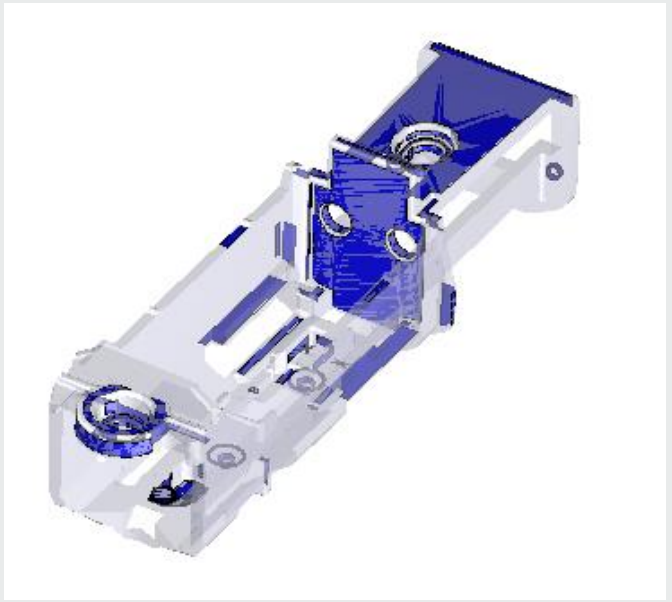
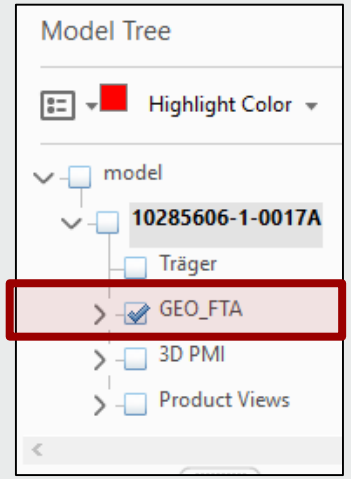
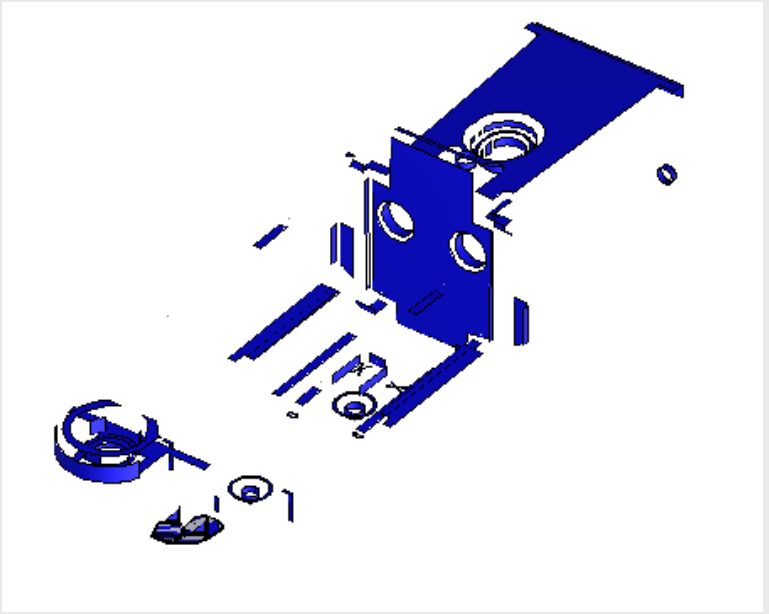
3. Click on “Transparent”



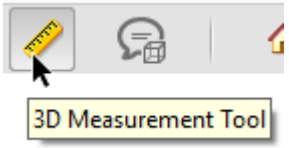


As result you get the Transparent 3D Model with all clearly visible measure surfaces.

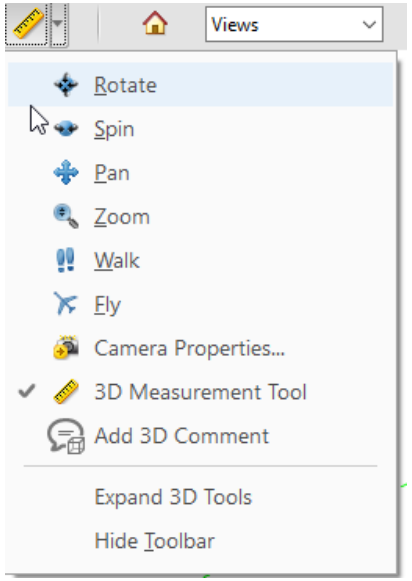
How to show all measure surfaces?

Model + Measure Surfaces	Measure Surfaces
 	 

measuring tool

Various measurement functions can be activated with the "3D measurement tool“ 

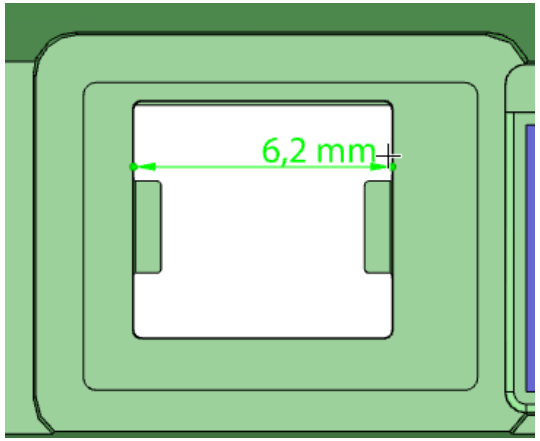
button.



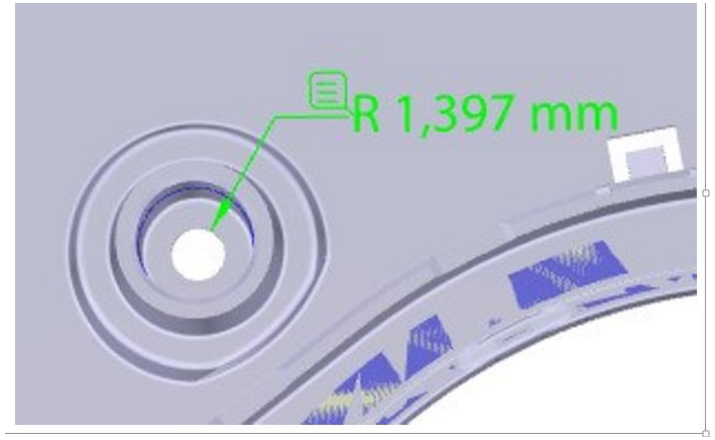
The respective functions are indicated by an info text.

With these measurement functions it is possible to measure dimensions that have not been entered, e.g. Measure distances, radii etc. and then also print out these dimensions (see examples below).

example 1



example 2



Cutting tool

A cross-sectional view can be activated with the "Switch cross-section on / off" button (see example).
Via the associated pulldown menu (Fig.1) a window can be opened in which the properties of this cross section can be set (Fig. 2).

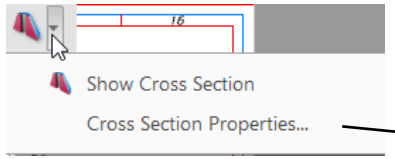


Fig.1

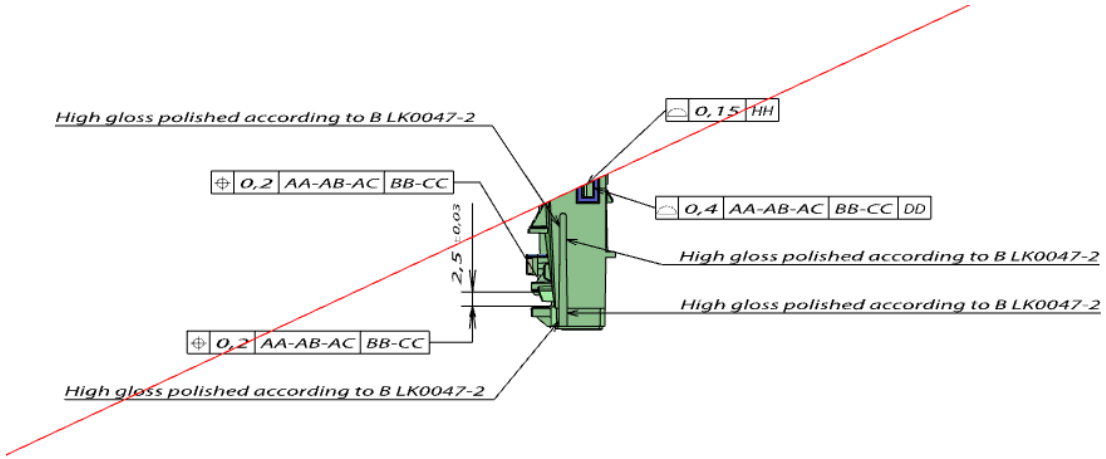
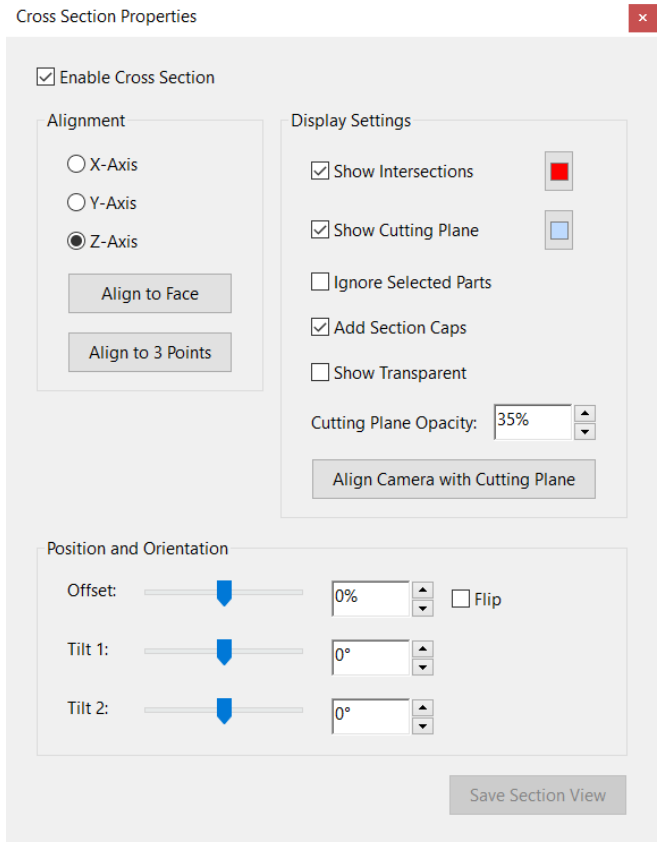


Fig.2

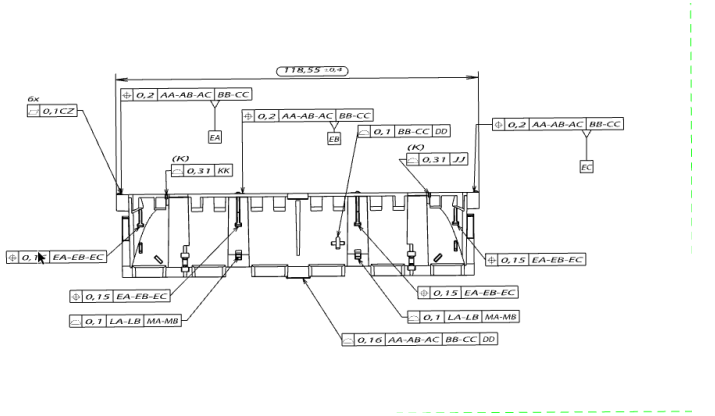


Further display options / printing

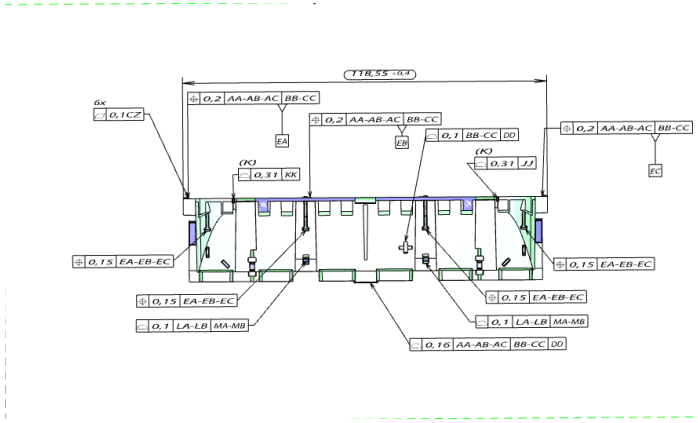
With the pulldown menus of the buttons  "Model rendering mode" and "Activate additional lighting" it is possible to change the part view, so that e.g. Contours or details become more visible (see example).

examples

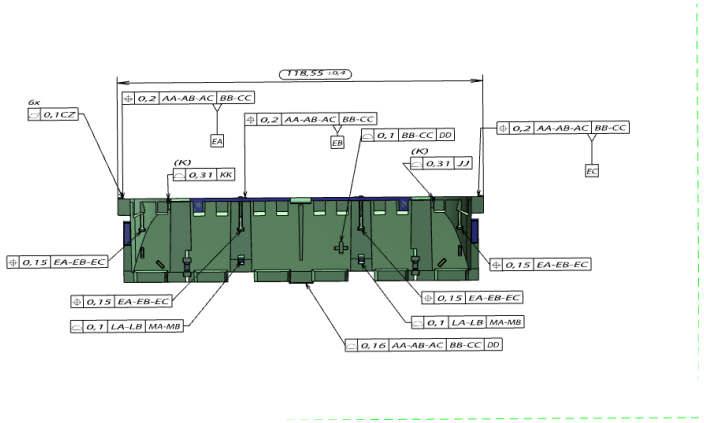
Standardview



filled view



filled view and Daylight

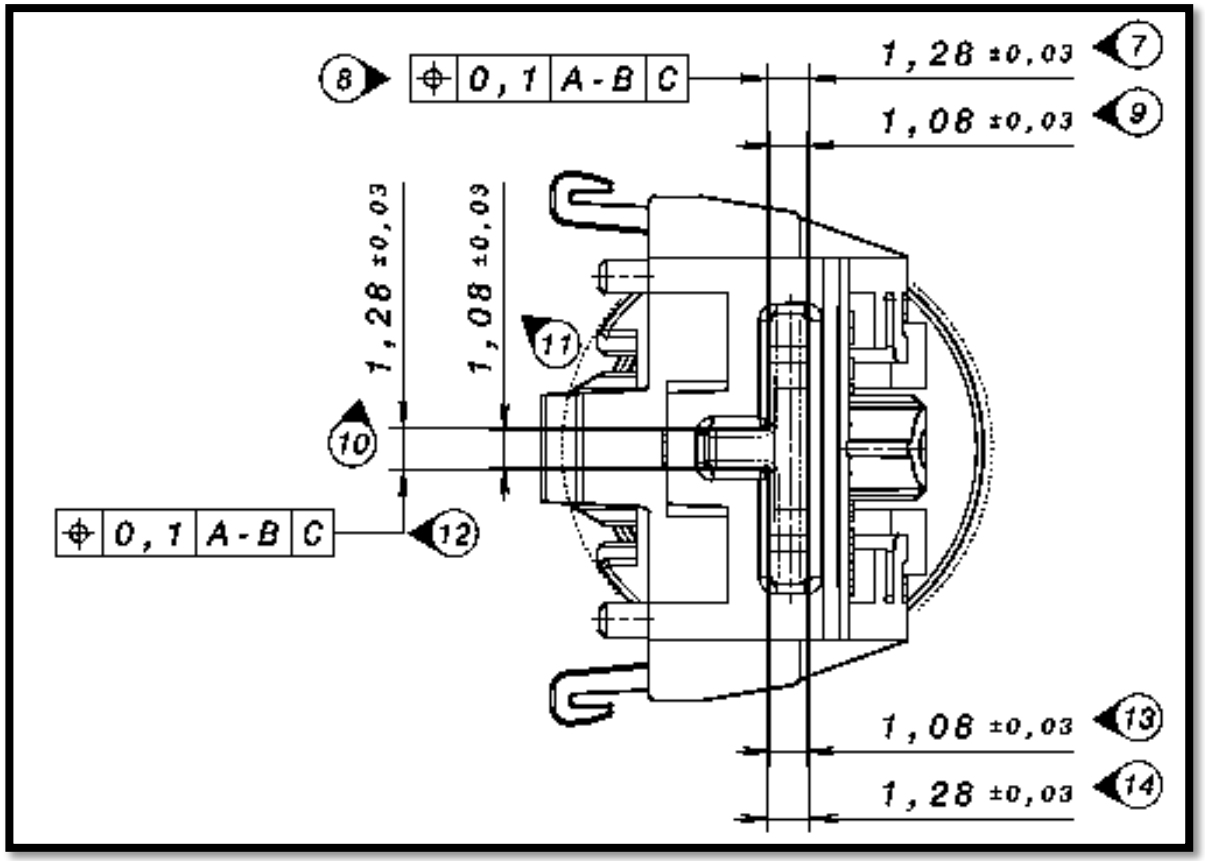


Printing:

Basically, all views that have been created with the different tools can also be printed.
This is done using the normal print function of Adobe Acrobat Reader.

Clear identifying of measure features 2D

Conventional 2D drawing use numbering and certification-stamping for
a clearly identification of the measure features (see example of a 2D drawing)



View references, dimensions or texts

The 3D PDF offers a NEW possibility,
to identify the measure features clearly.
Every measure feature has its own clearly
feature name which is assigned to
a view and a measure surface
(red marked area).