Drawing Creation Tutorial

Creating Snapshot Views



PROCESS, POWER & MARINE

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SESSION 6

Creating Snapshot Views

Objective

By the end of this session, you will be able to:

Snapshot a view in 3D model and use the preview option

Overview

In this lesson, we will look at creating snapshot views for drawings and reports. The **Snapshot View** command provides a quick and easy way to convert a 3D graphic view into a drawing. Snapshot views are typically used for non-standard view orientations. When you select **Tools > Snapshot View** in any 3D task, a ribbon appears allowing you to pick a composed drawing component, name the snapshot view, and assign a view style. When you click **Finish**, the software captures the view in the look direction of the 3D view. It also copies the definition of the filter used to define the workspace and stores it with the view.

The volume for the snapshot view is automatically created (in a hidden state) when you click **Finish** on the **Snapshot View** ribbon. The volume is defined in one of two ways:

- If there is view clipping in the graphic window, the volume is created the same size as the clipping boundary.
- If there is no view clipping in the graphic window, the volume encompasses the view range in the active graphic view.

To better control the size of the volume, it is recommended to take snapshots from a clipped 3D view.

You can check the **Generate Preview** box on the **Snapshot View** ribbon to create a preview that displays the visible objects from the 3D view permitted by the view style. Visible edges in the preview are drawn with a black continuous line style, and hidden edges are not drawn. The snapshot preview does not include labels or dimensions, even if they are in the view style.

On the next pages, we will demonstrate how you can create a snapshot view and then generate a preview from the 3D model.

Create New Drawing

- 1. Switch to the **Drawing Console** window.
- 2. Expand the Creation Labs\05 folder.
- 3. Right-click Labs\05\Equipment, and select New Drawing.

The **Drawing Sheet General Properties** dialog box displays.

4. Type **Snapshot U01** in the **Name** field on the **Drawing Sheet General Properties** dialog box.

TIP The Layout Template and Border Template fields remain populated, so you do not need to edit them.

5. Click **OK** on the **Drawing Sheet General Properties** dialog box.

The software opens the new drawing in a SmartSketch Drawing Editor window.

Create Snapshot View

- 1. Switch to the Smart 3D window.
- 2. Click File > Define Workspace.

The **Define Workspace** dialog box displays.

3. Select More from the Filter list. Then, select Drawings Creation Filters\05\U01 Workspace.

The only change in the workspace is to remove the **U01 2 Points** volume, so that only objects from the **System** tab are included in the workspace definition for the creation of the snapshot. The volume could have been hidden to prevent it from showing in the snapshot view.

4. Click **OK** on the **Define Workspace** dialog box.

The software populates the workspace with modeled objects.

- 5. Click **Common Views** A, and select the face that is looking **Northeast and Down**.
- 6. Click Fit W.

The software fits all the objects into the graphic view.

7. Click Tools > Snapshot View.

The **Snapshot View** ribbon displays.



A snapshot view creates a drawing view query based on the workspace definition. The volume for the snapshot view is automatically created when you click **Finish** on the **Snapshot View** ribbon. It is defined in one of two ways:

a. If there is no view clipping in the graphic window, the volume encompasses the view range in the active graphic view.

b. If there is view clipping in the graphic window, the volume is created the same size as the clipping boundary.

The snapshot volume is initially created in a hidden state.

8. Select **More** from the **Drawing** type list on the **Snapshot View** ribbon:

The **Select Drawing Type** window displays.

- 9. Expand the Drawings\Creation Labs\05 folder on the Select Drawing Type window.
- 10. Select **Equipment**.
- 11. Click **OK** on the **Select Drawing Type** window.
- 12. Type Snapshot Isometric View01 in the View Name field.
- 13. Select **More** from the **View** style list.

The Select View Style dialog box displays.

- 14. Select Orthographic\Equipment Isometric on the Select View Style dialog box.
- 15. Click **OK** on the **Select View Style** dialog box.
- 16. Select More from the Space Folder list.

The **Select Space Folder** dialog box displays.

- 17. Select the space folder **Drawings Creation Labs\05**.
- 18. Click **OK** on the **Select Space Folder** dialog box.
- 19. Select Generate Preview.
- 20. Click Finish to create the snapshot.



The **Generate Preview** option produces a simple preview of the graphics at the time that the snapshot view is placed in the drawing. Visible edges in the preview are drawn with a black continuous line style and hidden edges are not drawn; in other words, the graphic rule settings in the view style are ignored.

The snapshot preview does not include labels or dimensions, even if they are in the view style.

Despite ignoring the rules in the view style, the snapshot preview does display only the objects permitted by the view style.

The snapshot preview does not display the objects that have been hidden in the 3D graphic window.

The snapshot preview ignores the **Selected Set** option on the **Snapshot View** ribbon and still displays all of the objects in the graphic view according to the criteria above.

- 21. Press ESC to exit Snapshot View.
- 22. Expand the **Drawings Creation Labs** and **05** space folders on the **Space** tab of the **Workspace Explorer**.

A new volume with same name as the snapshot view displays in the folder.

Place Snapshot View

- 1. Switch to the SmartSketch Drawing Editor window.
- Maximize the drawing window in SmartSketch Drawing Editor.
- 3. Click Fit .
- 4. Click **Place Snapshot View** from the toolbar.

The Place Snapshot View ribbon displays.



The View Name list contains all of the unplaced snapshots associated with the drawing's parent component. The Place Snapshot View ribbon initially displays the 'oldest' unplaced snapshot in the View Name list. Use the list, if necessary, to change what view to place.

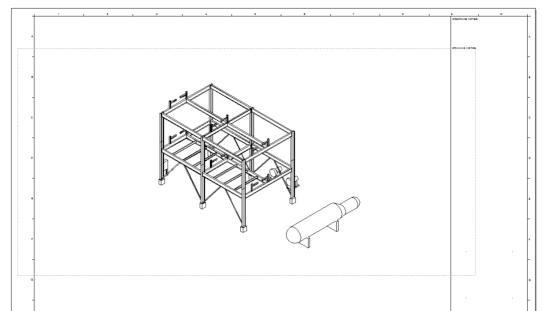
The **Place Snapshot View** ribbon initially displays the **View Scale** as **Fit To Scale**. To place a snapshot with this scale, drag the cursor in the drawing window to create a rectangle of the required size. If a scale is chosen, as is done in this lab, the size of the view is determined by the scaled size of the snapshot volume and it is placed with a single click

5. Select Architectural Scales from the View Scale list.

An additional list displays on the right end of the ribbon.

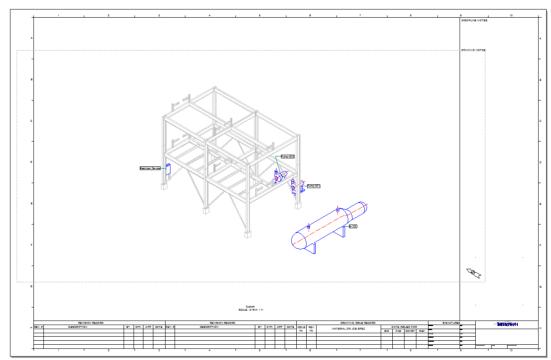
- 6. Select 3/16 in:1 ft as the scale from the newly-added list.
- 7. Move the cursor over the drawing window.

A graphic view with preview appears attached to the cursor.



8. Click within the border area to place the view.

Right-click the view boundary, and select **Update View**.
When the update completes, the view contents should appear similar to the picture below:



10. Click **File > Exit** to exit **SmartSketch Drawing Editor**. You do not need to save the drawing because the software automatically saved during the update of the view.