

Ferrovial

by **CGS Labs**



Customizing Data in the Polygon Table in Layout

Tutorial





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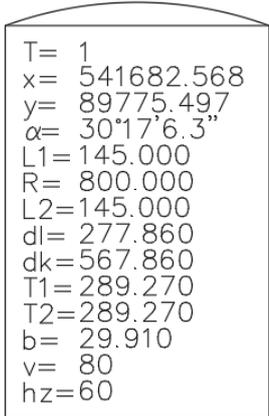
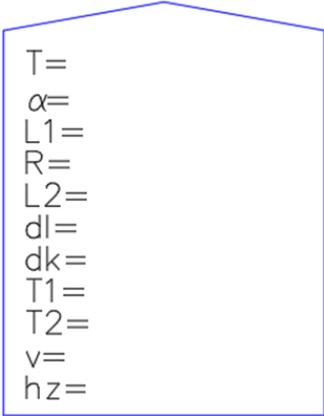
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Introduction

In this tutorial, we will show how to customize the 'polygon table' that is automatically created at each tangent polygon (TP) vertex in a layout.

Below is an example of a data table image with default settings on the left, and the image on the right shows how we modified this data.

Before:	After:
	

Modifying DWG Drawings with "Polygon Table" Blocks

The polygon table shown in the previous image is actually a block that is saved in its own DWG drawing and can be found on your computer at the following path:

C:\Users\[username]\AppData\Roaming\CGSA\CGSApps 2025[Language]\LABELS\Ferrovia\PolyTable

**Note: Replace [username] with the actual user account name (e.g., "Jack") and [Language] with "SLO" for Slovenian or "ENG" for English, depending on the language of the application.*

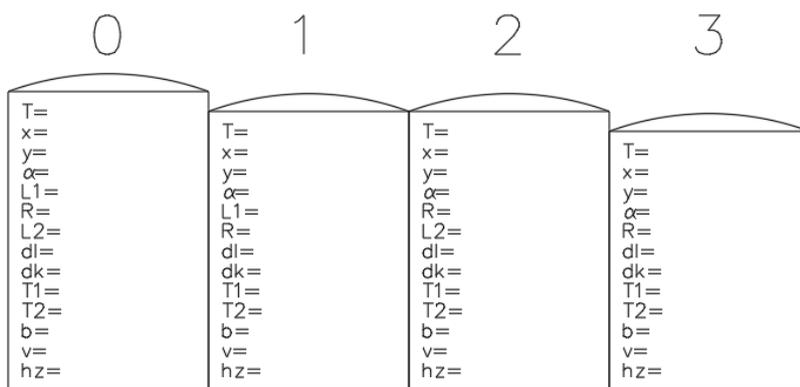
	ara_polytable10.dwg	03/03/2023 14:31	DWG File	66 KB
	ara_polytable11.dwg	03/03/2023 14:31	DWG File	66 KB
	ara_polytable12.dwg	03/03/2023 14:31	DWG File	68 KB
	ara_polytable13.dwg	03/03/2023 14:31	DWG File	66 KB
	ara_polytable20.dwg	03/03/2023 14:31	DWG File	66 KB
	ara_polytable21.dwg	03/03/2023 14:31	DWG File	66 KB
	ara_polytable22.dwg	03/03/2023 14:31	DWG File	66 KB
	ara_polytable23.dwg	03/03/2023 14:31	DWG File	66 KB

In this folder, you will find 8 DWG files because we have different combinations of alignment configurations, which result in varying data being displayed in the block. For example, in cases like Straight - Curve - Straight, there is no transition length (L1, L2) shown, as there is no spiral.

The block file name is composed of two numbers.

- The first number is either 1 or 2, where:
 - 1 indicates the left side,
 - 2 indicates the right side.

** This defines whether the polygon table will be drawn on the left or right side of the alignment.*
- The second number is one of 0, 1, 2, or 3, which represents different configurations:
 - 0: Spiral - Curve - Spiral,
 - 1: Spiral - Curve – Straight,
 - 2: Straight - Curve – Spiral,
 - 3: Straight - Curve – Straight.



Example file name: ara_polytable10:

In this example:

- The 1 means that the polygon table will be drawn on the left side of the alignment,
- The 0 represents the configuration "Spiral - Curve - Spiral."

1. Open the block and change parameters

1. Open the drawing "ara_polytable10".
2. Right-click on the block within the drawing and select the "Block Editor" option.

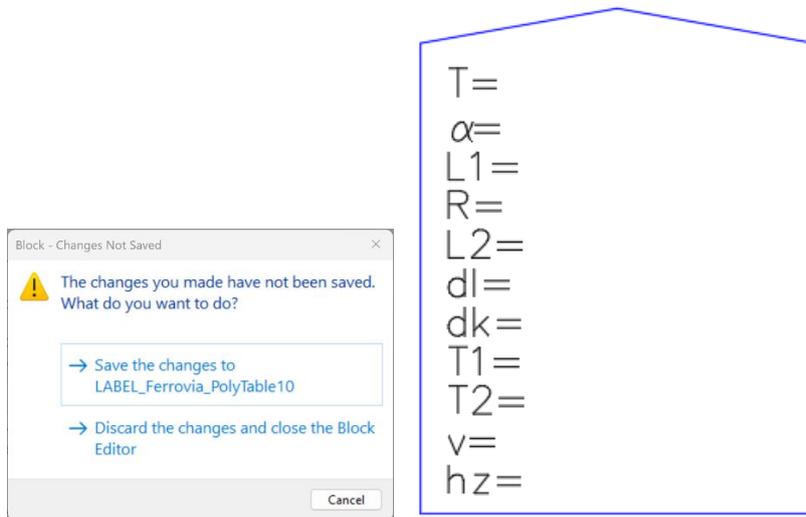
3. You can now make the following changes:

- Delete parameters that you do not want to display in the drawing.
- Edit polylines or change colors. These edits are at your discretion.
- You may also rename parameters on the left side.
- You can also change the style of the text on the right, such as the style of the attributes.

```

J= N_VERT
α= DFI_VERT
L1= SPI1_L
R= ARC_R
L2= SPI2_L
dl= ARC_L
dk= CURV_L
J1= TAN1_L
J2= TAN2_L
y= CURV_V
hz= CURV_HZ
  
```

4. Once you have finished editing, click "**Close Block Editor**" in the menu at the top. It opens a new dialogue box, where you click the "Save the changes to..." option.



5. Run the 'ATTSYNC' command. In the command line, select the 'select' option and then click on the block in the drawing. After that, click the 'Yes' option.

- This command updates all block attributes to match the block definitions.

6. Then save the drawing and close it.

***If you don't close it, you may encounter issues with refreshing this table.**

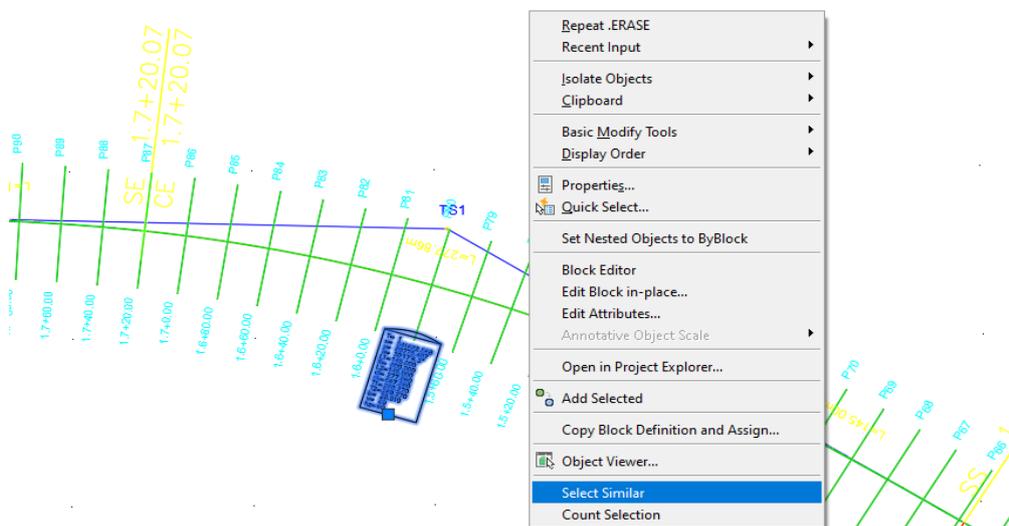
1.1 Customized Polygon Table in Layout in New Drawing

For new drawings, this new block will be automatically inserted when drawing the alignment.

1.2 Customized Polygon Table in Layout in Existing Drawing

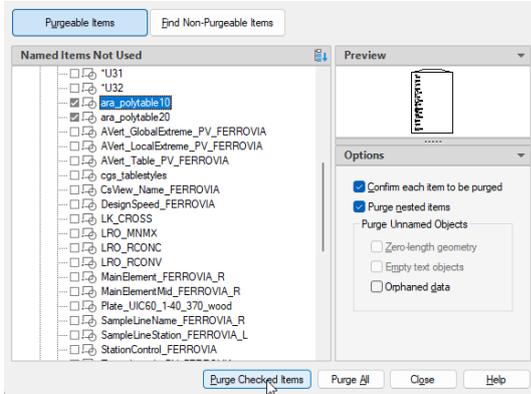
If you want to update polygon tables in existing drawings, follow these steps:

1. Open the drawing where you already have the alignment and polygon tables displayed in the layout.
2. Next, select all the existing table blocks in the drawing and delete them. You can use the command Select Similar to assist with the selection.

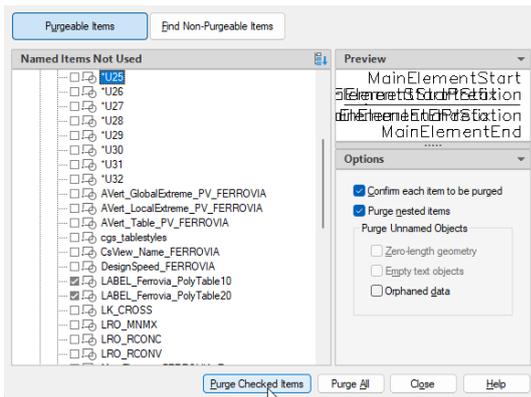


3. Then, you need to purge these blocks from the drawing.

- Run the "**Purge**" command.
- First, select the table blocks (e.g., ara_polytable10, ara_polytable20, etc.), and in the dialog box, click the "Purge Checked Items" button. This opens a new dialog box, where you click "Purge All Checked Items" again.

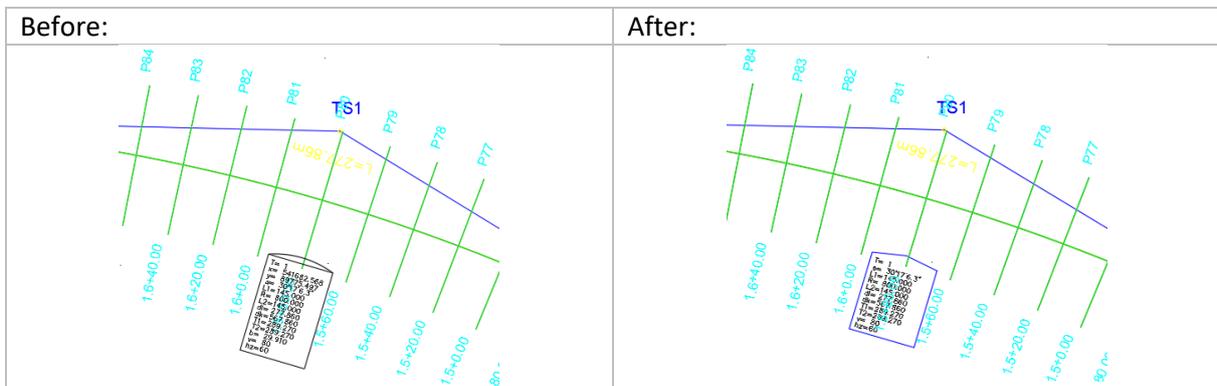


- Then, select the label blocks (e.g., LABEL_Ferrovia_Polytable10, LABEL_Ferrovia_Polytable20, etc.), and in the dialog box, click the "Purge Checked Items" button again. This opens a new dialog box, where you click "Purge All Checked Items" again.



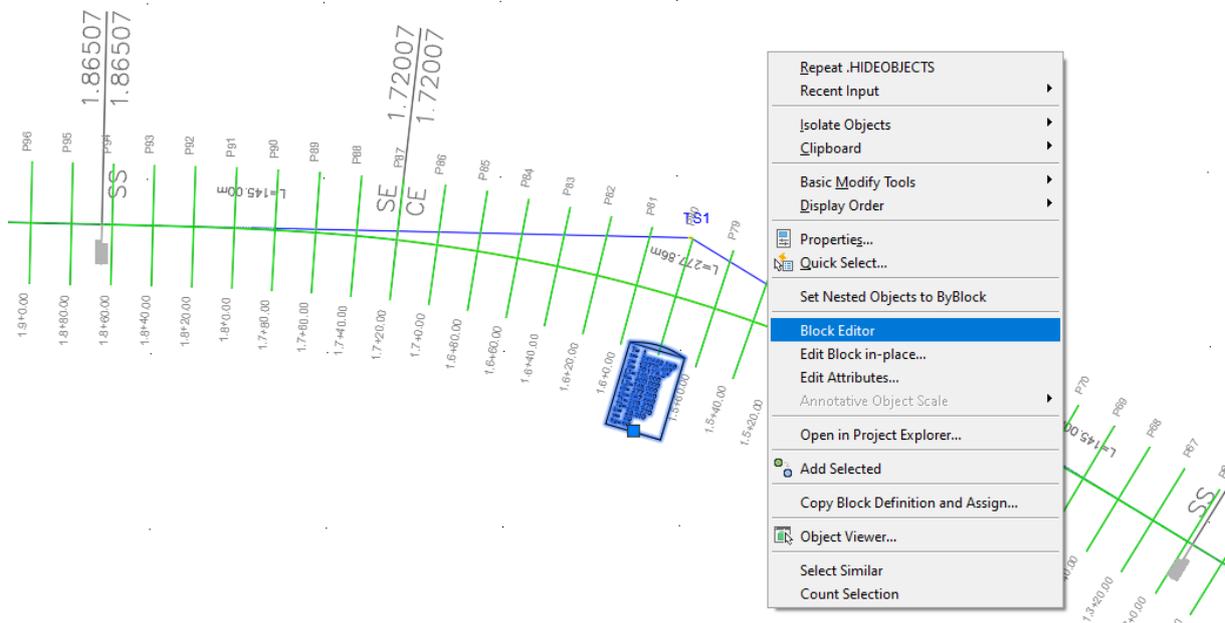
- Finally, close the dialog box by clicking "Close".

4. Next, in the layout, run the "Refresh Labels (22F9)" command and select the option "Redraw horizontal elements for current axis", then click OK. You should now see the updated table in the drawing.



Directly Modifying the 'Polygon Table' in the Existing Railway Drawing

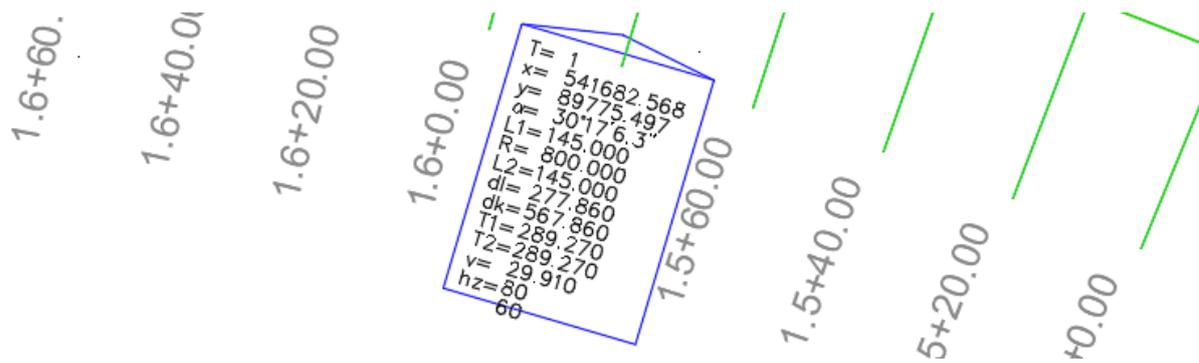
1. Start by opening the drawing that already contains the railway alignment and polygon tables.
2. Right-click on the polygon table block you wish to modify and select **"Block Editor."**



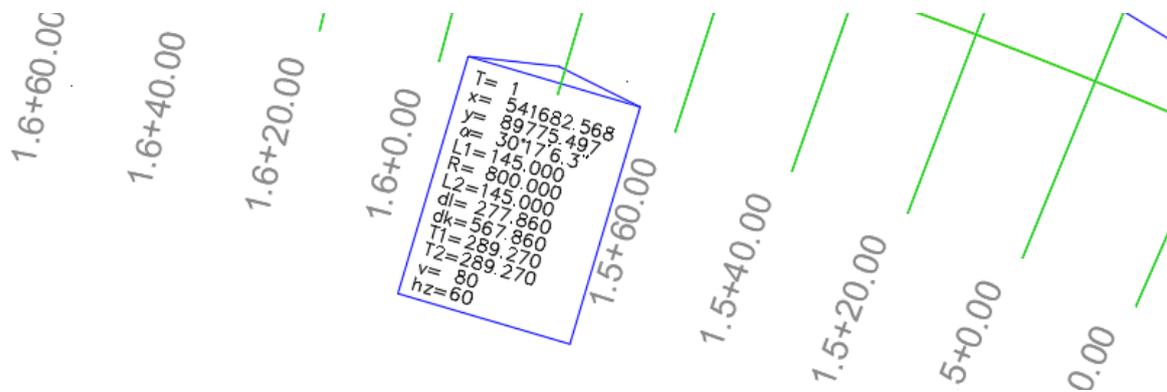
Make the desired changes to the block. Once you have finished editing, click **"Close Block Editor"** in the menu at the top. It opens a new dialogue box, where you click the "Save the changes to..." option.

Before:	After:
<pre> T= N_VERT x= X_VERT y= Y_VERT α= DFI_VERT L1= SPI1_L R= ARC_R L2= SPI2_L dl= ARC_L dk= CURV_L T1= TAN1_L T2= TAN2_L b= BISECT v= CURV_V hz= CURV_HZ </pre>	<pre> T= N_VERT x= X_VERT y= Y_VERT α= DFI_VERT L1= SPI1_L R= ARC_R L2= SPI2_L dl= ARC_L dk= CURV_L T1= TAN1_L T2= TAN2_L v= CURV_V hz= CURV_HZ </pre>

3. You may notice that some changes are visible in the drawing, but they may not fully reflect what you saved in the block:



To correct this, run the command **ATTSYNC**. In the command line, select the **"Select"** option, then choose the block. After that, click the **"Yes"** option. You can now verify that the table appears exactly as you modified it in the block:



If you run the command "Refresh Labels (22F9)," the table will remain unchanged.

These changes are only visible in the existing drawing you're editing and not in new DWG files!