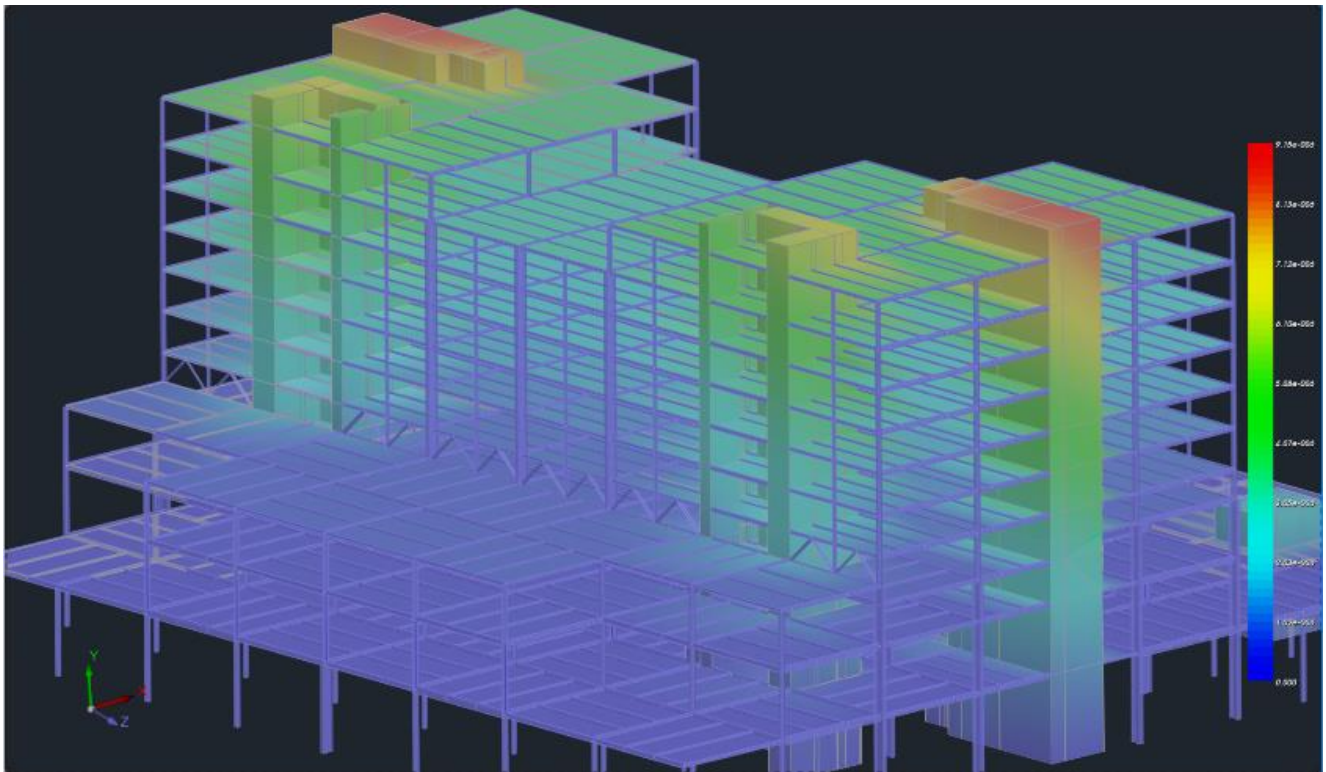




SCADA Protm
Structural Analysis & Design

User's Manual

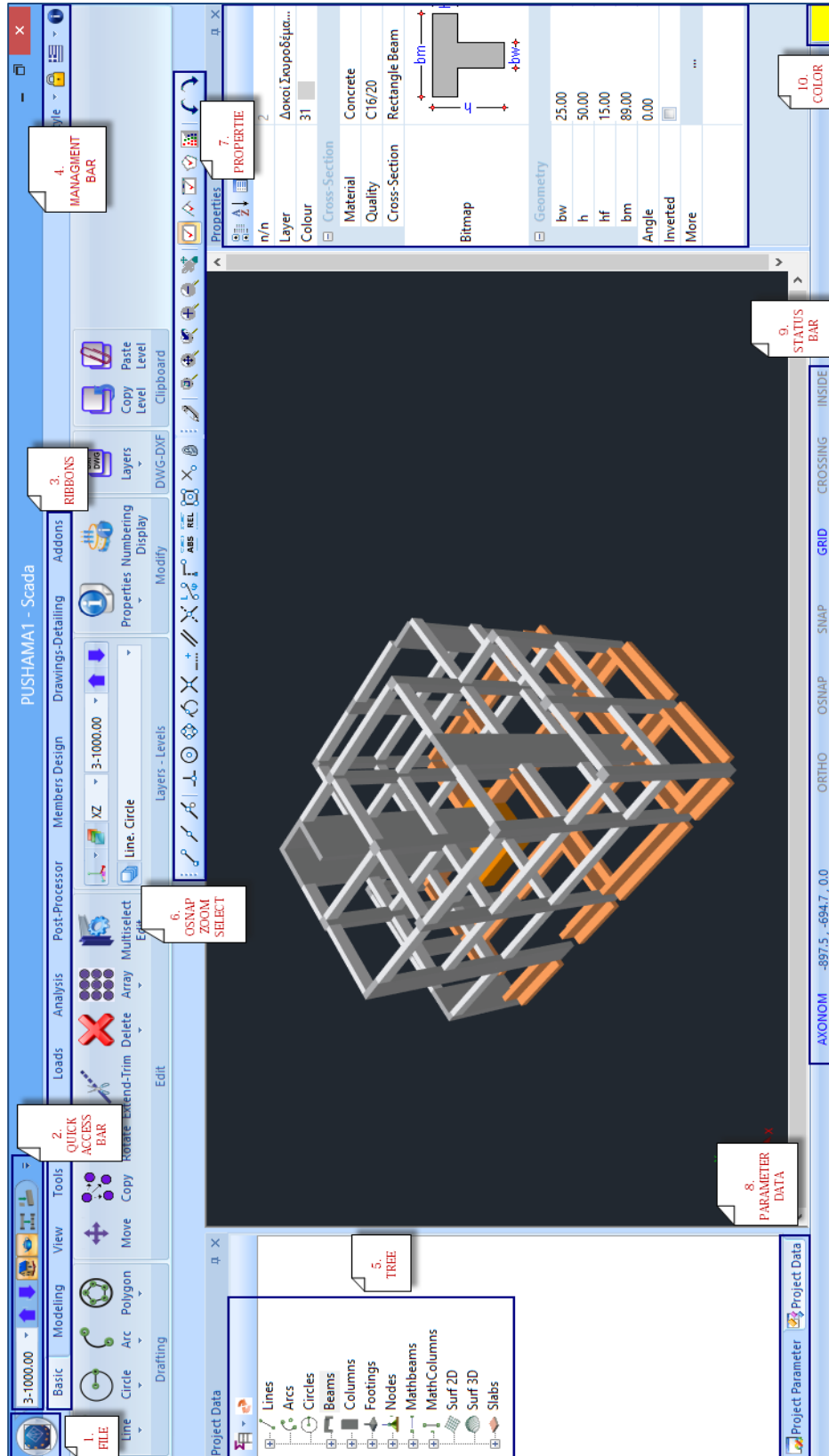
3.VIEW



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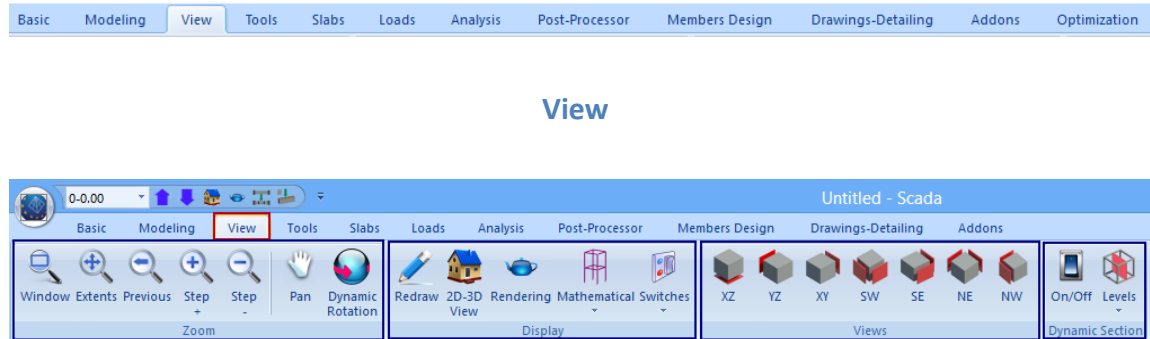
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I. THE NEW UPGRADED INTERFACE of SCADA Pro



II. DETAILED DESCRIPTION OF THE NEW INTERFACE

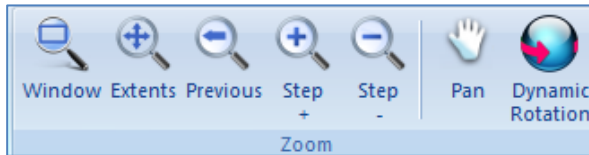
In the new upgraded SCADA Pro, all program commands are grouped in 12 Units.



The 3rd Unit entitled “View” includes the following four groups of commands:

1. **Zoom**
2. **Display**
3. **Views**
4. **Dynamic Section**

1.1 Zoom



The command group “Zoom” contains commands to make changes on the displayed size of a drawing on the computer screen. The Zoom commands are:

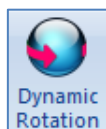
- Zoom Window
- Zoom Extends
- Zoom Previous
- Zoom In (Step +)
- Zoom Out (Step -)

1.2 Pan



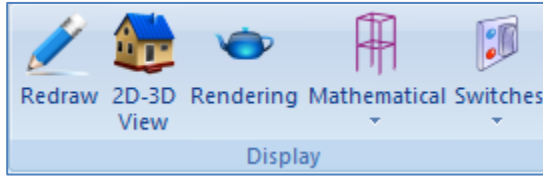
The tool “Pan” reflects the mouse movements on the screen so we can move around the screen effortlessly.

1.3 Dynamic Rotation



The tool “Dynamic Rotation” allows the rotation around the screen of the entire three-dimensional structure.

2. Display



The command group “Display” contains significant presentation commands.

2.1 Redraw



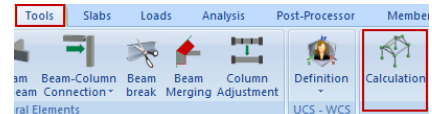
The tool “Redraw” simply repaints the screen, without drawing residuals.

2.2 2D-3D

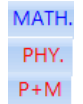


The command “2D-3D” is used to toggle between 2D and 3D representation.

⚠ The requirement for the 3D representation is the calculation of the mathematical model of the project. (Unit Tools>>Calculation)



In the 3D view, the user can choose the type of model display between the mathematical, the physical, or both of them. Select the type by clicking on the horizontal “status bar” (See §INTRODUCTION) or use the command “Mathematical” (See below).



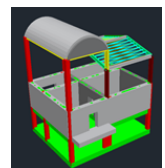
2.3 Rendering




The command “Rendering” is used to create a virtual representation of the structure.

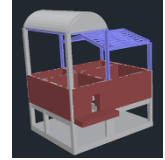
⚠ A precondition for rendering is the calculation of the mathematical model of the project. (Unit Tools>>Calculation)

In the photorealistic display, the elements are colored according to the colors of the corresponding layer.

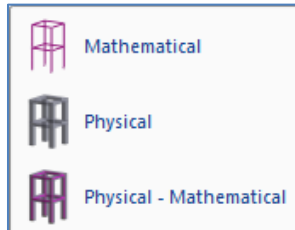
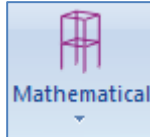


With one click on the colored button of the horizontal status line

OPBOF. OSNAP BHMA KANABOZ METOMH ENTOZ , the elements are colored according to their material (concrete-gray, metallic-blue, timber-brown, masonry-beige).

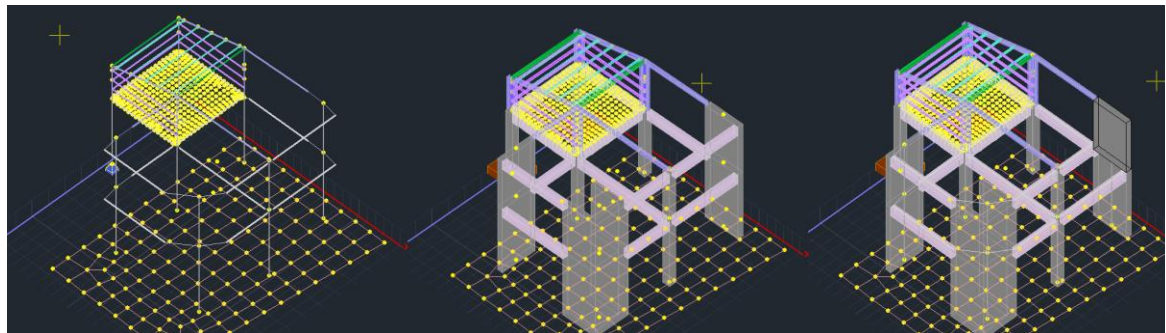


2.4 Mathematical



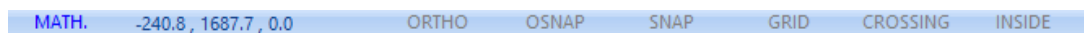
This command is used to toggle between mathematical, physical, and both models 3D representation.

The sequential selection of these three options alternates the display type of the model.

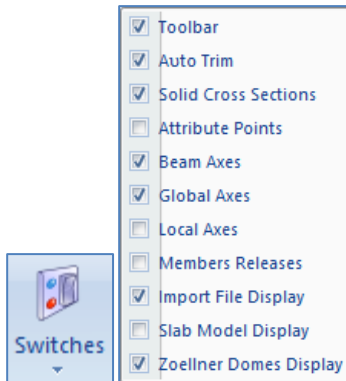


⚠ A precondition for these representations is the calculation of the mathematical model of the project. (Unit Tools>>Calculation) and the 3D view.

⚠ A different way to do the same thing is by clicking directly on the horizontal status line.



2.5 Switches




Depending on the case the tool “Switches” can be enabled or disabled. Specifically:

- “Toolbar” enabled → the toolbar on the interface is displayed
- “Auto Trim” enabled → a beam that crosses over a column is trimmed

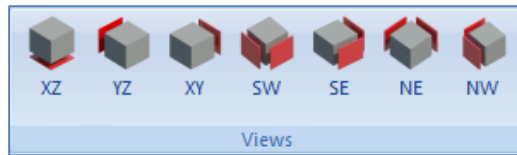
⚠ Deactivate when you want to insert a Shape Footing under basement walls

- “Solid Cross Section” enabled → color view of the solid cross-sections
- “Attribute Points” enabled → the columns’ input points and the beam’s input axes are displayed
- “Beam Axes” enabled → the three local axes of the beam, the centroid, and the two laterals are displayed
- “Global Axes” enabled → the global axes are displayed
- “Local Axes” enabled → the local axes of the members are displayed

⚠ The local axes  are represented by the corresponding color:
 Green: y axis,
 Blue: z axis and
 Red: x axis

- “Members Releases” enabled → member releases are displayed
- “Import File Display” enabled → the import DWG or DXF file is displayed
- “Slab Model Display” enabled → the slab’s mathematical model is displayed
- “Zoellner Domes Display” enabled → Zoellner domes are displayed

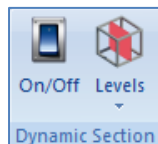
3. Views





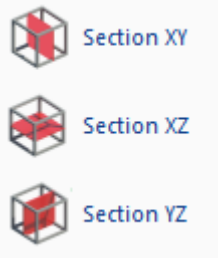
Each 2D View displays the corresponding side of the structure.

⚠ Precondition: the calculation of the mathematical model of the project. (Unit Tools>>Calculation)

4. Dynamic Section



In photorealistic visualization , the activation “ON”  of the command group “Dynamic Section” displays an intersection plane on the screen.



Move and turn the level by using the arrow or select the predefined intersection planes XY, XZ, YZ.

