

1-C Configurable Design – Exercise 4

Open *AMAConfigurations.dwg*.

Select the Rack Block shown on the screen. Select the Blue arrow in the middle of the rack and select the different configurations. This is an example of a 9 blocks combined into one. Each block was assigned to a visibility state in the Block Editor environment.

First we will create AutoCAD Blocks for each of the 3 work bench details. Name them, **WorkBench1000**, **WorkBench1500** and **WorkBench2500** accordingly. Select a common insertion point at the bottom left corner for each. Later we will reset them all to 0,0 but it is easier to work with them while they are not in the same place.

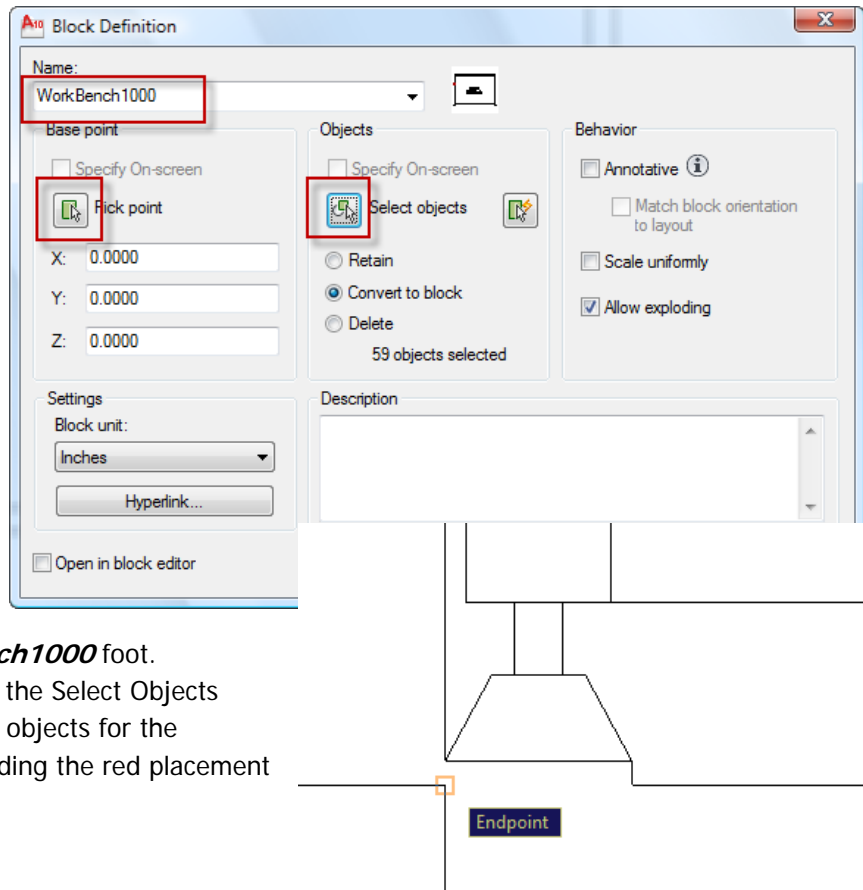
Dimensions and text will not follow the change in block, so you may want to embed the annotation in each block configuration. Included in the sample is an attachment point on a no-plot layer for rack attachment and a label for each.

Create Blocks for each of the 3 configurations

1. Go to AutoCAD Home Tab, Block Panel, select Create.



2. In the dialog box, select Pick Point and select the lower left corner of the **Workbench1000** foot.
3. In the dialog box, select the Select Objects button and select all the objects for the **WorkBench1000** including the red placement point.
4. Select Ok.
5. Repeat for Workbench1500 and Workbench 2500.



6. Create a new Block called **Work Bench Configurations**. Leave 0,0 for the Base Point, choose Select Objects and select all 3 of the work bench blocks.
7. Select Ok.

You should now have one block containing 3 nested blocks.

8. Select the new Block, and Select Edit from the Block Panel.
(The name **Work Bench Configurations** should already be highlighted)
9. Select Ok to enter the Block Editor.



Tip: While in the Block Editor, type UCSICON at the command line and enter OR then ON to move the UCSICON to the origin of this block. This will show you where 0,0 is at all times.

10. Show Block Authoring Palettes.
11. Place a Visibility Parameter just to the right of 0,0 (the UCSICON).

This Parameter this will serve as your control so enter a name.

12. Select the parameter,
13. right click and select Properties
14. Enter Visibility Name **WorkBenchConfig**

Create Visibility States for each configuration

15. On the Visibility Panel, select Visibility States.
16. Create New Visibility States for each of the 3 configurations, select the *Hide all existing objects in new state* option.
17. Name them **WorkBench1000**, **WorkBench1500** and **WorkBench2500**
18. Create one Visibility called All On, select

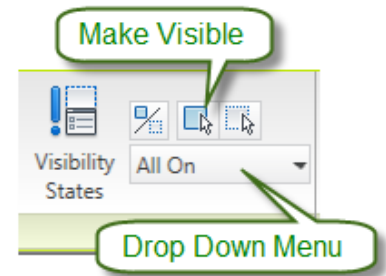
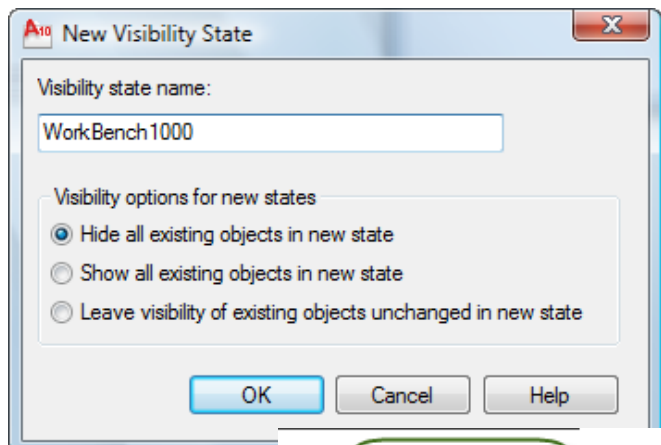
the Show All existing objects in new state.

19. Select Objects for each State
20. From the Visibility panel, select the First Visibility State from the dropdown menu.

Note: No geometry will be visible

21. From the Visibility Panel, select Make Visible. All objects will appear ghosted.
22. Select the appropriate block for the current Visibility State, Enter.
23. Repeat for each State.

Move all blocks to 0,0



24. From the Visibility panel, select the All On Visibility State from the dropdown menu.
25. Select all blocks, right click and select Properties
26. Change X and Y locations to 0. If you created your blocks with the same insertion point they should all move to 0,0 and be overlapping.

Tip: If any do not move, type BEDIT and select the offending block and move the bottom left corner to 0,0)

Activate the Default

27. From the Visibility panel, select the Visibility State you wish to be the default from the dropdown menu. In this example, select **WorkBench1000**.
28. Close Block Editor, selecting Save Changes to the block.

Try out your new Configuration Block

Select the new block and select the Blue Arrow. Select each of the 3 Visibility States. If you need to revise any of them you can repeat the steps from #8-28 verifying each step.

Move the **Insertion** point of the Rack to the **Node** of the Work Bench.

Try changing both the **Work Bench Configurations** and the **Rack Config** visibility states. For reference 01-03 fit the **WorkBench1000**, 04-06 fit **WorkBench1500** and 07-09 fit **WorkBench2500**.

Tip: Copy and Paste to a Tool Palette to be used in other drawings. See Customizing Tool Palettes in Help.

