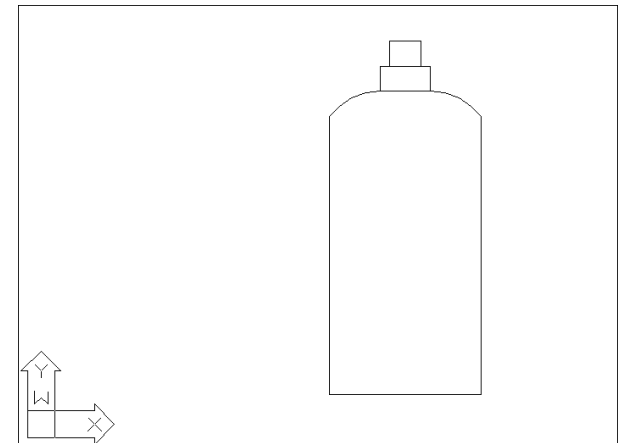
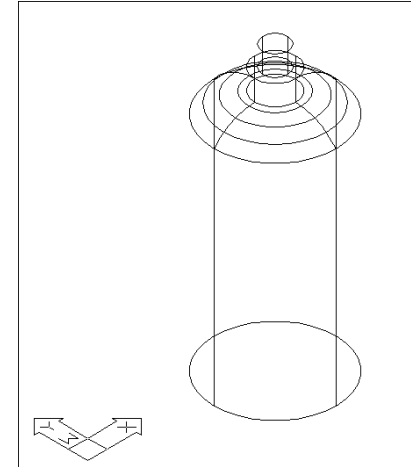




Chapter 16
Enhancing the Drawing
Process

Creating Sections 16.1

1. **Open** the drawing called 3DBottle.DWG
2. **Create** a layer called Section. Make it the current layer.
3. **Choose** Draw, Solids, Section.
4. **Choose** all 3 solids making up the bottle.
Select objects:
Specify first point on Section plane by [Object/
Zaxis/View/XY/YZ/ZX/3points]: **ZX**
Specify a point on the ZX-plane <0,0,0>:**quad of
bottle.**
5. **3DRotate** the section to a flat plane.



Slice 16.2

Slices a set of solids with a plane.

1. **Choose** Modify, Draw, Slice.

or

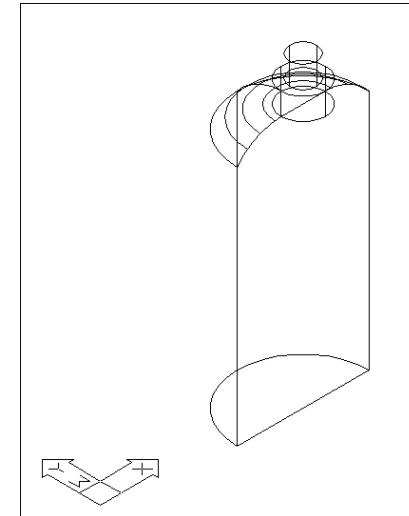
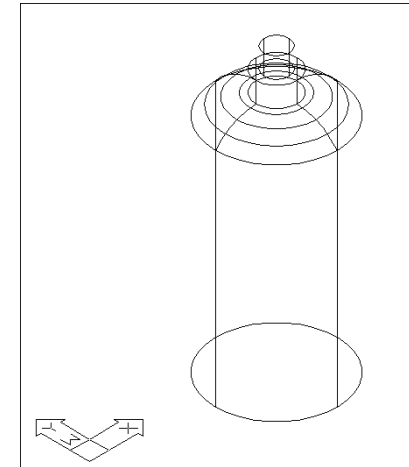
2. **Type** SLICE at the command prompt.

Command: **slice**

Slice plane by Object/Zaxis/View/XY/YZ/ZX/
<3points>: **ZX**

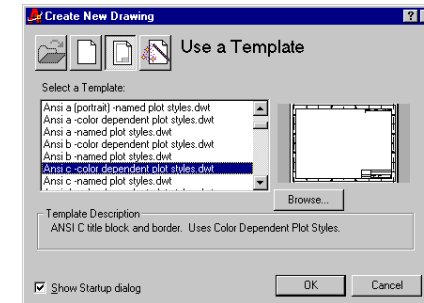
Point on ZX plane <0,0,0>: **quad of bottle**

Both sides/<Point on desired side of the plane>: pick the
side of the bottle you want to keep.

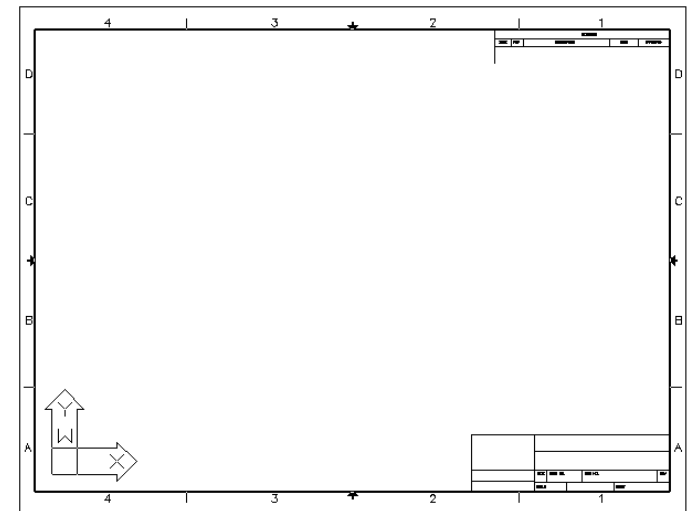


Create a SOLVIEW Viewport 16.3

1. **Choose** File, New...
2. **Choose** Use a Template from the startup dialog.
3. **Double Click** Ansi_c.dwt as the template file to start from.
This create a new drawing with a border and one floating Model Space.
4. **Double Click** MODEL from the Status Bar. Note the change to Paper Space.
5. **Double Click** PAPER from the Status Bar to toggle back to Model Space.

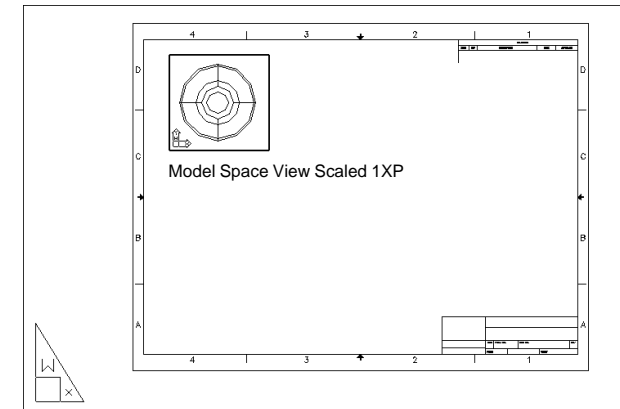
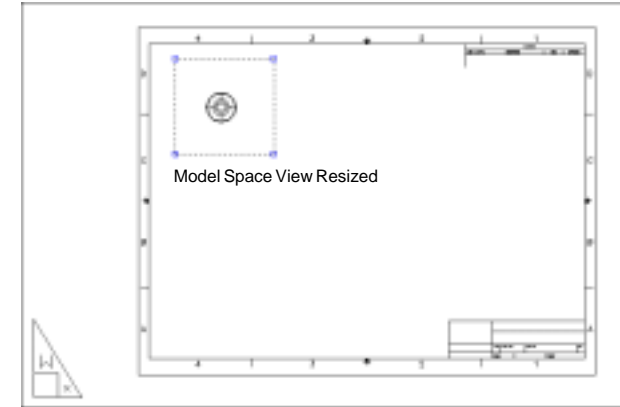
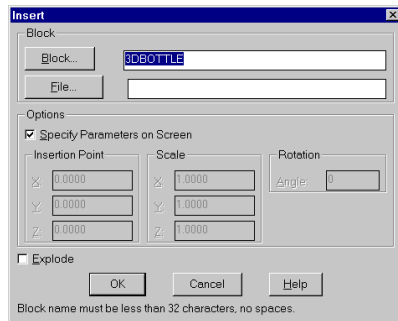


Drawing with a Model Space View



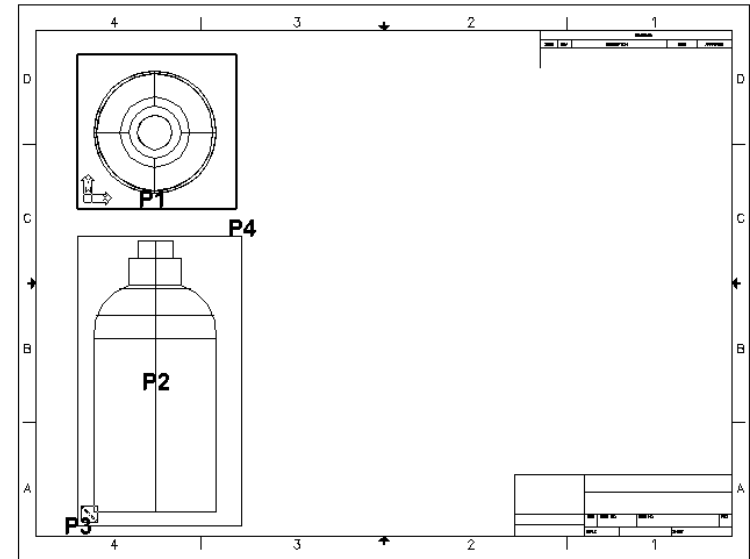
Insert a Drawing

1. **Choose** Insert, Block...
2. **Choose** the drawing called 3DBOTTLE.DWG to insert.
3. **Insert** the block anywhere in the Model Space view at a scale of 1 and rotation 0.
4. **Double Click** MODEL at the Status Bar and resize the Model Space view port in Paper Space.
5. **Double Click** PAPER at the Status Bar to return to Model Space.
6. **Type** ZOOM, 1XP at the command prompt.



Create an Orthogonal View

1. **Choose** Draw, Solids, Setup, View.
or
2. **Type** SOLVIEW at the command prompt.
Command: **solview**
Ucs/Ortho/Auxiliary/Section/<eXit>: **O**
Pick side of viewport to project: **P1**
View center: **P2**
Clip first corner: **P3**
Clip other corner: **P4**
View name: **front**
Ucs/Ortho/Auxiliary/Section/<eXit>:



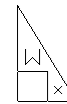
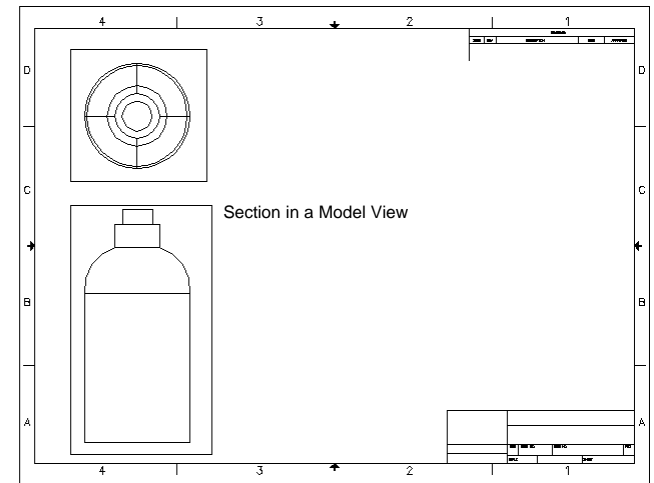
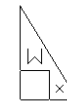
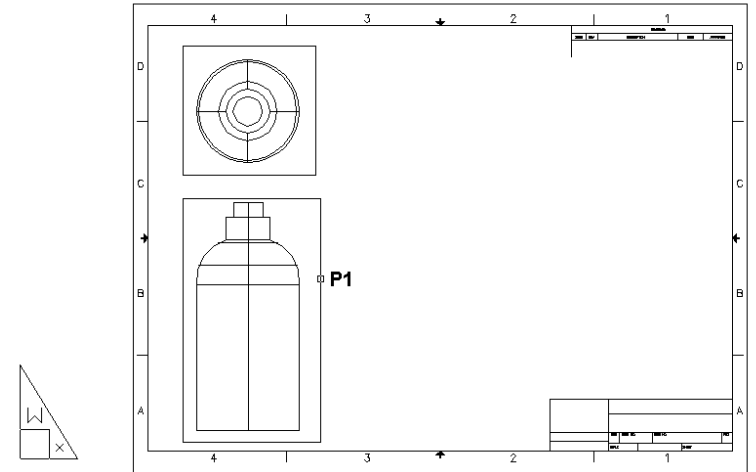
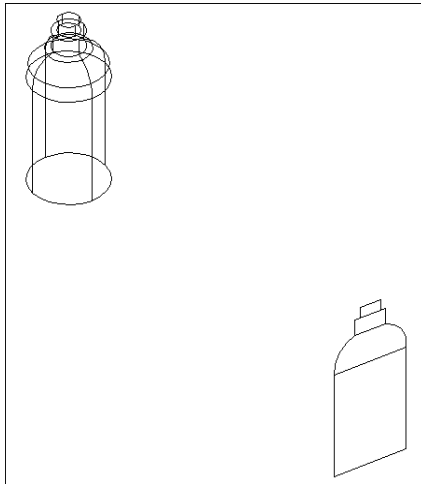
Create a 2D Section with Soldraw 16.4

Generates profiles and sections in viewports created with SOLVIEW.
 SOLDRAW can only prepare viewports that have been created with SOLVIEW.

1. **Choose** Draw, Solids, Setup, Drawing.
 or
2. **Type** Command: **soldraw**
 Select viewports to draw: **P1**
 Select objects: **1 found**
 Select objects: **enter**
 3 solids selected.

NOTE: If your object was an inserted block, you need to first explode it so it becomes a solid.

Resultant Section and Solid



Create a 3D View Using UCS 16.5

1. **Click** MSPACE and the plan view of the 3D Bottle.

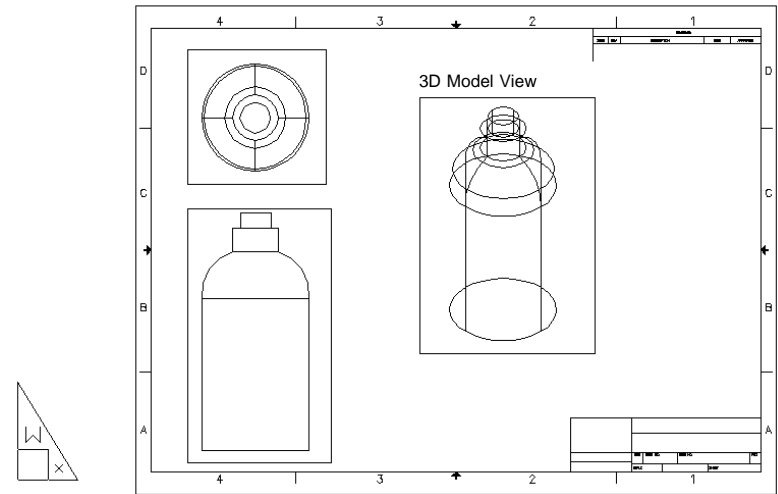
2. **Choose** View, 3D Viewport, SW Isometric...

3. **Type** UCS at the command prompt.
 Command: **ucs**
 Origin/ZAxis/3point/OBject/View/X/Y/Z/
 Prev/Restore/Save/Del/?/<World>: **view**
 This sets the current UCS parallel to the
 screen. We now need to save this ucs.

4. **Type** UCS at the command prompt.
 Command: **ucs**
 Origin/ZAxis/3point/OBject/View/X/Y/Z/
 Prev/Restore/Save/Del/?/<World>: **save**
 ?/Desired UCS name: **3dview**

5. **Click** PSPACE at the command prompt.

6. **Choose** Draw, Solids, Setup, View
 Command: **solview**
 Ucs/Ortho/Auxiliary/Section/<eXit>: **u**
 Named/World/?/<Current>: **n**
 Name of UCS to restore: **3dview**
 Enter view scale<1.0000>: **enter**
 View center: **pick**
 View center: **pick**



Create a Hidden Line View 16.6

1. **Double Click** MODEL to return to Model Space.
2. **Choose** Draw, Solids, Setup, Profile.
or
3. **Type** SOLPROF at the command prompt.
Command: **solprof**
Select objects: **pick solids**
Select objects: **enter**
Display hidden profile lines on separate layer? <Y>: **enter**
Project profile lines onto a plane? <Y>: **enter**
Delete tangential edges? <Y>: **enter**
3 solids selected.

