

Chapter 8: Create A Shape Yourself (CAS Y)

Introduction

This chapter discusses the Create A Shape Yourself (CAS Y) system, which allows you to design custom-shaped bottles, cans, shipcases, trays, etc. not included in the standard TOPS Pro database. This chapter discusses the CAS Y system in two sections: CAS Y Primary Package and CAS Y Shipcase/Tray.

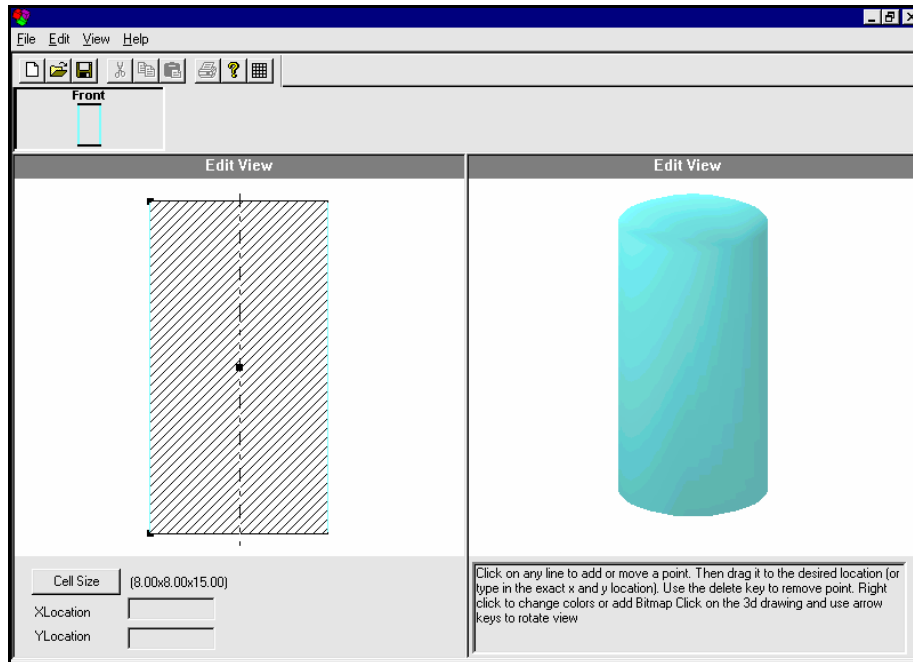
CAS Y Primary Package

The Create A Shape Yourself (CAS Y) system allows you to design a primary package (bottle, can, cup, etc.) that has a custom, non-standard shape. You can use the CAS Y system to create a more realistic model of your product.

Note: The CAS Y system is designed for display purposes only. You won't use CAS Y to define dimensions for a new bottle, can, cup, etc. The CAS Y system simply allows you to create a unique shape for a cylinder and see how it looks when packaged on a tray or shipper, etc.

After you've designed a cylinder with CAS Y, you can give that unit a name and save it to the database. As you work with an analysis in TOPS Pro – for example, a tray of soda cans – all your CAS Y-designed units are available in a drop-down list. If you want to see your tray packaged with the custom-shaped cans, you can select the CAS Y-designed can from the list.

To design a custom-shaped cylinder, you'll work with the CAS Y Primary Package Screen, as pictured on the next page.



Notice that the CASY Primary Package Screen is divided into two primary sections:

- ❖ **Edit View Work Area:** This section, on the left side of the screen, allows you to start with a generic cylinder and create a distinctly shaped unit (bottle, can, cup, etc.).
- ❖ **Edit View Display Area:** This section, on the right side of the screen, displays the unit in adjustable 3-D as you manipulate its shape in the Edit View Work Area.

In the Edit View Work area, notice the following features:

- ❖ **Work Unit:** This cylinder-shaped unit allows you to mark off sections in the unit. (By default, the unit displays as a cylinder. You can change its shape to an oval, rectangle or some other transitioned shape.) For each section, you'll drag the marker toward or away from the center axis and thus begin to define the shape of the unit. You'll use this click and drag technique to define all the various sections of the work unit.
- ❖ **Center Axis:** A vertical line that runs from top to bottom through the center of the work unit. The center axis allows you to offset a selected section of the work unit.

- ❖ **Cell Size:** Defines the relative dimension, not the actual size, of the new shape being created. When this CASY shape is applied to a new package later on, it will be scaled to the exact size as defined by the user.
- ❖ **x-Location:** For a selected point on the left edge of the work unit, this represents the relative distance to the center axis.
- ❖ **y-Location:** For a selected point on the left edge of the work unit, this represents the relative distance to the bottom edge of the work unit.

Note: The x- and y-Location measures are relative measures. They don't represent inches, millimeters, etc. Rather, they represent relative distances between two points, the total of which is set on the right side of the screen (length, width and height).

In the Edit View Display Area, notice the following features:

- ❖ **Display Unit:** This image evolves into a specific shape as you define the work unit. The CASY system allows you to rotate the display unit backward, forward, left and right to view it from a number of angles.
- ❖ **Length:** The relative length of the display unit.
- ❖ **Width:** The relative width of the display unit.
- ❖ **Height:** The relative height of the display unit.

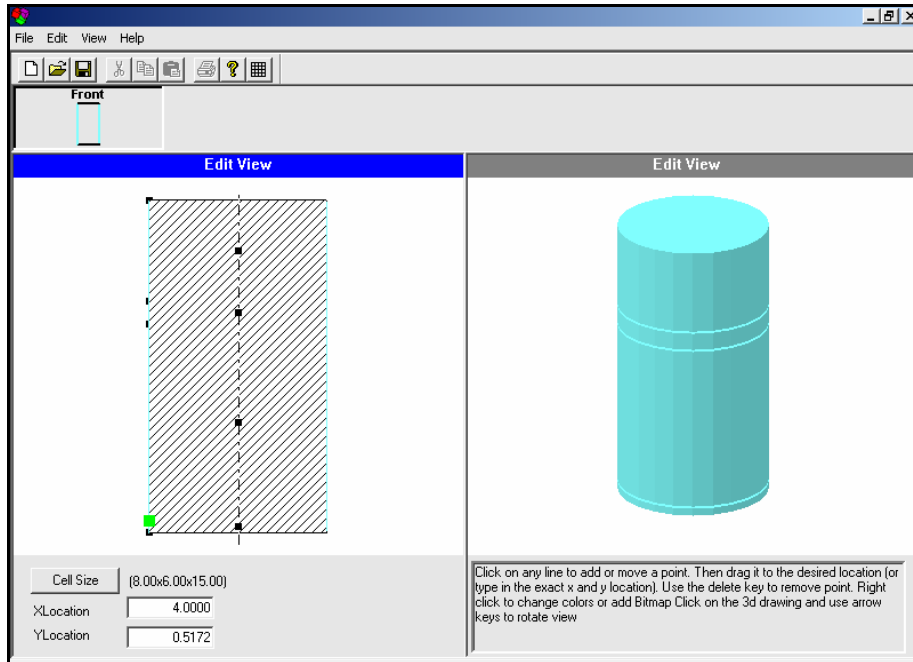
Note: The Length, Width and Height measures are relative measures. They don't represent inches, millimeters, etc. Rather, they represent relative length, width and height of the work unit – the hypothetical space you're using to build this cylinder.

Suppose you want to design a custom oil can that's comprised of four sections: a spout at the top of the can, the neck of the can, the body of the can and a wide base at the bottom of the can. In addition, the spout will be positioned off-center, to one side of the can. To design this oil can, start from the CASY Primary Package Screen and follow these instructions:

1. In the work area, select the points on the left edge of the work unit by clicking on the edge. This marks the four sections of the oil can.
 - ❖ The section from the first marker (top left corner of the work unit) to the second marker will represent the spout of the oil can.
 - ❖ The section from the second marker to the third marker will represent the neck of the oil can.
 - ❖ The section from the third marker to the fourth marker will represent the body of the oil can.

- ❖ The section from the fourth marker to the fifth marker (bottom left corner of the work unit) will represent the base of the oil can.

When you've marked off the four sections, the work unit will look similar to the one pictured below.



Notice that the display unit shows four clearly defined sections. Also, notice that if you select one of the markers on the left edge of the work unit, the x- and y-Locations change accordingly to show you the relative distance of that point from the center and bottom axes.

2. First, we'll design the spout section of the oil can. Click on the first marker, positioned on the top left corner of the work unit.

Note: Notice that the arrow converts to a crosshair symbol (+). When the crosshair symbol appears, you can drag that marker to another position on the work unit.

Drag the marker straight across the top edge of the unit to a position near the center axis. In this exercise, we'll drag the first marker to an x-Location of 0.4818; or type in this value for the x-Location. This marks the top of the spout section. This marker is flush to the top of the image, so the y-Location is 15.0.

Next, click on the second marker, which marks the bottom of the spout section, and drag it straight across to a position near the center axis. In this exercise, we'll make the bottom of the spout slightly wider than

the top of the spout; the x-Location will be 0.9315; or type in this value for the x-Location. The y-Location is 10.2141.

3. Next, we'll design the neck section of the oil can. The second marker, which marks the bottom of the spout section, also marks the top part of the neck section. The position of this marker will not change.

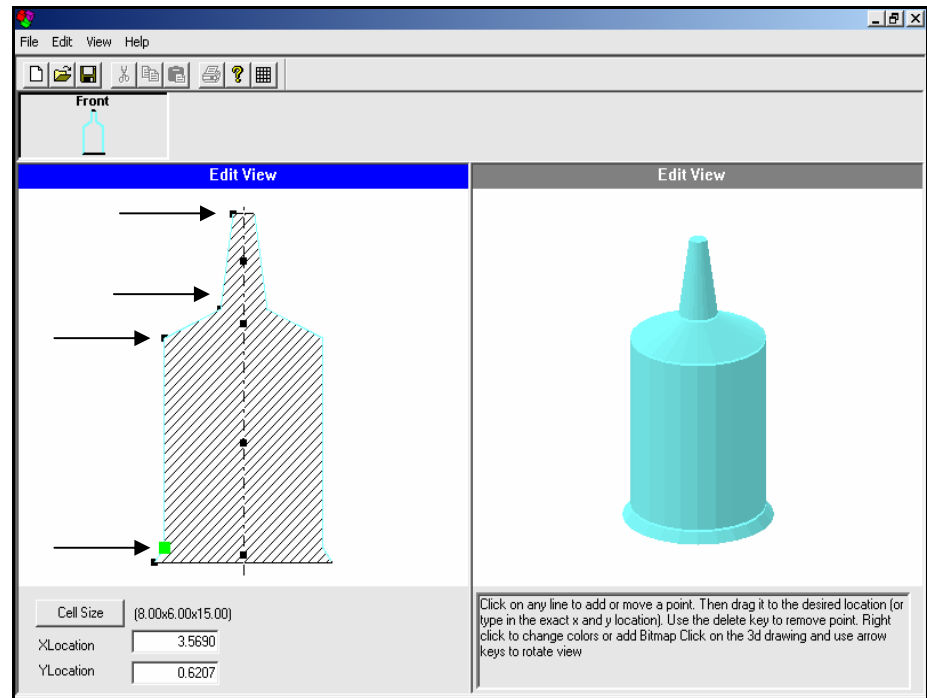
Click on the third marker, which marks the bottom of the neck section, and drag it slightly to the right. In this exercise, we'll drag this marker to an x-Location of 3.6296. The y-Location is 8.2227.

4. Next, we'll design the body section of the oil can. The third marker, which marks the bottom of the neck section, also marks the top part of the body section. The position of this marker will not change.

Click on the fourth marker, which represents the bottom of the body section, and drag it slightly to the right, even with the third marker – an x-Location of 3.5690. (There should be a perfectly straight, vertical line from the third marker to the fourth marker.) The y-Location is 0.5172.

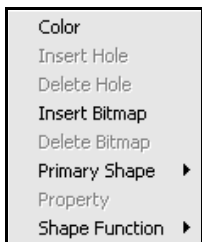
The bottom section of the unit, the base section of the oil can, is already set; it's defined by the fourth and fifth markers. (The fifth marker sits on the bottom left corner).

When you've defined the five sections of the oil can, the work unit should look similar to the one pictured below.



5. Next, we'll fine-tune the shapes of each section of the oil can. The CASY system allows you to assign a specific shape – round, oval or rectangular – to an individual section. In this exercise, we'll go with the default shape (Round) for each section of the oil can.

To assign a shape to the spout section, right-click on that section in the work unit. A small menu appears, as pictured below.

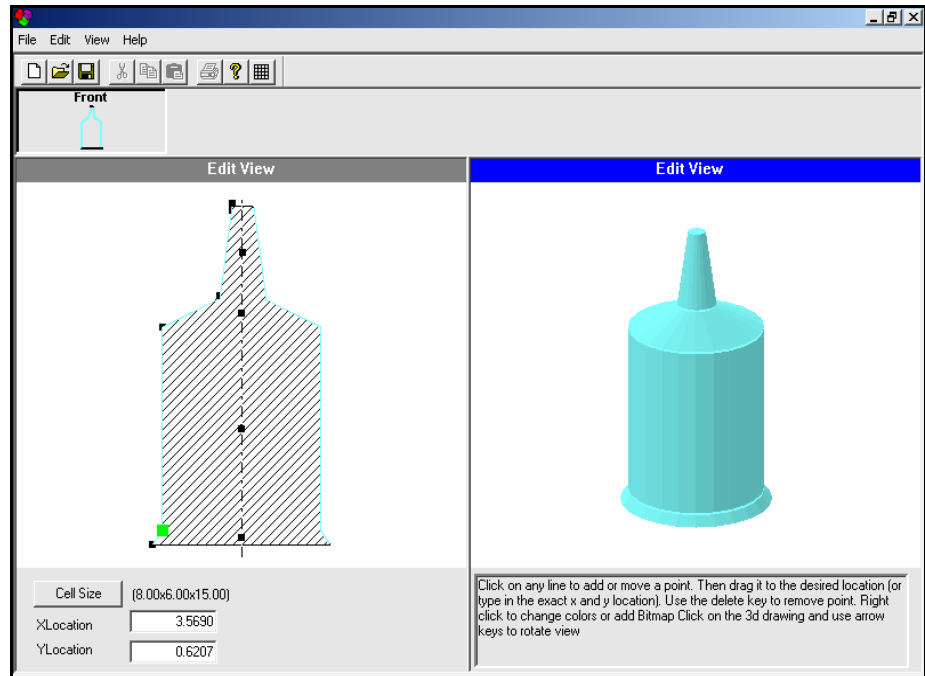


Select the Primary Shape option. A submenu appears, as pictured below.



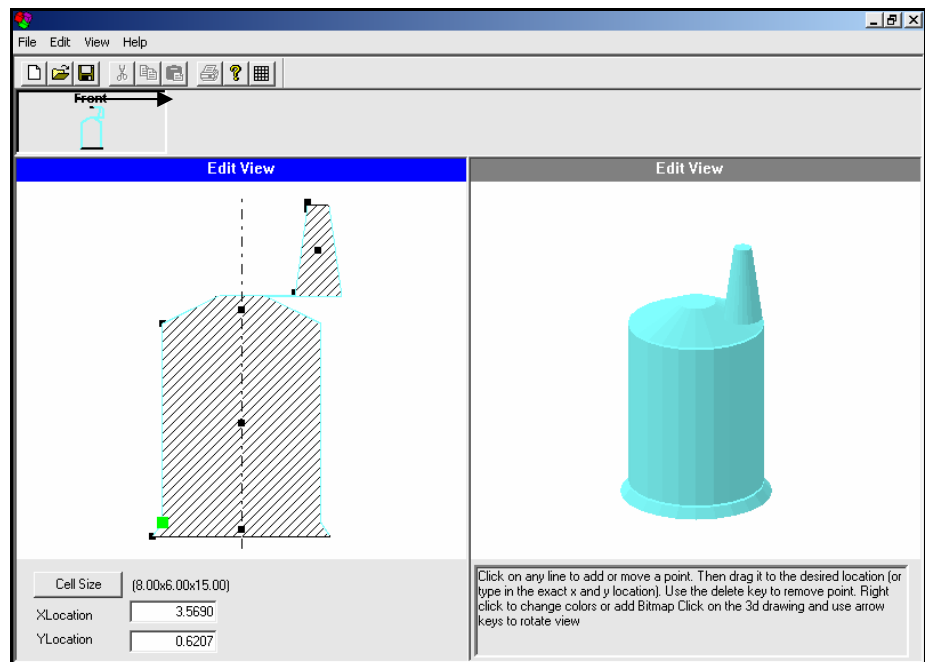
Select the Round option.

Repeat these steps for each section of the oil can. When you've assigned the appropriate shapes to the four sections of the oil can, the can should look like the one pictured on the next page.



6. Next, we'll position the spout off-center, flush to the right side of the oil can. In the above figure, notice that each section of the work unit has a marker that sits on the center axis line.

To move a section off-center, click on the center marker for that section and drag it off-center. In this exercise, we'll click on the center marker for the spout section and drag it to the right, as pictured below.

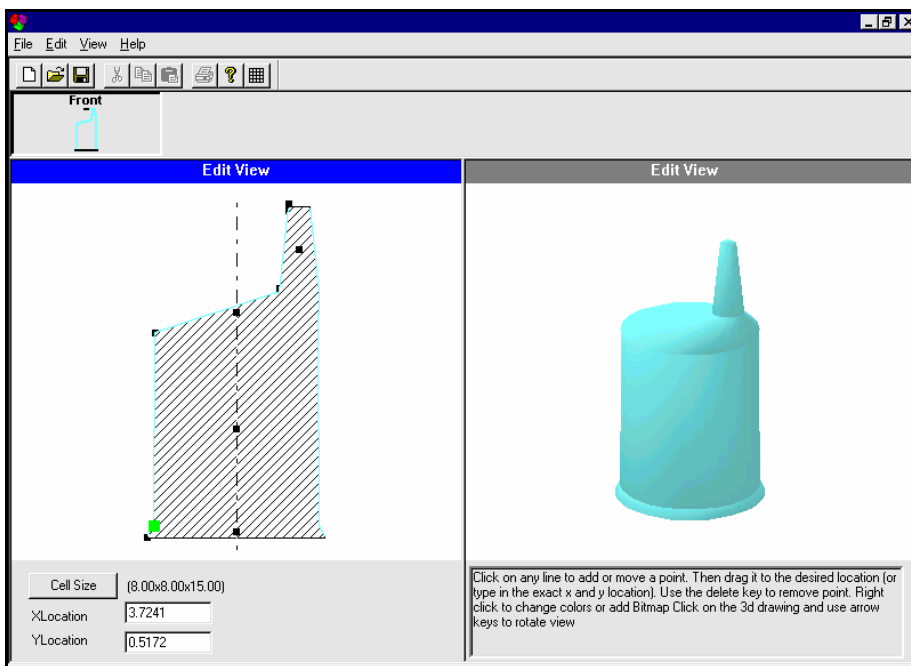


7. Notice that in previous figure, there's a disjointed space where the spout section meets the neck section of the can; it needs a smoother transition. CASY provides a feature that allows you to smoothly transition from one section to another when one section is off-center.

Right-click in the neck (second) section on the work unit and the small menu appears.

Select the Primary Shape option. At the submenu which appears, select the TransTop option.

The work unit redisplay with the spout and neck sections of the can joined seamlessly together, as pictured below.

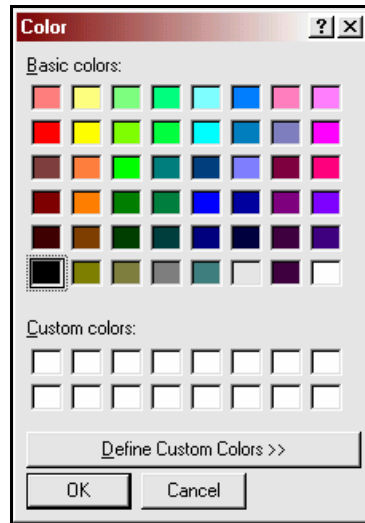


Note: The TransTop option transitions the top of the selected section to conform to the bottom of the adjoining section. Likewise, the TransBottom option transitions the bottom of a section to conform to the top of the adjoining section. The TransTop and TransBottom options are active only when you're working with an off-center section.

CASY provides two other transition features that you should be aware of. The TransRect option gives the selected section a round bottom that transitions to a rectangular top. Likewise, the TransRound option gives the selected section a rectangular bottom that transitions to a round top.

- Next, we'll assign colors to the five sections of the oil can. In this exercise, we'll make the spout gray, the neck and body sections red, and the base black.

Right-click in the spout section of the work unit, the small menu appears. Select the Color option. A color palette appears, as pictured below, and prompts you to select a color.

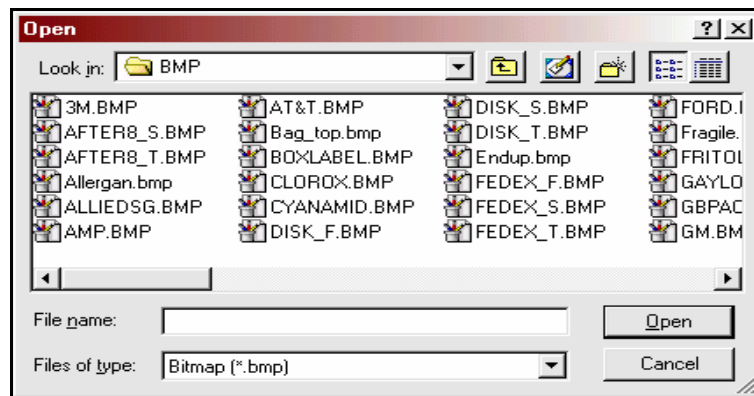


Select gray and click on OK. The color palette closes and the display unit on the screen redisplay with the spout colored gray.

Repeat these steps and assign a color to each section of the work unit.

- CASY also allows you to select and insert a bitmap onto individual sections of the primary package. To insert a bitmap onto a section, right-click on that section.

The small menu appears, select the Insert Bitmap option. A dialog box appears with a list of bitmap files, as pictured below.



Select the bitmap file you want to insert and click on the Open button.

The system inserts the bitmap onto the selected section of the oil can. You can resize the bitmap as you like and drag it any position on the selected section.

10. When you're satisfied with all the elements of the custom-shaped primary package, be sure to give it a name and save it to the database. The new unit will now be available in the CASY-style list of primary packages.

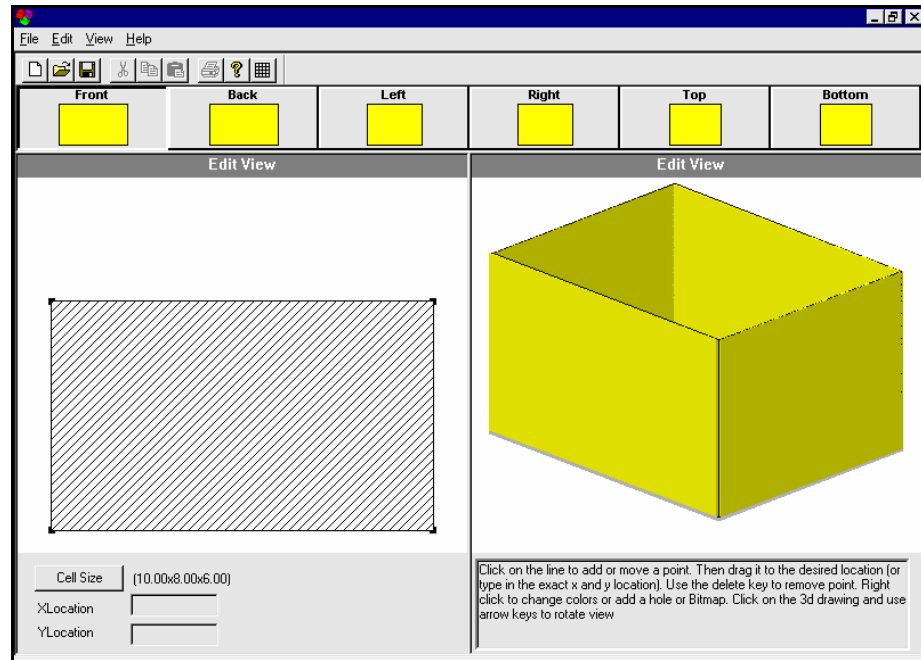
CASY Shipcase/Tray

The Create A Shape Yourself (CASY) system allows you to design and build a shipcase or tray that has a custom, non-standard shape. You can use CASY Shipcase/Tray to create more realistic trays and boxes.

Note: The CASY system is designed for display purposes only. You won't use CASY to define the dimensions of a shipcase or tray. The CASY system simply allows you to create a unique shape for a shipcase or tray and see how it looks when loaded onto a pallet, etc.

After you've designed a shipcase or tray with CASY, you can give that unit a name and save it to the database. As you work with an analysis in TOPS Pro – for example, a tray of soda cans – all your CASY-designed units are available in a drop-down list. If you want to see a pallet loaded with the custom-shaped shipcases, you can select the CASY-designed shipcase from the list.

To design a custom-shaped shipcase or tray, you'll work with the CASY Shipcase/Tray Screen, as pictured on the next page.



Notice that the CASY Shipcase/Tray Screen is divided into two primary sections:

- ❖ **Edit View Work Area:** This section, on the left side of the screen, allows you to start with a generic box and create a distinctly shaped unit (shipcase or tray).
- ❖ **Edit View Display Area:** This section, on the right side of the screen, displays the unit as you manipulate its shape in the Edit View Work Area.

In the Edit View Work area, notice the following features:

- ❖ **Work Unit:** This box-shaped unit allows you to click on any point on the top edge of the unit, drag it downward and form openings that give the unit its shape.
- ❖ **Cell Size:** Defines the relative dimension, not the actual size, of the new shipcase or tray being created. When this CASY shape is applied to a new shipper later on, it will be scaled to the exact size as defined by the user.
- ❖ **x-Location:** For a selected point on the top edge of the work unit, this represents the relative distance to the right edge of the unit.
- ❖ **y-Location:** For a selected point on the top edge of the work unit, this represents the relative distance to the bottom edge of the work unit.

Note: The x- and y-Location measures are relative measures. They don't represent inches, millimeters, etc. Rather, they represent relative distances between two points.

In the Edit View Display Area, notice the following features:

- ❖ **Display Unit:** This image evolves into a specific shape as you define the shape with the work unit. The CASY system allows you to rotate the display unit backward, forward, left and right to view it from a number of angles.
- ❖ **Length:** The relative length of the display unit.
- ❖ **Width:** The relative width of the display unit.
- ❖ **Height:** The relative height of the display unit.

Note: The Length, Width and Height measures are relative measures. They don't represent inches, millimeters, etc. Rather, they represent relative length, width and height of the work unit – the hypothetical space you're using to build this shape.

Also, notice the six large icons at the top of the screen, just below the button bar. The **Front, Back, Left and Right icons** allow you to work with the corresponding areas of the work unit. For example, you can choose to work with the front side of the tray, back side, left side or right side.

Note: The Top and Bottom icons are not currently active.

In this exercise, we'll design a shipcase for bleach bottles. We want the bleach brand label to be clearly visible as the bottles sit in the case, so we'll design the case with a large display window in the front and back sides. Also, the shipcase needs handles (holes) in the left and right sides of the case.

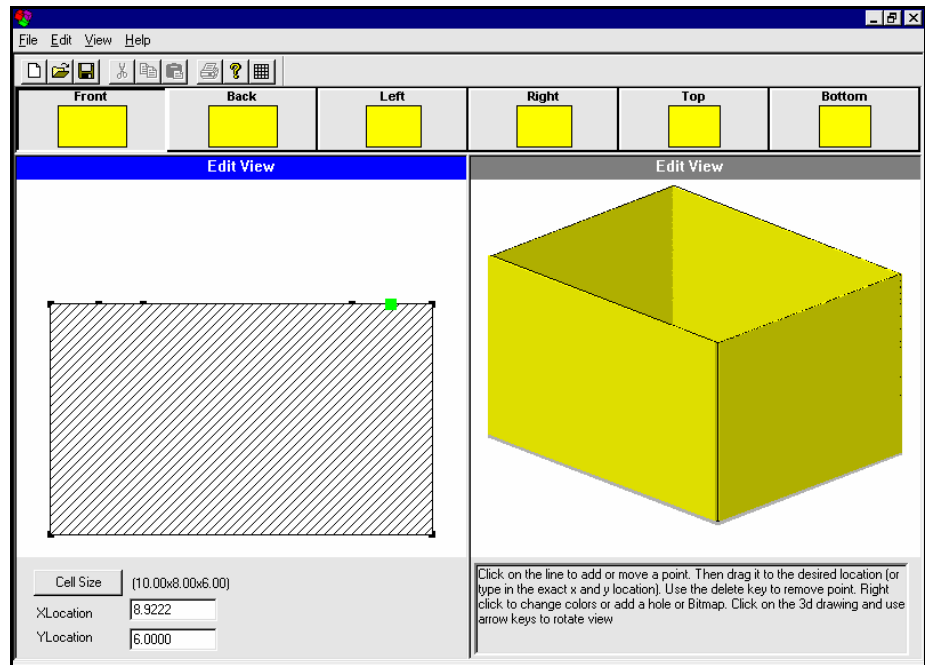
To design a shipcase that meets these specifications, follow these instructions:

1. When the CASY Shipcase/Tray Screen opens, the front side of the unit is active by default, so we'll work with that side first. The front needs six markers along its top edge, which we'll use to design the display window. The top left and top right corners serve as two of the markers.

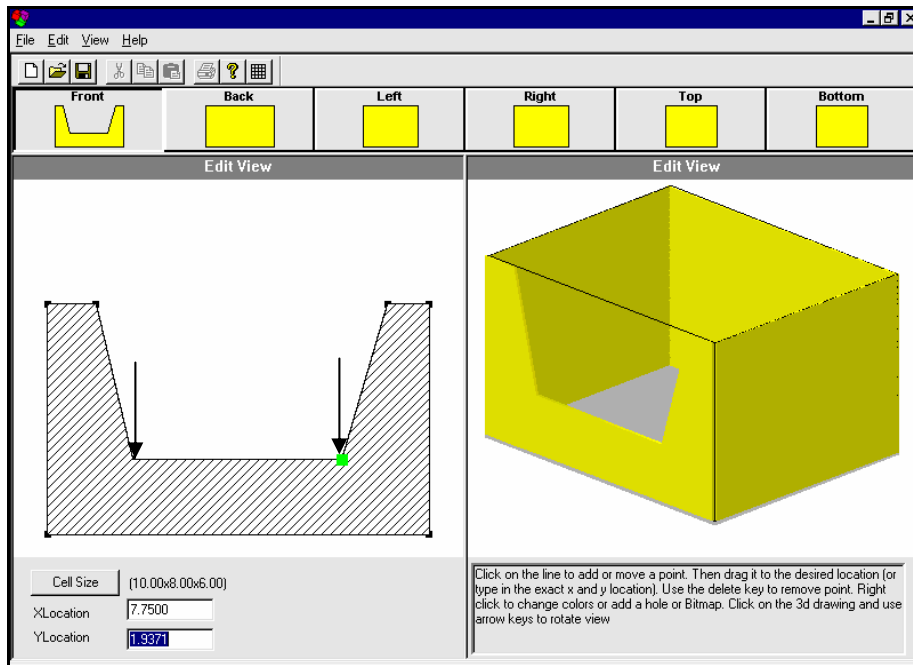
Click on the top edge of the shipcase to insert the other four markers.
Position these four markers as follows:

- ❖ Marker 2: x-Location = 1.0538
- ❖ Marker 3: x-Location = 2.2094
- ❖ Marker 4: x-Location = 7.7500
- ❖ Marker 5: x-Location = 8.9222

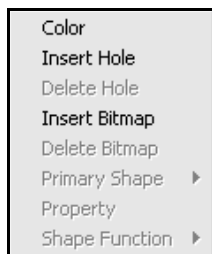
The work unit, with six markers across the top edge, should look like the one pictured below.



2. For markers 3 and 4, drag the markers downward to a y-Location of 1.9371. When you've moved these markers into the right positions, the work unit should look like the one pictured on the next page.

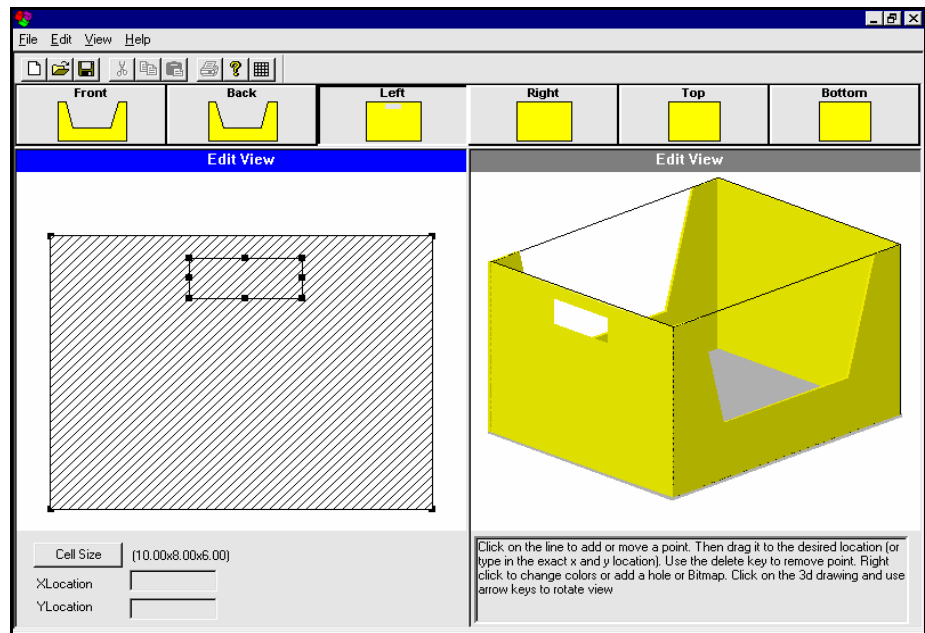


3. Now that the display window on the front side of the shipcase is complete, repeat the same process to design a display window for the back side of the shipcase. Use the same x- and y-Locations for the markers.
4. On the left and right sides of the case, we want to create holes to serve as handles for the shipcase. To create a hole in the left side of the shipcase, click on the Left icon on the Toolbar. The CASY Shipcase/Tray Screen redisplay with work unit representing the left side of the case.
5. Right-click inside the work unit. A small menu appears, as pictured below.



Select the Insert Hole option. The system inserts a box, which represents the hole, on the face of the work unit. This box has markers that allow you to expand the box to the right, left, up and down. You can also drag the box to any position on the work unit you want.

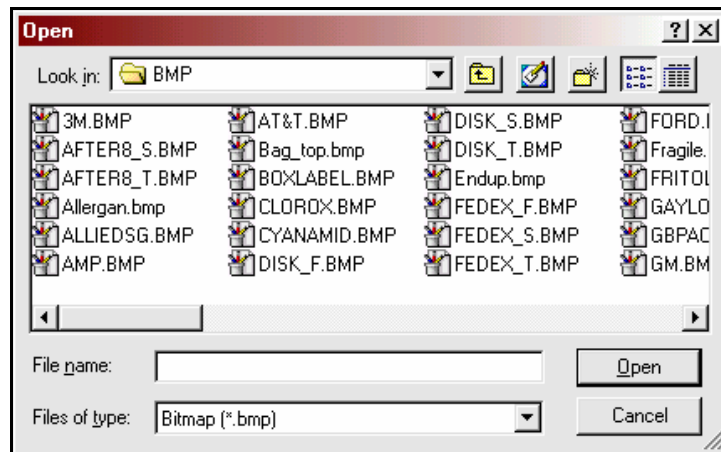
Resize the box (hole) to the appropriate size and move it near the top edge of the work unit. The left side of the shipcase should look similar to the one pictured below.



6. Now that the hole on the left side of the shipcase is complete, repeat the same process to design a hole for the right side.
7. CASY allows you to select and insert a bitmap onto any side of the shipcase. To insert a bitmap, select a side (front, back, left or right) to make it active.

Right-click inside the work unit. The small menu appears.

Select the Insert Bitmap option. A dialog box appears with a list of bitmap files, as pictured below.



Select the bitmap file you want to insert and click on the Open button.

The system inserts the selected bitmap onto the active side of the shipcase. You can resize the bitmap as you like and drag it to any position on the active side.

In this exercise, we'll insert a TOPS bitmap on the left and right sides of the shipcase. After all the design elements are complete, the shipcase should look similar to the one pictured below.

