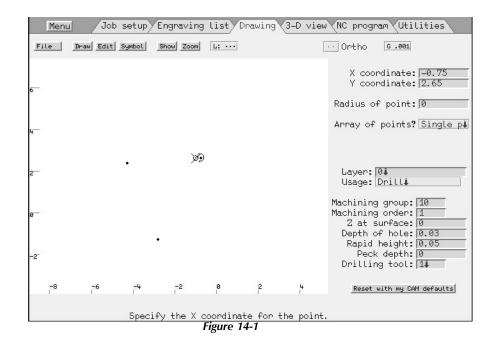
## **Drilling Holes**



This field does not affect the NC program Job setup Engraving list Drawing &-D view NC program Utilities File Draw Edit Symbol ·· Ortho G .001 Show Zoom L: · · · Drill parameters coordinate: -0.75 Y coordinate: 2.65 Radius of point: 0 Array of points? Single p. in/min Feed: 3 Speed: 5000 rpm Layer: 01 Peck distance: Usage: Drill. -Rapid height: 0.05 Machining group: 10 Machining order: 1 Z at surface: 0 Depth of hole: 0.03 Depth: 1.25 Rapid height: 0.05 Peck depth: 0 Drilling tool: 14 Reset with my CAM defaults Enter the depth below the surface you want the tool to reach

Figure 14-2

In Figure 14-1 are three points. To set or edit the drilling parameters for one of the points, touch the mouse to the point. This will bring up the parameters along the right side of the

To drill holes with MillWrite you fist

create points or arrays of points. You

can create a point from the Draw

menu, or you can click the right mouse

button to bring up the **New Item** menu and then pick the *Draw Points* option.

screen, just as with any line, arc, or rectangle.

The procedure for setting the tool for drilling is the same as if you were setting the tool for engraving or pocketing. Specifically, click the left mouse button or press [Inter-] on the **Drilling Tool** field. This brings up the drilling tool options, as seen in Figure 14-2.

MillWrite uses the information that you enter here to create G81 (drill) or G83 (drill and peck) operations for the NC program.

NOTE: If your machine does not use it G81 or G83 codes, MillWrite will create the necessary code to do the drilling and or pecking with G0 and G1 codes. However you must let MillWrite know that your machine does not use G81 or G83 codes by selecting an appropriate NC format at the **Job Setup** page, such as "Wood Router".

Below the data fields for X and Y coordinate is a data fields is called "Radius Of The Point". The value you enter here does not affect the NC program. The purpose for this field is to let MillWrite draw a circle that is the size of the hole so that you can see how big the hole is. This lets you check for errors, such as holes that are too close to other holes.

For example, if you are drilling a hole that is 2 inches in diameter, you could specify the radius to be 1 inch. MillWrite will then draw a circle with a 2 inch diameter at the point. If you had another point that also had a 2 inch diameter, this would let you see if the two holes are overlapping.

In figure 14-3, two of the holes have been set for radius of 1 inch. MillWrite drew a 2 inch diameter circle around each of those holes. This gives you an of whether you're idea specifying the correct size holes and in the correct location.

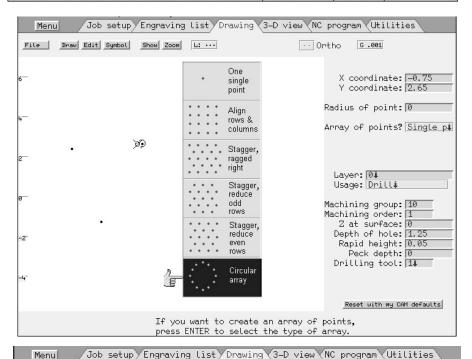
You can set any of the points to be an array of points. Just click the data field called Array of Points. The menu seen in 14-4 will figure appear. MillWrite has four different styles of rectangular arrays and one style for circular arrays.

In figure 14-5, one of the points has been set to be a circular array. A few new data fields have appeared to allow you to specify the number and location of points in the array.

In figure 14-5, the five points were specified as being 22.5° apart. If you do not specify the spacing between points, MillWrite will space them evenly around a complete circle. In this example of an array with five points, MillWrite would separate each point by 72°.

MillWrite puts a small circle at the center of a circular array, but the center of the array will not be drilled. However, you can move the entire array by grabbing the center point and dragging it with the mouse.

Job setup Engraving list Drawing (3-D view NC program (Utilities Menu File + Draw Edit Symbol Show Zoom L: ... ◆◆ Ortho X coordinate: -0.75 The large Y coordinate: 2.65 circles show the size of the hole. Radius of point: 1 Array of points? Single pi Layer: 01 Usage: Peck Drill! Machining group: 10 Machining order: 1 Z at surface: 0 Depth of hole: 1.25 Rapid height: 0.05 Peck depth: 0.2 Drilling tool: 14 Reset with my CAM defaults If you want to specify a radius for this point, the point will be drawn as a circle of that radius. This can identify it as a hole, for example.



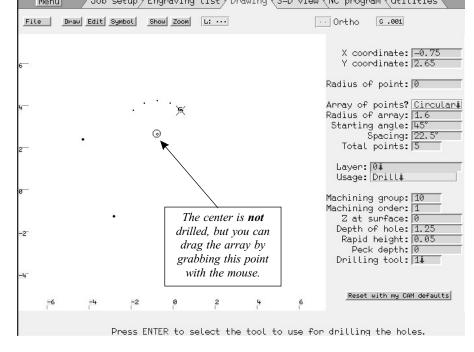


Figure 14-3

Figure 14-4

Figure 14-5