

QUICK BOBART LESSON 1

This is a fast training tutorial for the BobART Demo. If you have any questions regarding this lesson or how to use the BobART for completing this training lesson, contact BobCAD-CAM direct at 727-442-3554 or 877-262-2231 if you are inside the USA. Thank you.

The jpeg image used for this lesson:



STEP 1. Open the BobCAD software with a NEW drawing screen. When the main screen opens, the CAM side will open as well unless you have already opened the BobCAD demo. Whatever the case is, select the CAD file menu and select **OPEN BITMAP IN BOBART**. Select the **RUN DEMO** button to continue. This will launch the BobART program as well as the OPEN box. You may need to locate the BobCAD-CAM DEMO folder at this time to continue on with step 2.

STEP 2. First locate the BobCAD-CAM Folder, then locate the **SAMPLES** folder and double-click on it to open it. Now locate the **BobART SAMPLES** folder and double-click on it. You will see 3 jpeg images. Locate the jpeg image called, "**Celtic Heart.jpg**" and double-click on it to auto-load it into the BobART software.



STEP 3. Now that the jpeg image is loaded, select the BobART **Machine** menu and then **SURFACE PROFILING** to open the Toolpath from Image box.



This new box provides you with special tooling options for determining the toolpath results. In brief, you have 3 tool options: Flat cutter, Ball cutter and Vee cutter. Have a look at what each section provides below:

- **The tool diameter.**
- **Step-Over Distance** for the toolpath. (Typically half the distance of the size of your tool.)
- **Step Distance.** The image you are working with is made up of many pixels. This value determines the length of toolpath line between each pixel. In other words, if you want the toolpath to have a higher tolerance or be generated more accurately, you will change this value. By increasing the tolerance, it may take a few extra moments to generate the toolpath. This is due to the fact that the toolpath is made up of lines rather than lines and arcs.
- **Toolpath Angle.** This relates to the angle direction that the toolpath starts and finishes on the screen for machining.

**45-Degree Angle
Toolpath**



**0-Degree Angle
Toolpath**

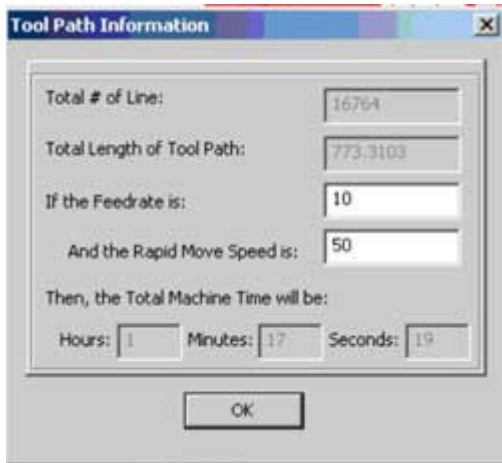


- **Cutter Types.** BobART gives you 3 types of cutter options: Flat tool, Ball Mill Cutter and a Vee Cutter or carving type tool. If you are using a Vee cutter, you can enter the angle of the cutter.
- **Image Size.** You can modify the shape of the image by un-checking the “Keep Aspect Ratio” option and changing the shape in X and Y. The Z value allows you to determine how deep the toolpath will be created. There is no need to enter a – symbol in front of the value.
- **Direction of Toolpath.** This includes two options. Alternate Direction gives you a surface toolpath that is continuous. Same Direction gives you toolpath that only goes in one direction. In other words, the toolpath created follows the contour, moves up, then rapids back to the next step over and feeds down into the next cut and so on, all going in the same direction.

Enter the following information in the Toolpath from Image box:

- Enter .125 as the tool diameter.
- Enter .05 for the Step Over.
- Leave the Step Distance at .01.
- Leave the Toolpath Angle at 0.
- Select BALL as the cutter type.
- Leave the Image Size settings as they are.
- Enter .25 for the Z-Depth.
- Make sure that Alternate Direction is selected as the direction of toolpath option.

Now select the OK button. This will generate the toolpath in the BobART main window and open a new “**Toolpath Information**” box.



This new box will give you important information regarding your toolpath and machine time. By manually adjusting the Feed-rate and Rapid Move information, the machine time calculation will automatically change for you.

Click the OK button in the Toolpath Information box to close it out.

STEP 4. This is your toolpath that you just created. The DEMO version of BobART will not allow you to open the toolpath in the CAD window of the BobCAD Software and machine it as this is only a demo.

If you are interested in purchasing the BobART system, select the BobART **FILE** menu and **OPEN IN CAD WINDOW**. Select the REGISTER button and contact BobCAD-CAM directly at the numbers below:

BobCAD-CAM

USA: 877-262-2231

International: 727-442-3554

BOBART™
IMAGE PROFILING SOFTWARE