

DeArmond Tool



806-381-8898

<http://www.dearmondtool.com>
P.O. Box 30684
Amarillo, Texas 79120

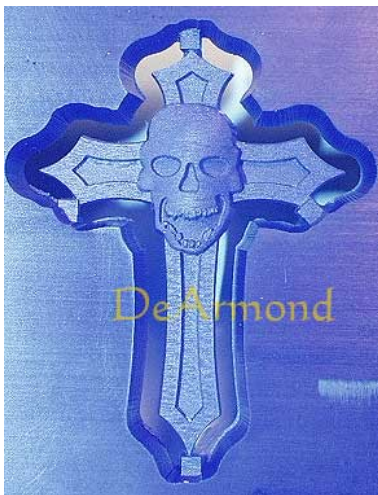
THIS IS A FREE CODE FILE AND INSTRUCTION SET. IT IS NOT TO BE SOLD. Enjoy.

By proceeding, you agree to not hold DeArmond Tool responsible for any accidents, machine damage or bodily injury. The machine, code, nor these instructions have brains...use your own.

NOTE:

This project requires some CNC experience. It should NOT be your first file to try. Here, we DO NOT give the same level of instructions as we do in the beginner series. Users of this file need to have at least basic milling experience.

This file is programmed & cut in metrics.



TO CUT THE SMILIN JACK CROSS....

This project is meant for those users with at least intermediate experience in CNC machining.

The method used here requires a Rotary Axis and 4 jaw chuck to cut the file.

You will need these materials to cut the project..... A wax sheet 8mm thick, 153mm long x 68 mm wide. A ruler. TWO .005” 15 degree taper end mills as shown.

DeArmond Tool Stocks these end mills. You can find them here...

<http://www.dearmondtool.com/cuttersj.htm>

We also sell the kit... this includes the wax and the cutting tools.... Call or E-mail us and let us know you want the “Smilin Jack Cross Kit”



LET'S GET STARTED!We presume you have done the following....

1. Downloaded the code file
2. Un-zipped it into the Mach3/ gcode ...or your favorite folder.

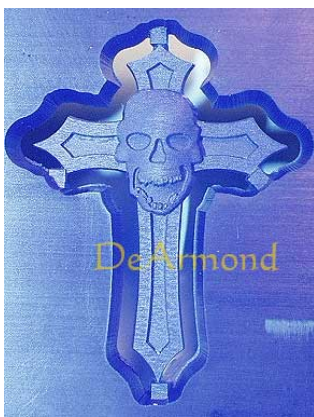
1. With the rotary properly mounted & aligned on you milling machine, insert a tool into the spindle and a tool into the rotary chuck as shown

below and align in Y & Z axis as shown here.... Align the tool tips in the Y and Z axis **as close as possible** to touching... without letting them actually touch. **(Wear eye protection!)**



!! NOTE: MAKE SURE after setting the tool that FROM “Z” -0, that you have room in “Z” for a minimum of 50 mm positive “Z” movement! After cutting one side, the rotary AUTOMATICALLY rotates & the program cuts the back side of the model. During this rotation... the “Z” axis moves the tool tip up 50 mm from “Z”-0.

2. Once aligned, Zero the Y & Z axis in Mach3.



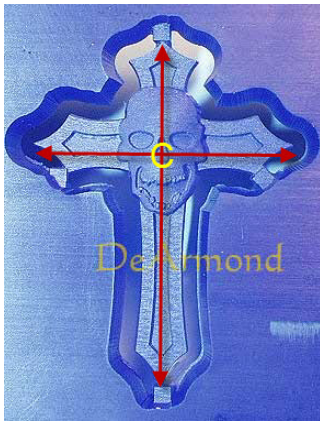
3. Insert your wax tablet into the 4 jaw chuck and adjust so that you have about 25mm of material in -X , +X -Y & +Y. Use your ruler and measure from the tip of your tool in all 4 directions. OR... depending on your experience, you can use the

DRO in Mach3 to accomplish the same thing. Check that the wax is held flat. Adjust & Zero The "A" axis.

The cross is approx. 38 X 44 mm in size. By allowing 25mm in **all** directions, you should not hit the chuck or run out of material.

Notice that you need space on all sides of the cross. Remember this when checking to make sure you won't collide with the chuck.

4. X & Y zero are located approximately as shown in the image below.... Look at the image and read the # 3 instructions again and it should make sense. Once you find the "X"-0 location on your material... Zero "X" in Mach3.



5.....Once you have made the above adjustments, you are ready to proceed with the machining.

This is the way you will set up most any rotary flip model for machining.

Have fun.... Be Careful!

Visit our site... <http://www.dearmondtool.com> Phone.... 806-381-8898

