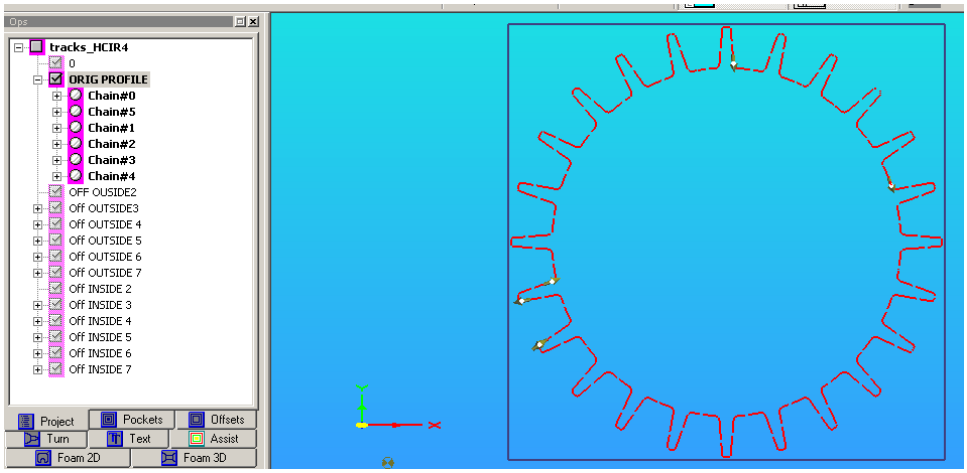
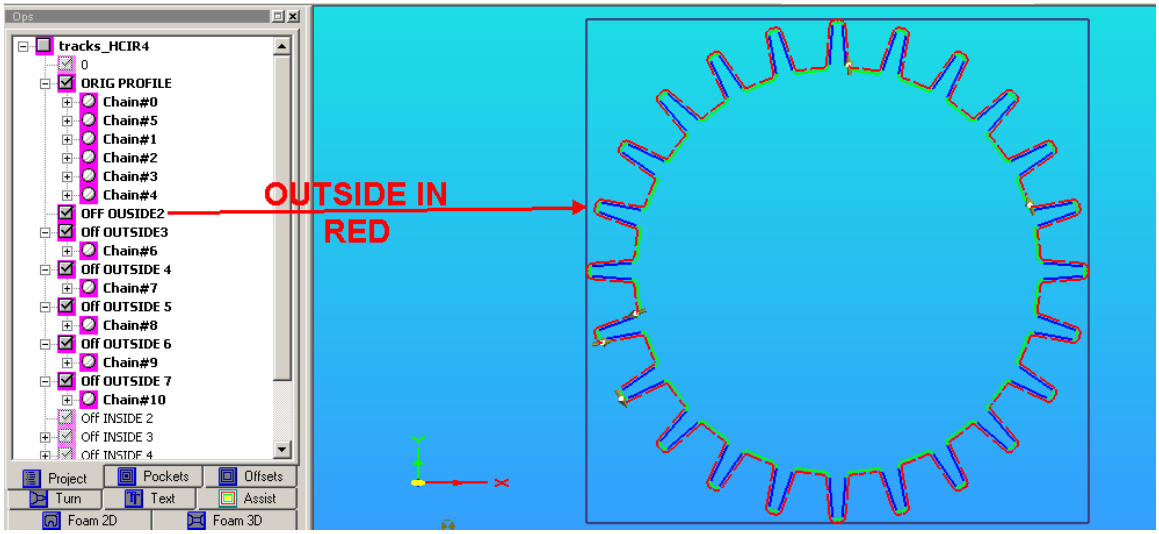
Cpayne,

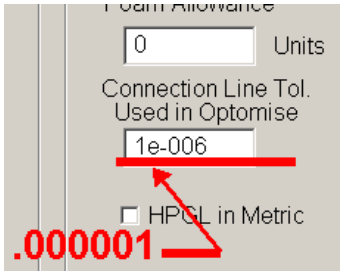
I redrew your original drawing because it had some problems in it. See Section “A” at the end of this writing. I only used the top piece and then did an array and checked that it closed. So below is the profile in LC.



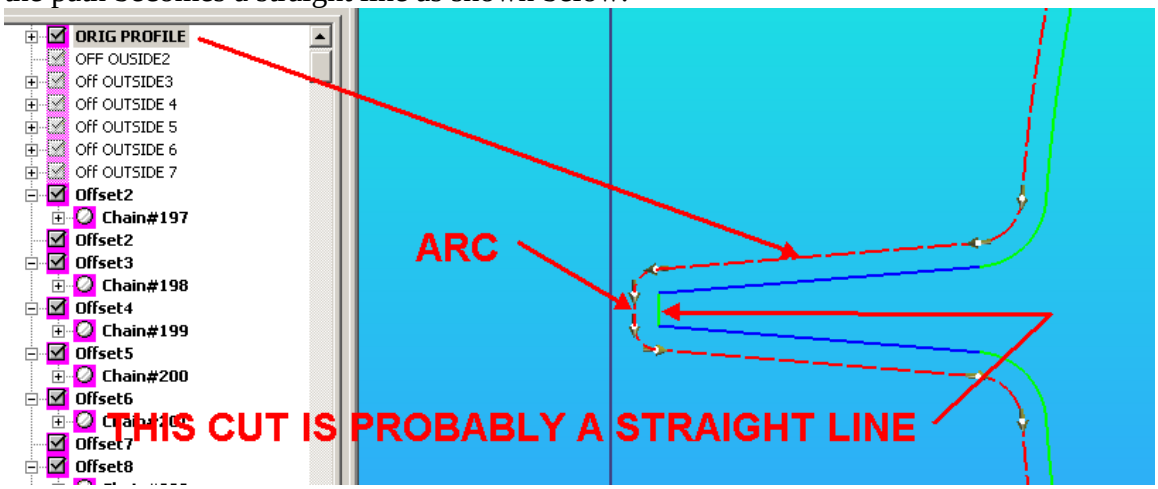
Now if you enable the OFF OUTSIDE LAYERS you will see that I was able to offset a cut using an .125” end mill as shown below.



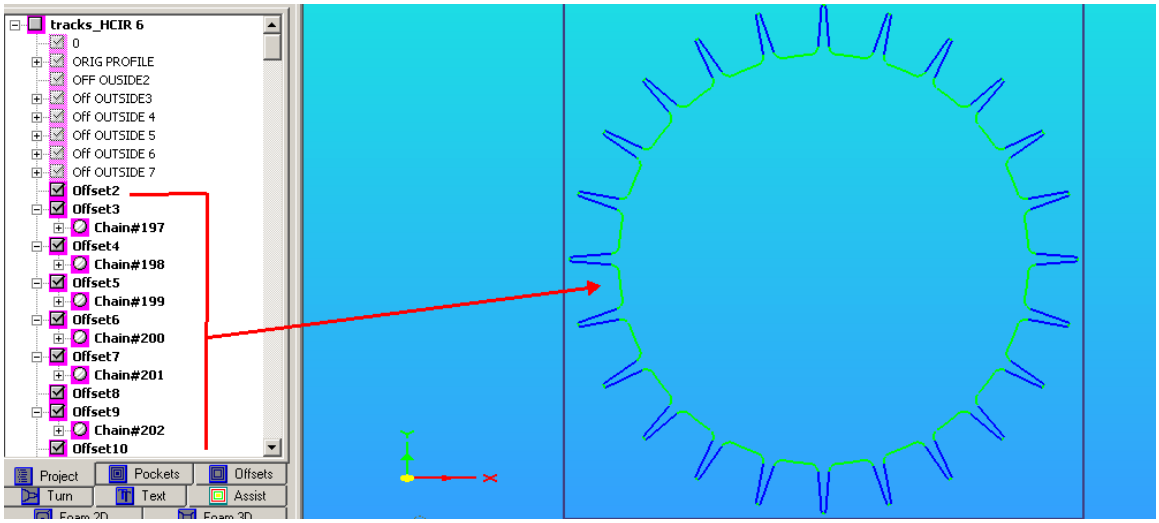
Now I had some problems on doing an inside offset. The problem I believe is one of tolerance and once I set it to a very small value I was able to get the inside offset with a .125” diameter end mill.



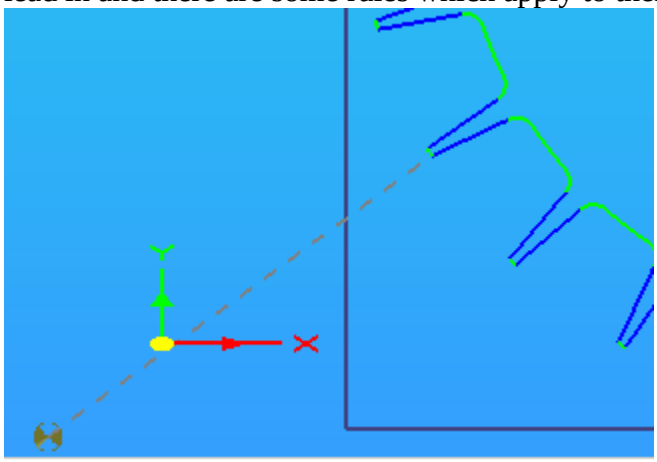
I think, can be wrong, but math wise, the depth / difference of the chord is so small that the path becomes a straight line as shown below.



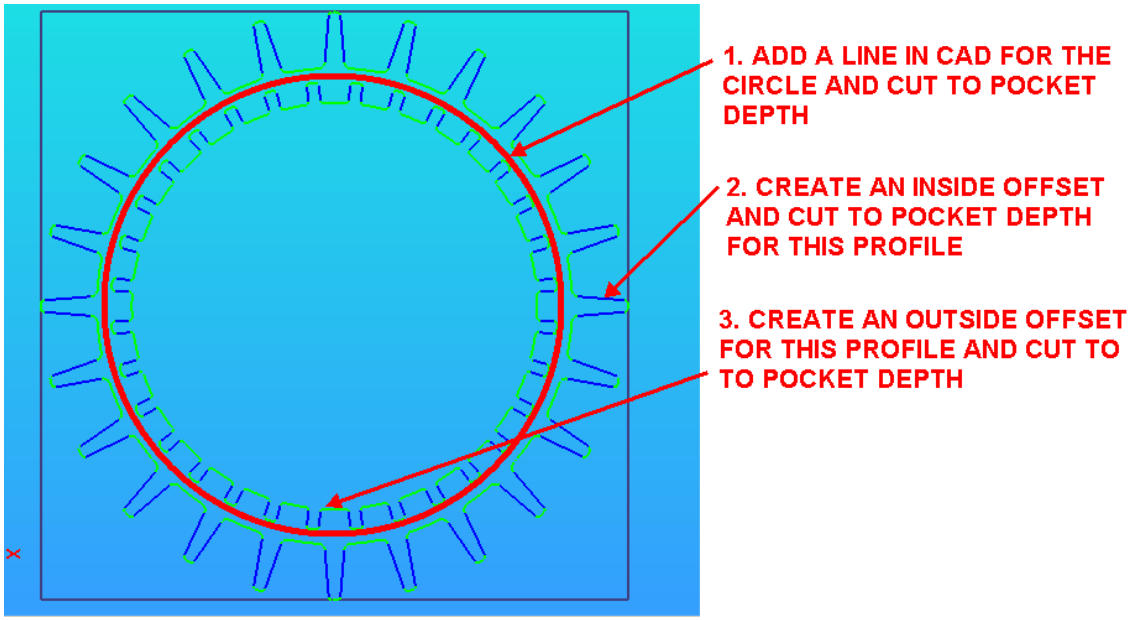
So here is a view of the inside offset.



Just a comment, you want to watch where the rapid starts since you may want to add a lead in and there are some rules which apply to them.



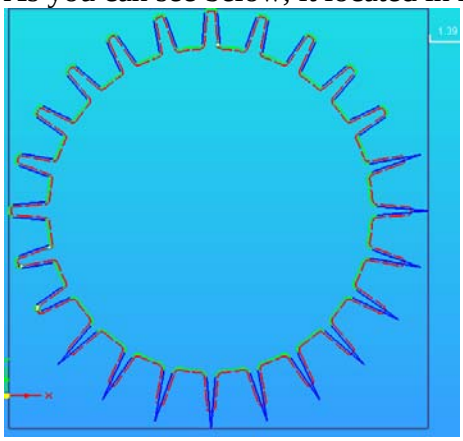
To pocket the area I would suggest the following.



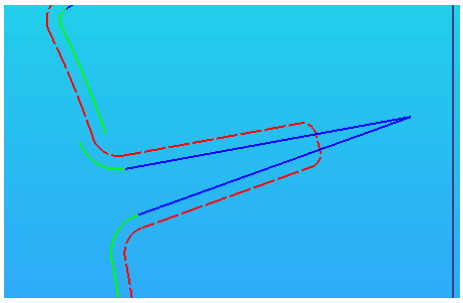
SECTION “A”

We all draw differently, but …..keeping common things on the same layer goes a long way to avoiding problems. This way you can manipulate (select, enable, etc) to try things in a painless manner. When something will not pocket first time around I usually just try to see if I can do an offset as that will help show what is wrong.

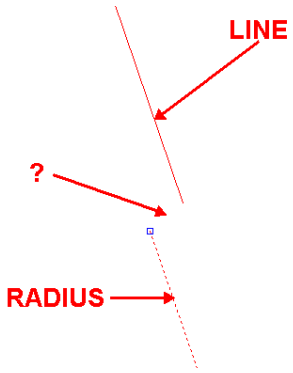
As you can see below, it located in my opinion either a cad or import problem.



I zoom in to look at a problem area as shown below. You can see the line and arc is not connected, The start of the offset here is at the extension of a line. You can’t pocket something if all the entities are not connected as shown below. Again it may be the way it was drawn or it can just be LC ‘s importer. I don’t know!

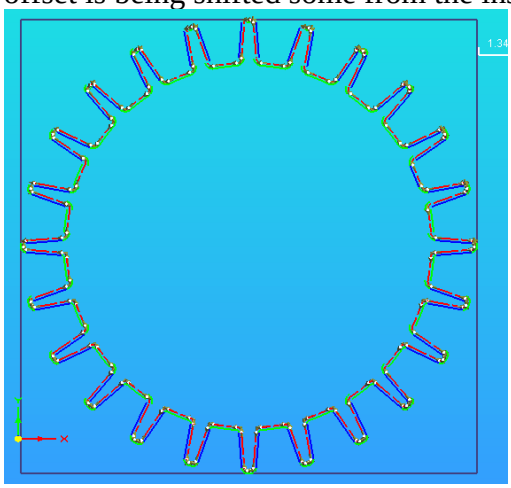


So if you look at that point in CAD it is not connected, although the distance is very, very small.

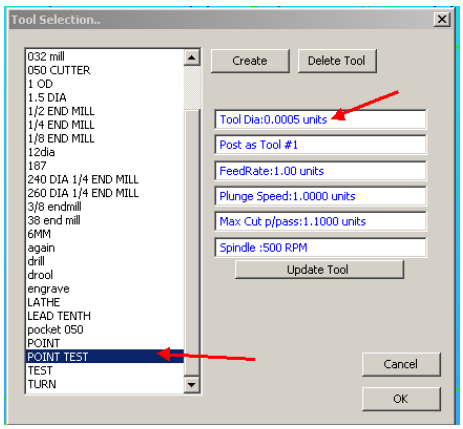


Now LC will let you join two entities, but one must be a straight line. (not two arcs). So I redrew the particular offending arc and made it into a straight line “snapping” it to the radius.

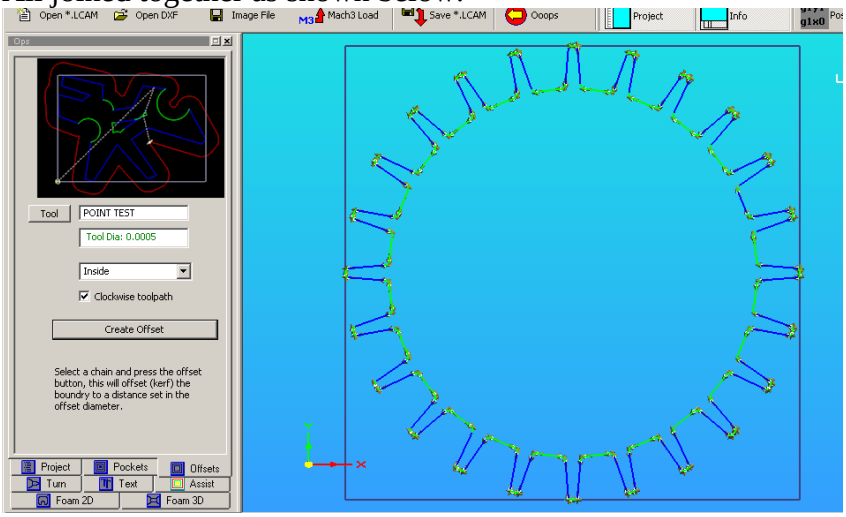
Using a .125 dia mill I created the offset. Something is still wrong below, because the offset is being shifted some from the inside. But at least it joined the entites.



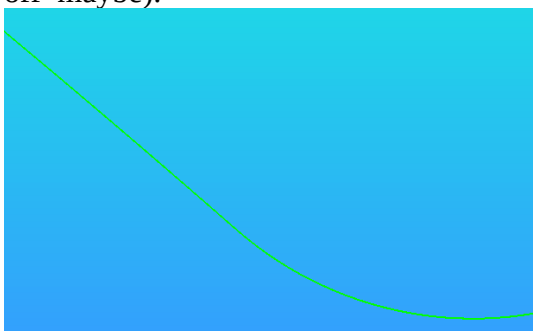
Now I do something as a test. I create a point tool such that the diameter will be extremely small. All I want to do is see if LC will create an offset and stay on the drawn line, which it did below.



I un-enabled the original layer and now your left with just the offsets which LC created. All joined together as shown below.



Looking at the same offending point, zoomed way out, and “ALL” layers enabled you can see that the offsets created and original are one and the same (ok some silly .00001” off maybe).



I use the Sel in Box tool to select all the offset layers at once and then see if I can pocket them.

So that just some things you can play with!