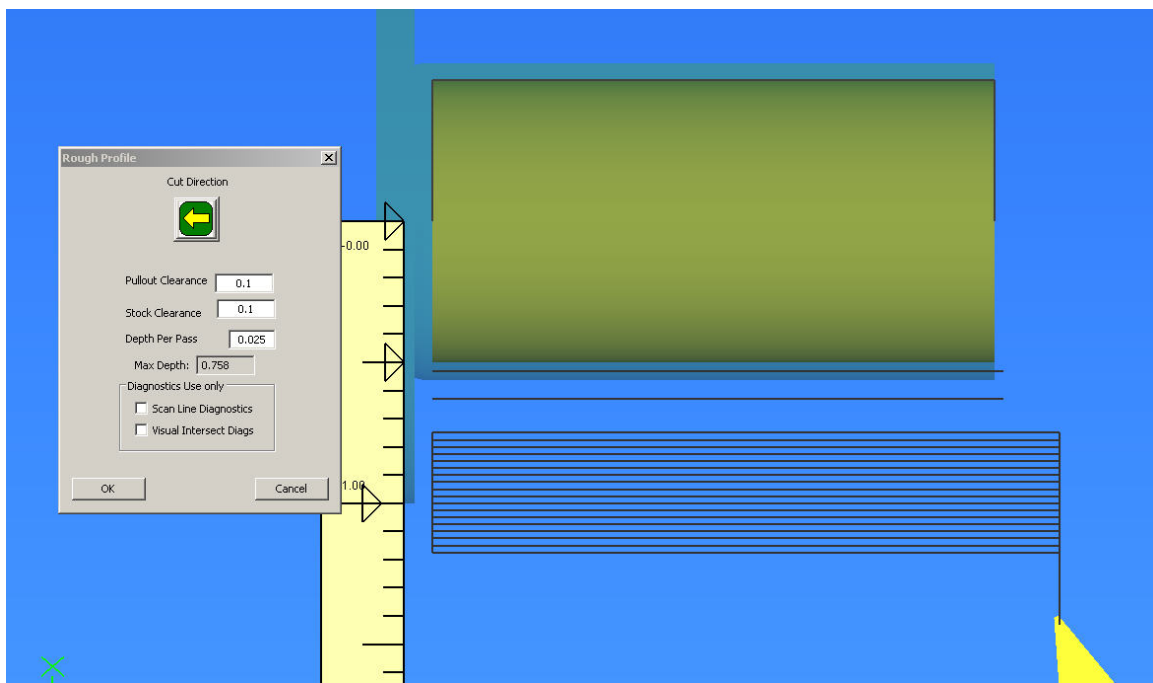
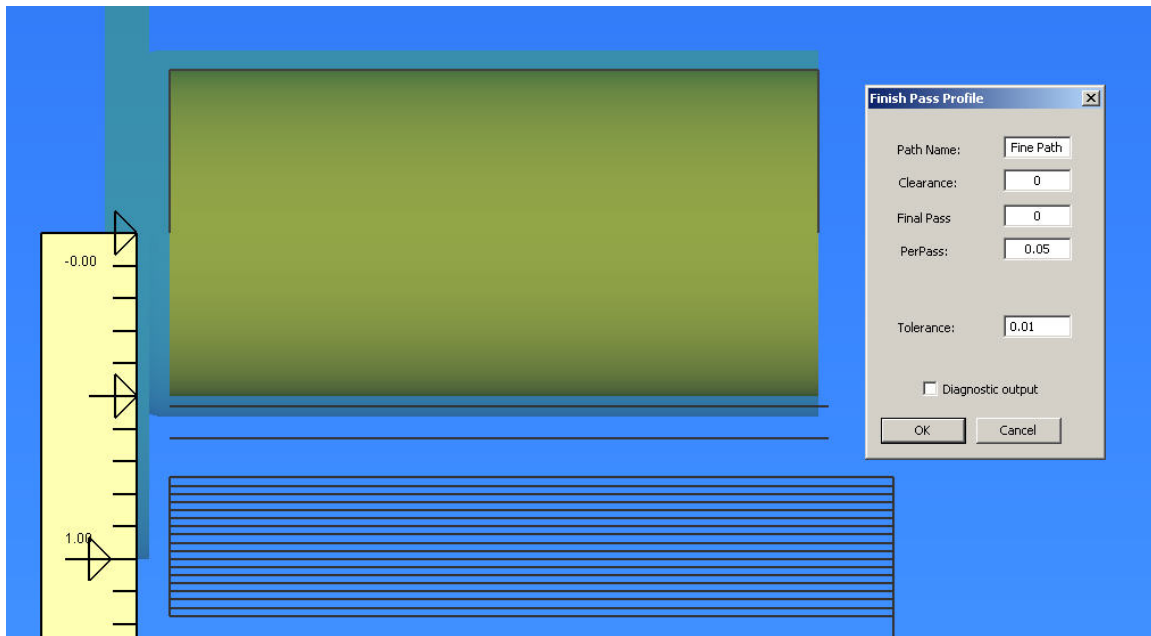


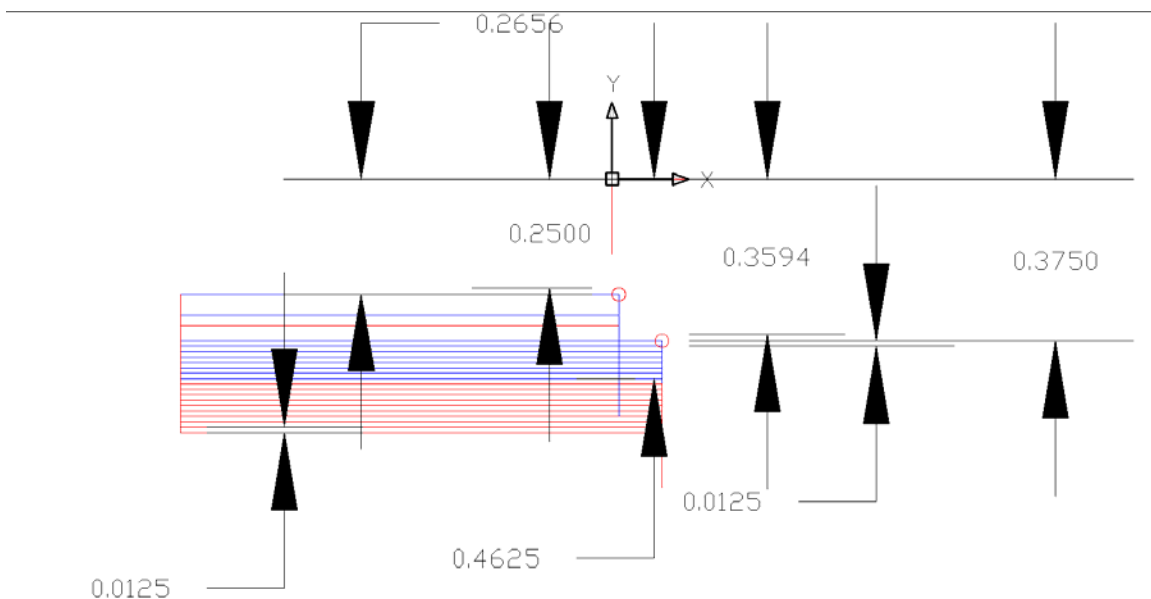
DXF drawn as diameter.



Imported in diameter mode and note rough settings.



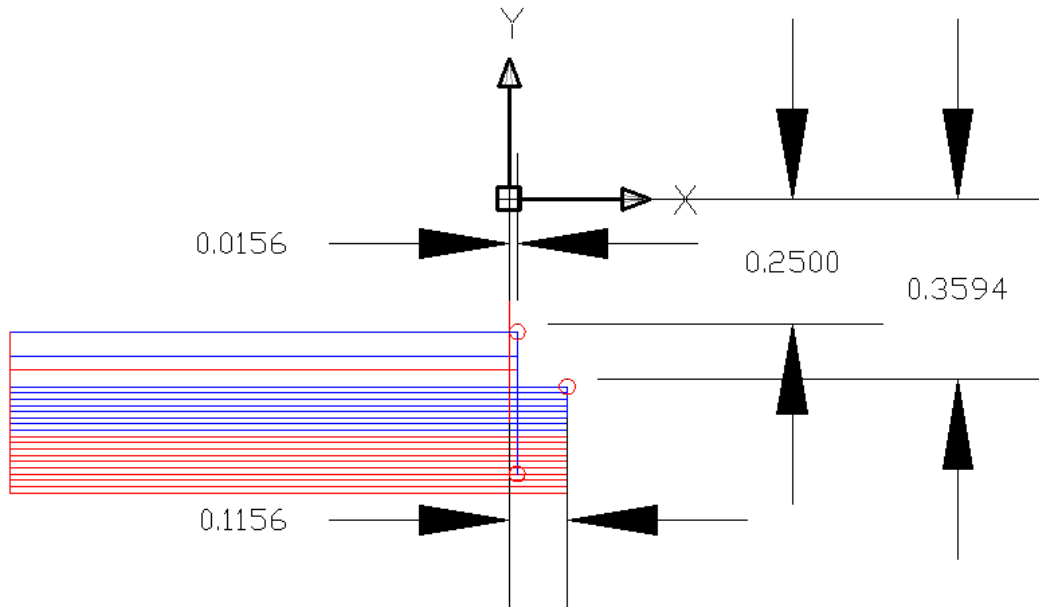
Rough and finish path shown and note finish pass settings.



CHECK OF FINAL DIAMETER

Backplot of the Gcode. Blue are cut moves, red are clearance moves, red circles are tip radius. With a tip radius of 1/64" (0.0156), the last finish pass is at $.2656 - .0156 = .25$ " $.25" \times 2 = .5"$ finished diameter of piece as wanted.

CHECK OF TOOL TIP LOCATION FOR FINISH AND FINAL PASS



School me on tip radius reply #2 by Jim

Hi Rich, thanks for the help. I'm now able to get accurate diameters by offsetting the tool the radius of the tip. **?WHY??? SEE ABOVE CHECKS**

Another issue has come up though. It seems as if LT compensates for tip radius on the final cuts, but not on the first pass. **NOT TRUE AS SHOWN ABOVE**

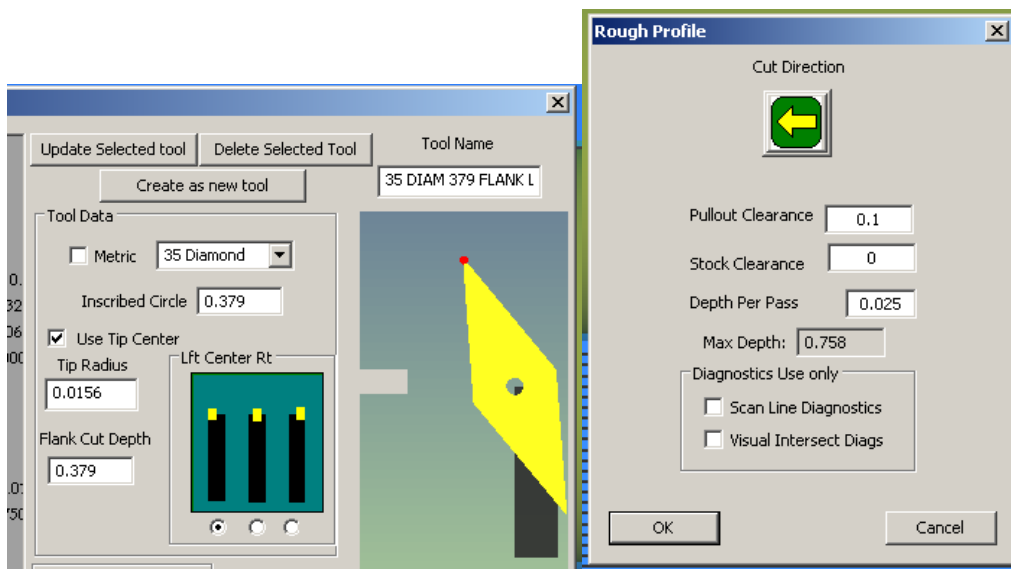
To demonstrate, here is how to duplicate my issue:

Import a straight line that will result in a .5" diameter cylinder. Now set the stock size to 1" and use a tool with a 1/64" radius. Then set a roughing tool path with 0.025" per pass. The first roughing pass will be at X0.475 which would be correct with a 0 radius tool, but not correct with a 0.0156 radius tool that ends up making a first cut pass depth of 0.0406" in reality because of the offset of the tool radius.

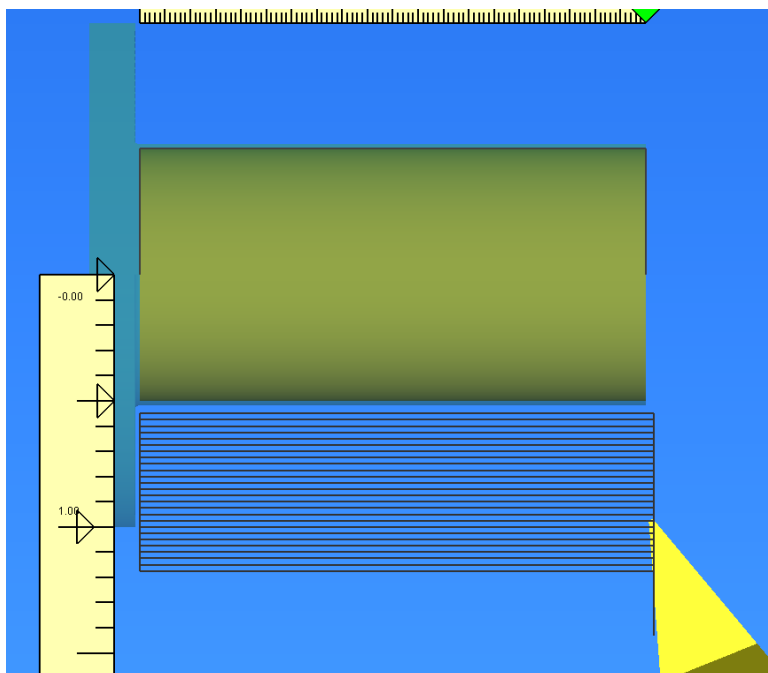
My work around is to specify a diameter of my stock larger than it actually is by 2 radii of the cutter. That seems a little kludgy.

So now that you see what I've done, what am I doing wrong in my set up?

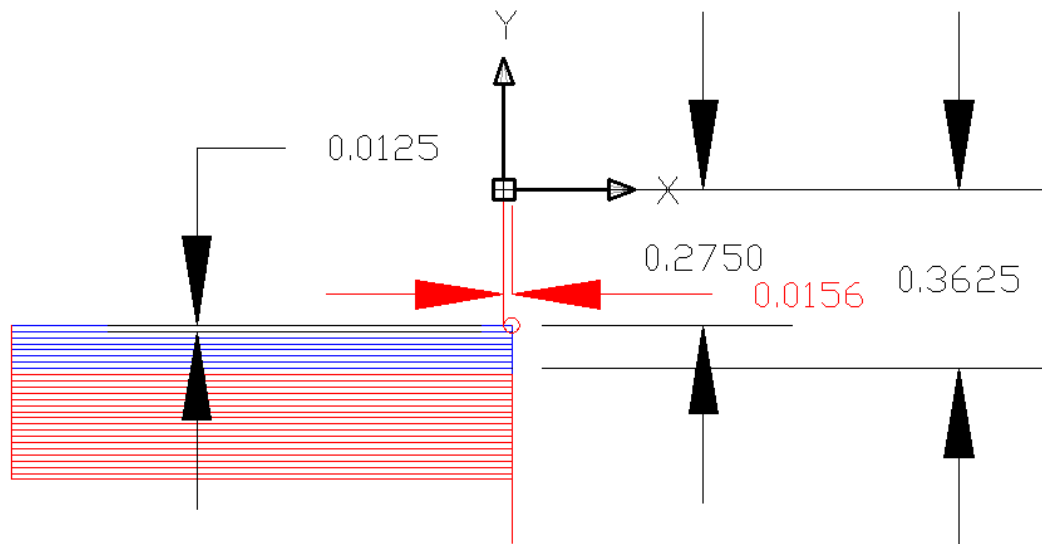
Post your dxf file.



Tool and depth per you reply.



Rough paths shown.



Backplot of the code. Note that no finish pass was done so there is additional machining required.
 $.275 - .0156 = .2594 \times 2 = .5188$ diameter thus the additional machining or finish pass is required to remove .0188" total.

RICH