

TB001 (Rev1) - Out of Round Circles and Arcs

Question: What is causing an inconsistent radius after milling a circle or arc?

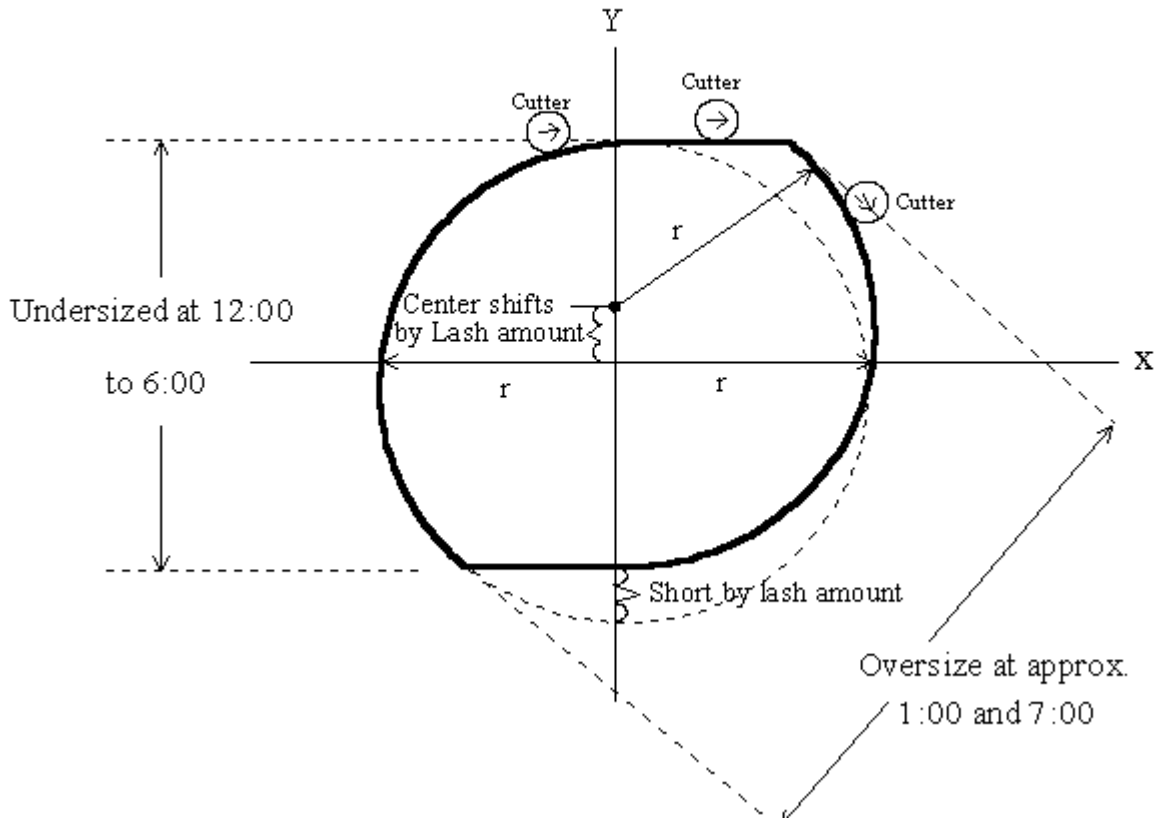
Answer: Mechanical lash in the machine or improper backlash compensation setting...

Solutions:

- Adjust software lash if less than 0.001". See [TB037 - measuring machine lash](#).
- Repair mechanical if lash is over 0.001". Contact your dealer.

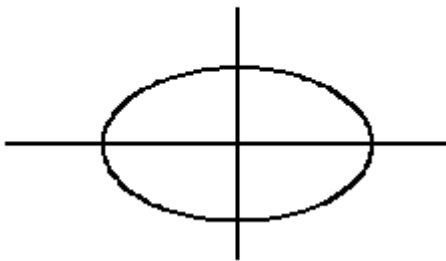
Drawing shows: Exaggerated example of Mechanical lash in the Y axis, with a CW cutter path.

Note: This example has no lash in the X axis.



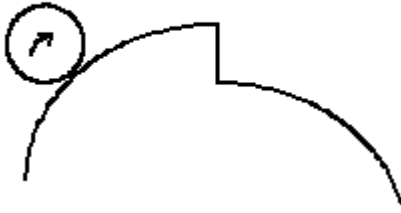
Problem: Elliptical Shape

Cure: Adjust Pitch (turns/inch)



See [TB036 - Measuring Motor Revs/inch](#)

Problem: Steps at 0,90,180,270
Cure: ReduceLash Compensation



See [TB037 - Measuring Backlash](#)

Document History

Rev1 Created on 1997-10-01 by #277