Lathe Project 1 Process Plan

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1. Start with $\phi = 1.375$ aluminum round bar, length max/min = $2'/2''$.

Bandsaw

2. If necessary, cut off $2'$ of bar.

Manual Lathe

3. Load in three-jaw chuck with $1.250''$ stickout.
4. Face the material.
5. Drill in $1.250''$ with $\frac{5}{8}''$ twist drill.
6. Bore inner diameter $1.125''$ to final inner diamater. ID = $0.750'' \pm 0.010''$.
7. Turn last $1.1''$ of outer diameter to final dimension. OD = $1.250'' \pm 0.010''$.

Bandsaw

8. Cut off at shoulder.

Manual Lathe

9. Chuck into collet and face cutoff end to final length. Length = $1.000'' \pm 0.010''$.