MANU 150 Mill Project Process Plan

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Rough Stock

1. Select Aluminum square bar, $\phi = 1.75$", length min = 2.125".

Bandsaw

2. Cut off bar to length 2.125".

CNC Mill

3. Set in vise and run program `mill1.gcode`.
4. Face material with 2" shell cutter.
5. Mill periphery with $\frac{5}{8}$" endmill.
6. Peck drill center hole with $\frac{1}{4}$" twist drill.
7. End program and flip over in vise. Run program `mill2.gcode`.
8. Face to final dimensions with 2" shell cutter.
9. Check dimensions and deburr as needed.

Table 1: Inspection Report

Dimension	Value(")	Max(")	Min(")	Actual(")	In Tol?
Length	2.000	2.005	1.995		
Width	1.500	1.505	1.495		
Height	1.250	1.255	1.245		