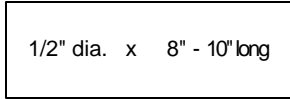


Pyramid / Point / 3-Edge Tool

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1. Material Selection

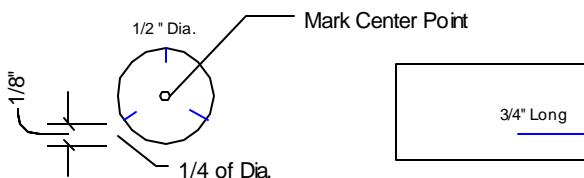


- HSS or Tool Steel (non-hss drill rod, shock absorber rod, reamers, etc.)
- 1/2" diameter is best but 3/8" or 5/8" will work too.
- 8" - 10" long is plenty with 2" handle sock-in included.

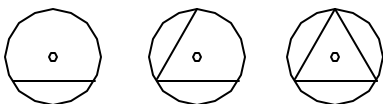
2. Material Preparation

- For Tool Steel, if it's not already annealed or if you don't know if it has been annealed, do this first. It makes it easier to do the initial shaping and grinding.
- To anneal, heat the area of steel to cherry red and let cool slowly to room temperature. It may take hours.

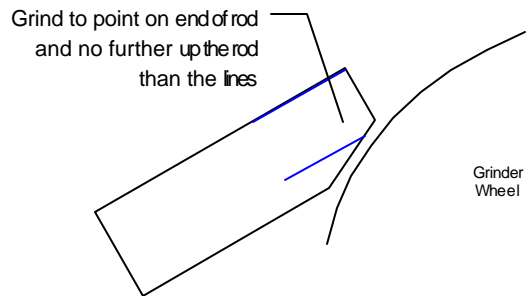
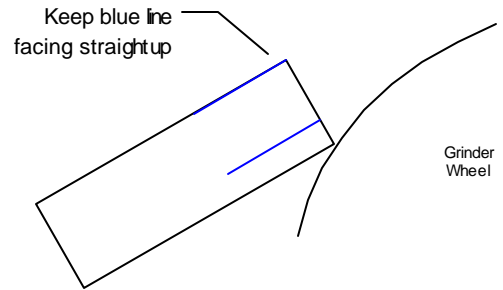
3. Marking Landmarks



- Mark the center on the end of the stock
- Make 3 lines from the end along the sides that are equally spaced and as long as the diameter of the rod used. This can be done by ...
 - Measure up from bottom edge 1/8 of diameter of rod
 - Draw line on end of rod across its width using toolrest as straight guide.
 - Rotate rod so that end-point of 1st line is now at toolrest. Draw another straight line.
 - Rotate and draw again. You should have a triangle drawn on the end of the rod.
 - At each point of the triangle, mark a straight line down the length of the rod using the toolrest as a guide.



4. Rough Shaping on Grinder



Rotate Rod so that next blue line is straight up. Grind next bevel.

5. Heat Treat

- The tool needs to be hardened so it'll stay sharp longer. Heat to cherry red and then quickly quench in appropriate medium (water, oil, air) until cold.
- Sand and clean off tool so you can see raw steel.
- The tool is now very hard and brittle. Temper it to make it just a little softer. Heat to light straw color very carefully and slowly. Quench again.

6. Refine & Sharpen Edges

