

PROJECT - Drill Point Gauge

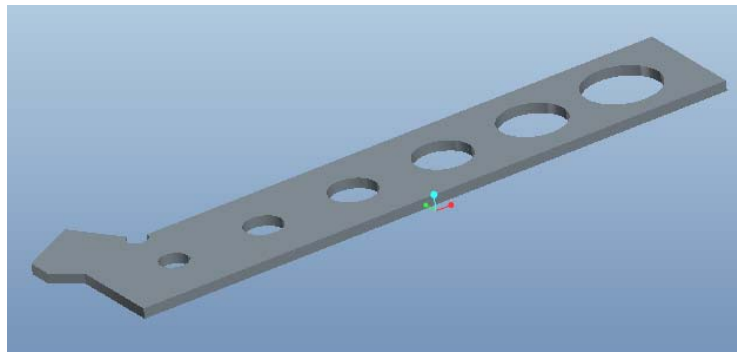
Foundation Skills



The Purpose...

A sharp cutter cuts cleaner, faster, cooler and safer. With practice, you will be able to sharpen drill bits in a matter of seconds.

To get started, you need a gauge to help you sharpen the bit SYMMETRICALLY (if the center is offset – one cutter longer than the other – you will drill a hole *larger* than the bit's diameter!)

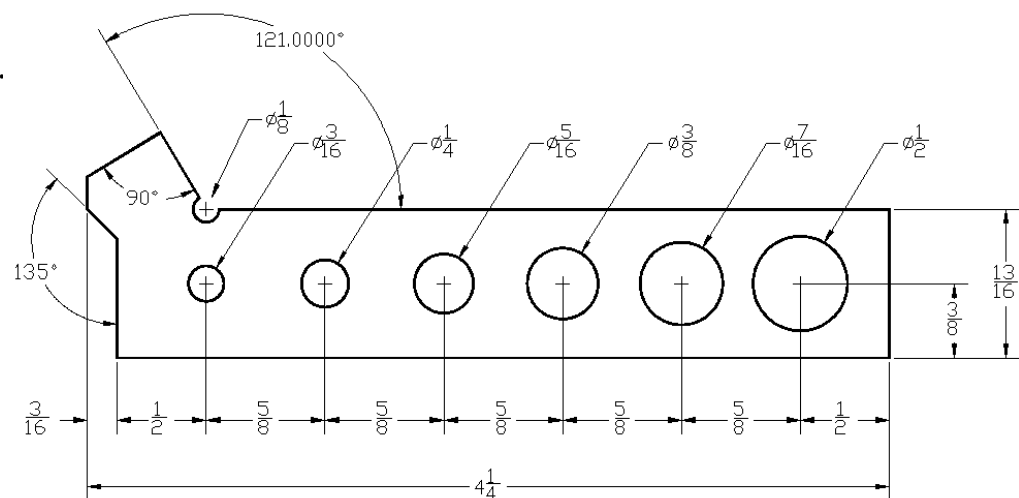


The Preparation...

For this activity you will need the following:

- 4-1/4" of 1/8 x 1-1/4" flat steel
- Tin Snips
- Imperial ruler
- Scriber
- Centre punch
- Ball-pein hammer
- Whitney Punch
- Files - single cut and double cut
- Lettering stamps

The Procedure..



LAYOUT

- Cut 4-1/4" of 1/8 x 1-1/4" flat steel
- File one short end square with one long side
- Remove scale and file smooth on both sides
- Apply layout die or felt pen to one side
- Layout the body lines and hole centers.

HAVE YOUR WORK CHECKED BEFORE PROCEEDING!!

CUTTING

- Center punch the hole centers
- Lightly center punch the outline of the body (makes it easier to see as you're cutting)
- Drill all the holes (use a pilot hole for holes larger than 1/4")
- Hacksaw to shape – Be sure to cut on the OUTSIDE of the lines
- Finish file the edges of the body

You will be shown how to sharpen a drill bit. When the drill is sharpened satisfactorily,

HAND DRILL POINT GAUGE IN FOR MARKING