

Name: _____

Score: _____

Drill Bits

Why?:

One of the hardest decisions when operating a drill press is to select the best cutter. The size of the hole, hardness of material, rigidity of the setup, and kind of cutters available should determine this. Selecting proper cutters can aid in the success of the machining operation.

1. Name the four drill sets. List the largest and smallest drill that would be found in each set according to the chart in the textbook

- a. _____
Largest _____ Smallest _____
- b. _____
Largest _____ Smallest _____
- c. _____
Largest _____ Smallest _____
- d. _____
Largest _____ Smallest _____

2. From the given drill bits determine what the Diameter is in decimals and what set it comes from. This will be six drill bits labeled with letters below.

- a. DIA _____ Set _____
- b. DIA _____ Set _____
- c. DIA _____ Set _____
- d. DIA _____ Set _____
- e. DIA _____ Set _____
- f. DIA _____ Set _____

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3. Describe the purpose or function of the following drill parts:

- a. Margin
- b. Chisel edge or dead center
- c. Shank
- d. Flute
- e. Lip clearance or lip relief angle
- f. Cutting Edge

HANDS-ON Activity
Drill Sharpening.

You will be given a demonstration on sharpening a drill bit and then proper use of the drill press to successfully sharpen and test your drill bit. You will need to a signature from the instructor or lab assistant demonstrating success.

_____ **Drill bit sharpened**

_____ **Hole successfully drilled**

Below write a summary explaining any troubles or success. Do you feel comfortable sharpening drill bits?
