Here is a riddle: What do you call a tub full of dull, unmarked drill bits?

The answer, in my book, is, at best "scrap metal" and worst case, junk not worth keeping.

These drill bits have two counts against them. First, they are of unknown size. If you break a drill bit in the middle of a project, do you really want to start sorting through this tub in hopes of finding a replacement? Second, they are mostly dull. If you own a drill sharpening machine, then that can be easily corrected. If you don't, then the tub certainly contains junk not worth keeping.

I am guilty of having a few tubs of worthless drill bits but today was a day of reckoning. I decided to size and sharpen all of this junk because I know the day will come when this effort will pay off. Probably have one less frantic trip to my local Ace Hardware to buy a single drill bit.
My process is not perfect and may be off plus or minus one size. But that is far better than being unmarked.

I start by zeroing my caliper on the shank of the unknown drill bit. Then I close the jaws to get the actual diameter (ignoring the sign). I subtract 5 thou and use that as a starting point on my drill bit table. My favorite table can be found at http://rick.sparber.org/dtu.pdf.

This gives me a starting point.

When I find a shank within plus or minus 5 thou of my unknown, I check the next higher or lower one to see if it is closer.

Once identified, I sharpen it on my Drill Doctor.

Yes, I know the actual cut hole can be different from what I marked and would be a function of the manufacturer. Didn't say this was a perfect procedure. But it does get me close. Likely within one drill bit size across all fractional, number, and letter drills. In critical applications, I will drill a test hole and measure it with an expanding gage and mic or plug gage.

Even with these limitations, I'm a lot closer to having useful drill bits again. All that is left to do is dunk the ends of each one into paraffin wax to protect the edge.

I welcome your comments and questions.

If you wish to be contacted each time I publish an article, email me with just "Article Alias" in the subject line.

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