

Hey, check out this tutorial on  
"Window" Casing Pens!



My good buddy Mr. Natural assumes that you already know the basics for making a casing pen so things like drilling and seating bullets won't be covered. If you need help with the basics he encourages you to visit the IAP library.

I use 25.06 ammo for all my casing pens, mainly because the case mouth fits perfectly on a standard 7mm pen mandrel and makes it easy to perform a lot of different operations. The case is the same size as a 30.06 with the only difference being the diameter of the bullet. The case mouth has been reduced .051" to accommodate the smaller round.

I start by drilling the primer end out to 1/4" and installing it on this.....

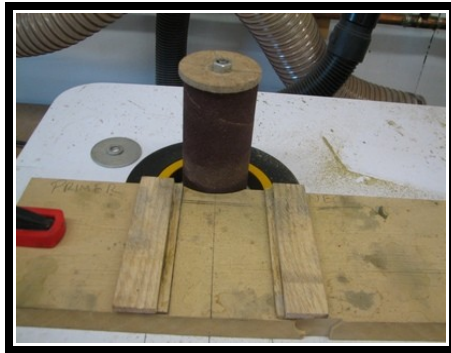


It's a piece of an old mandrel that I cut down to size and threaded. You don't have to have one but it makes it easier to control the casing while sanding and it also helps to save your fingers!

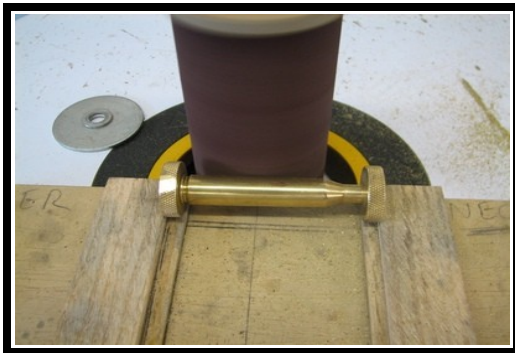
**NOTE:** If you make one of these, DO NOT over tighten it. When you remove the center of the case with the sander, what's left is very fragile and if your jig is too tight the case will collapse, ruining all your hard work.



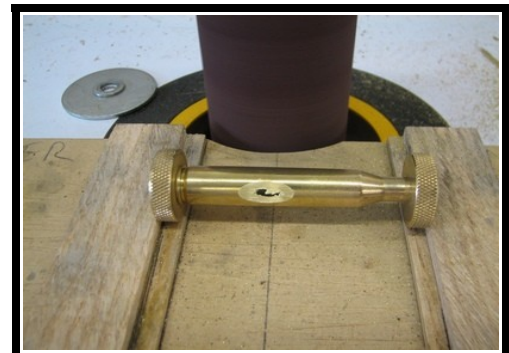
Why don't you ask  
the big dummy how  
he knows that?



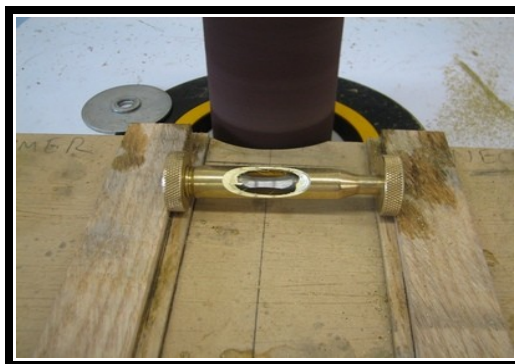
Here's the jig I made to hold the case for sanding. It's nothing more than some wooden rails that the thumb nuts ride on to keep the case in the correct position. You'll notice I'm using an oscillating spindle sander. These are nice but you don't have to have one. A sanding drum for your drill press will work too. I'm using a 2" sleeve but I've also made them using a 3" sleeve, the choice is yours.



Here's the case ready to sand.....



first pass .....



one side complete.....

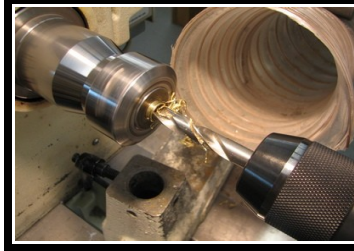


done.

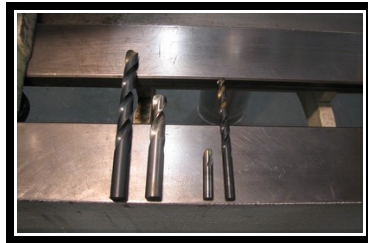
Keep a container of water and an air hose handy while sanding. The case gets hot so dipping it in the water cools it off. Blow off the excess water so it won't ruin the sandpaper. I used calipers when I first started making these but not anymore. If you look straight down over the case when sanding, you can get it even. When you get close, hold it up and look at it. You can see which side needs a little more taken off.



Now I hand sand the "windows". I turned a piece of wood 2" in diameter to match the spindle on my sander and taped some 400 grit wet/dry to it.



Next I drill out the case head. A letter "W" bit works for 25.06 ammo but you'll have to figure out what size you need for your particular situation. Try to match the case I.D.



I like to drill around 600 rpm but it ain't critical

One word about bits. The shorter the better when drilling casings. The two in the middle are what I use, the other two are regular jobber length bits of the same size. I use a screw machine length bit for the "W" and a "spotting" bit for the pilot hole. The shorter bits give me better accuracy because they don't "wander" like the longer ones. Which ever type you use, feed the bit slow and use some water or oil to keep things cool.

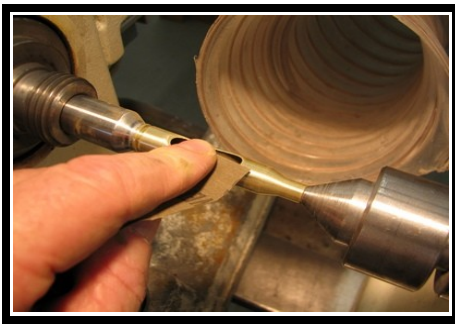
**Don't forget to dry off all chucks and lathe parts when finished!**



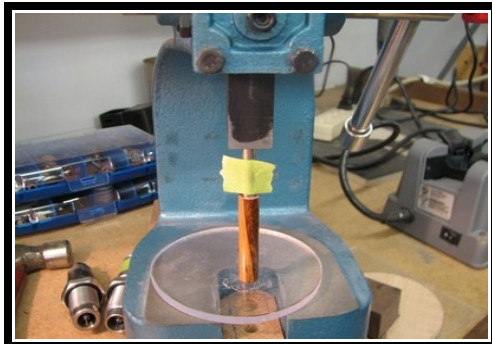
The next step is cleaning up the burrs. I use a mini file, a chainsaw file and a re-loaders chamfering tool for the end.



I use standard slimline tubes and they're a little long. I put the finished insert in the case, mark it with an X-acto knife and shorten it on the disk sander.



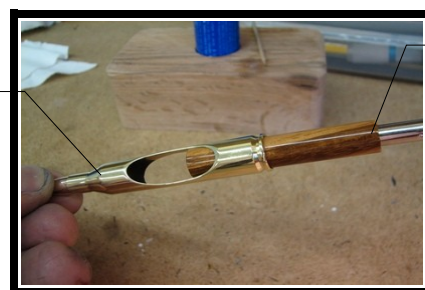
Sanding and buffing is next. I use 600 grit wet/dry paper, used dry. I sand with the lathe on and then turn it off so I can get all the nooks and crannies. Sanding with 600 leaves real fine scratches so go ahead and sand aggressively, the buffing will remove them all. For buffing I use a sewn cotton wheel and Dialux Blue polishing compound.



Now is when I press in the transmission. Doing it now prevents accidental damage to the casing in it's weakened state with all that metal removed. After seating the bullet I press and try, press and try, until I get it right. That little piece of tape helps me to see how far I'm going.



Glue here inside



And here

Next, with the transmission in the CLOSED position, I like to match the grain and put a witness mark on the transmission in line with the clip. That lines things up for final assembly.

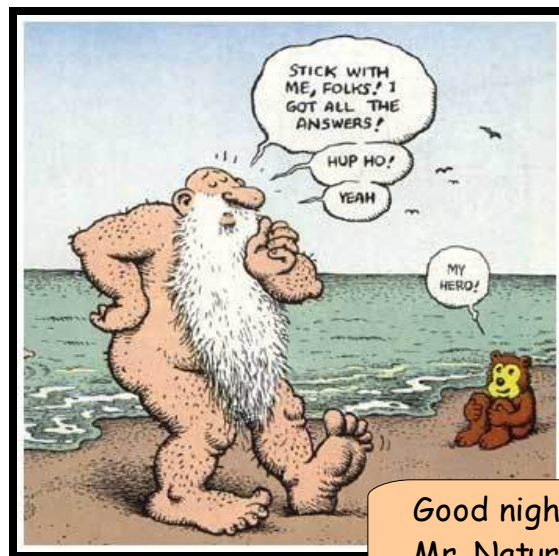
Now I use a toothpick and put two dabs of epoxy on the inside where the insert will bottom out and a couple on the insert itself. Then slide the insert in keeping the witness mark at 90 degrees to the window. Wipe away the excess glue and that's it!



I use clear powder coating on MY casing pens !

Here's the finished pen. I didn't finish the brass for this tutorial but obviously that's done before you glue in the insert.

I hope this makes the process clear for you, Natch and I look forward to seeing your creations!



Good night Mr. Natural

