Benjamin Cardoso Le mans le 29/04/2011

Dremeltingpotes.free.fr

Cardoso5fr@yahoo.fr

WIP Straight Razor



Caution: The realization of your Straight Razor will require to resort to tools being capable to cause serious wounds. I invite you to use them with the greatest precaution and to discover their operating modes by reading manufacturers notes. You will have also to handle a heat source in order to carry out the heat treatment. I invite you to take all the precautions necessary not to wound your entourage or you even. Insulate, and warn the people neighborhood whom you will handle possibly dangerous tools. I also invite you to wear gloves, masks and glasses. Perhaps you will be like an alien, but that will avoid you possible nuisances.

The author of this text do not can in no case to be held for person in charge for the possible incidents who would occur at the time of the realization of this tutorial.

WIP straight razor

I shave me since 2 year with straight razor. I tried a lot of time with various success to make some razor. I succeed 2,5 time to make one really efficient. For the last one i did i take picture.



I used a 100MnCrW4 (O1) 5,9 thick plate. I draw the blade. It will be a simple 5/8. I cut with a stainless steel cutting disk.



Some 60 belt grit grind after.



The shape is more or less OK



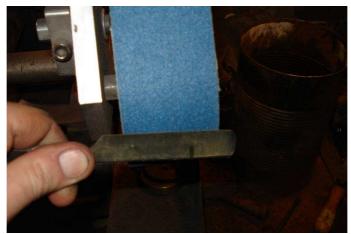
I drilled the pivot hole to 3,8mm



I reamed the pivot to 4mm



The blade is drilled.



I grind the hollow grind with new 60 grit belt, 150 mm contact wheel, 80 shore.



30 mn of work after



It's already thin



I chequered the back, 3 normalization, oil hardening.



After the quench, the sharpening file slide on the edge.





I cleaned the blade, and propan torch flash tempering. I did a gold tempering.



Between 0,23 and 0,21 mm thick after the 120 belt.



Between 0,16mm and 0,18 mm after the 240 grit



I countersinked the side of the blade, and clean it with a 500 grit belt. I'm between, 0,09 and 0,13 mm



I etched my logo



I cut stainless piece (304 or 316L i don't know), 1,6mm thick.



I put the BP washer in order to see where i need to point.



I drilled to 3,8mm, reamed to 4mm, and drilled the heel to 4mm



Some hole.



I draw vaguely the handle.



I check the position of the blade



I shorten the various pieces.



The spacer is in a scrap piece of T40 (ti grade 2). Drilled to 4mm and bevelled.



I grind the handle with a 60 belt, i put the spacer in place and pinned it with a brass pin. (+ epoxy)



I fold a bit the stainless handle.







Some black compound, and green compound on buffer, that is already able to shave hair on the harm.



My sharpening kit, Japanese stone 800, 1000-3000, chinese stone 8000 and 12000. A piece of jean straighten on a oak plate with red buffering compound, a paddle with leather and green compound and on the other side simply leather.





After sharpening, and 1 week of shaving, that is not bad at all. I'm almost to the level of my favorite straight razor. It's less hollow grind than i would have thought, the edge is "straight" i would have think it would be more flexible. The edge retention is not bad at all.

It's a 5/8, 7 cm sharp, blade 14,5 cm, 6mm thick to the pivot, and on all the back. Highness closed 2,3 cm to the highest.

I'm satisfacted by the result.

I would have to keep a bit more material at the begin of the tang to a better hand take, and i would need to try to decrease the thickness at the pivot level, but i didn't find the solution to have something less thick and perfectly clean and perpendicular for the pivot (the screw are less tolerant than pins).

Thickness, 12mm to the pivot, 3,5 mm to the heel. 16 cm closed

Sorry for the poor quality of the picture, in my workshop i don't have a lot of light $\ensuremath{\overline{\bigoplus}}$