

Mexican collector fins

After studying BIS I gave it a thought, and as I work in the printing industry, I have easy access to offset printing plates, these plates are, after use in the printing machines, sold for recycling to scrap metal prices. If you know someone working in a print shop, just ask for them, and they will sell or give them to you.

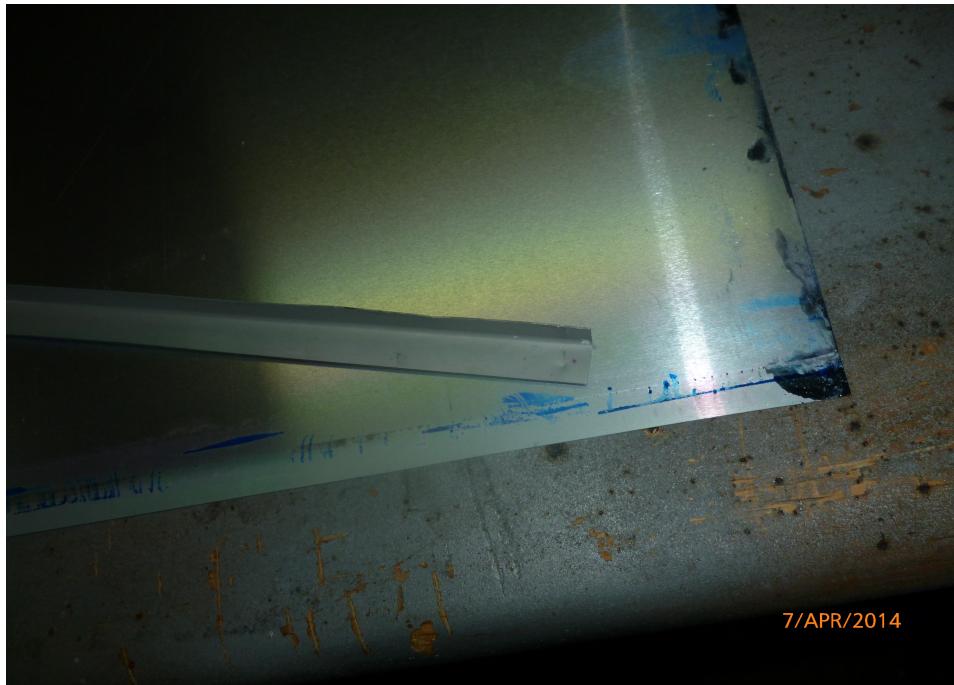
The plates are normally 0.3 mm thick and comes in sizes from 30 x 50 cm. Up to 120 x 160 cm. Most used are 50 x 70 cm. And 70x 100 cm. The dimensions varies, so don't hang me if yours are different.

They are easy to work with, cut, bend and straighten. Beware they have sharp edges and corners, use protective gear.

Some of them comes with one side bend like this.

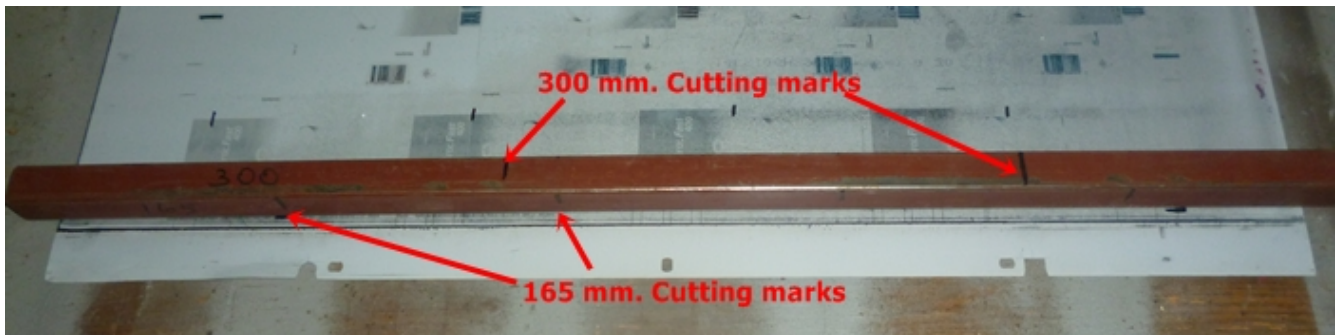


Just cut it straight off with a ruler and a sharp knife.

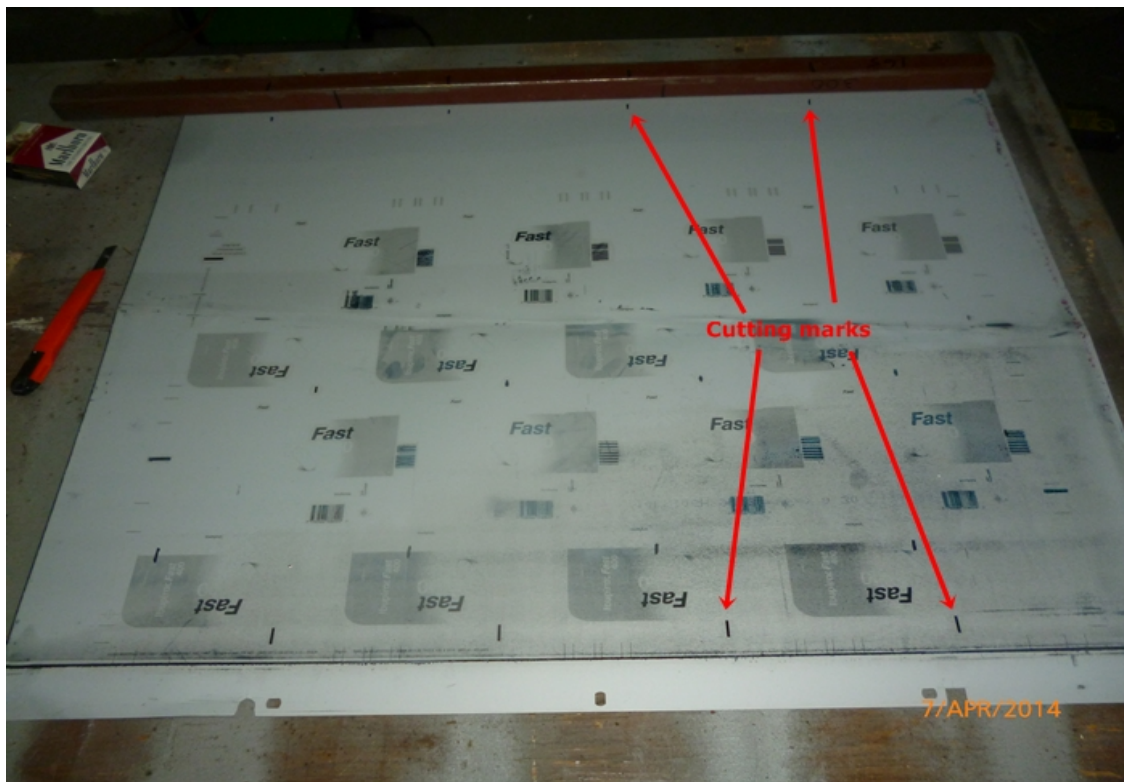


I wanted 300 mm long and 165 mm wide pieces, to, after forming, ending up with a collector fin 140 mm wide (distance center to center of 1/2" copper tube risers).

First I made my ruler, just a 1" x 1" 1 meter long square tube, There are more sophisticated rulers available for money, but this one I had in my workshop. Mark your dimensions on the ruler long on one side and wide on another.



Now just transfer the marks to your printing plate, to the left you see the knife I use for cutting.



Place the ruler at the marks and cut along it, no need to cut through, just get a clear line in the plate.

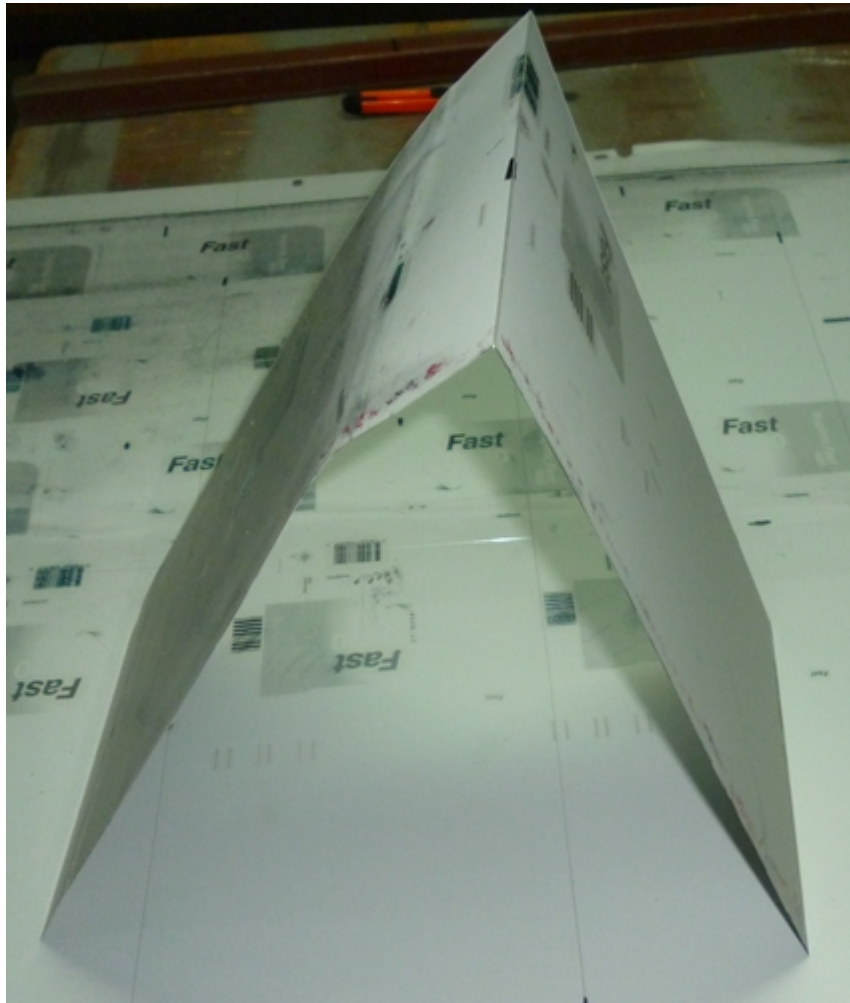
Looks like this



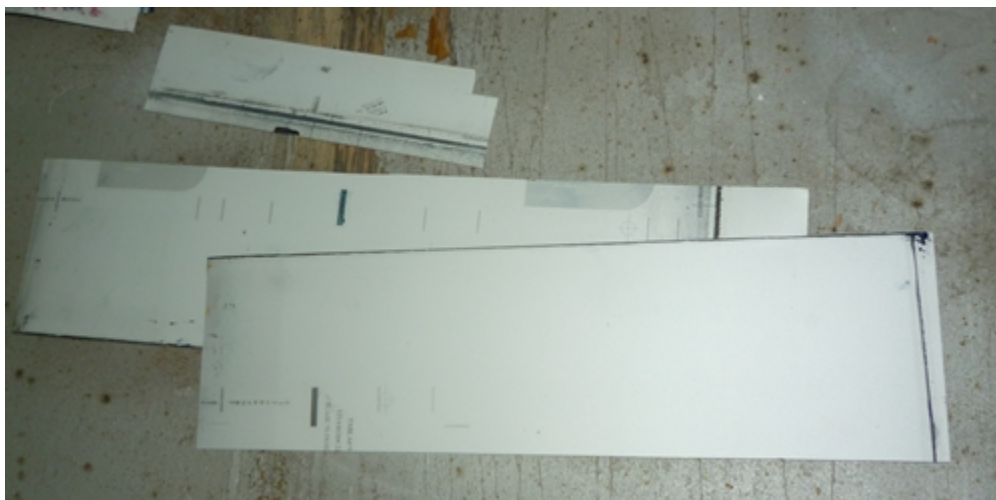
Place the plate over a table edge bend it up and down 2-3 times and it will separate clean.



Of this plate I got 8 pieces, for one panel I needed 63, so I had to cut 8 plates. Here 2 pieces, just bend back and for and they separate.



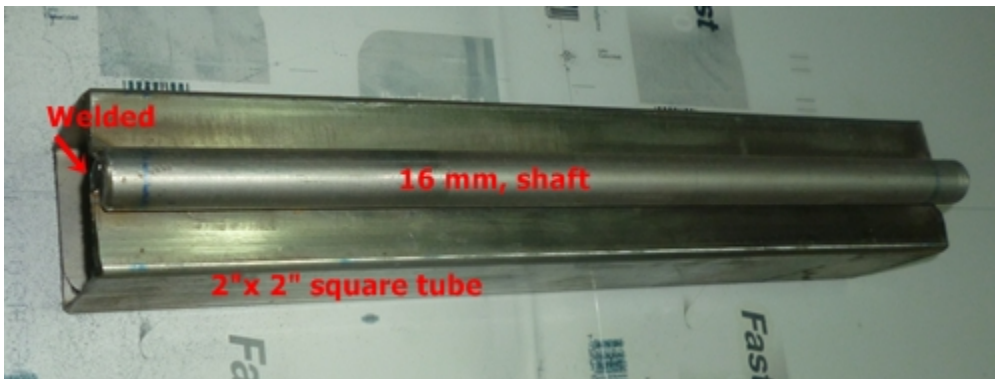
Of each plate I got some strips over, I used these for the underlay of the copper pipes. It was not enough for all of it, but I used one plate to make the rest.



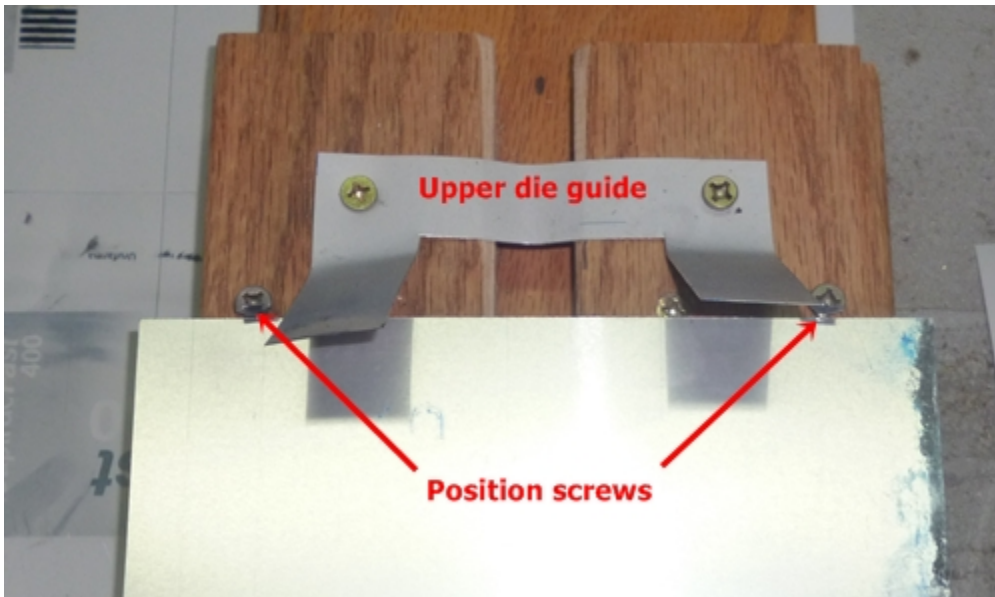
To form them I made an upper and a lower “die”, the lower one I made of some oak wood rests I had in the shop.



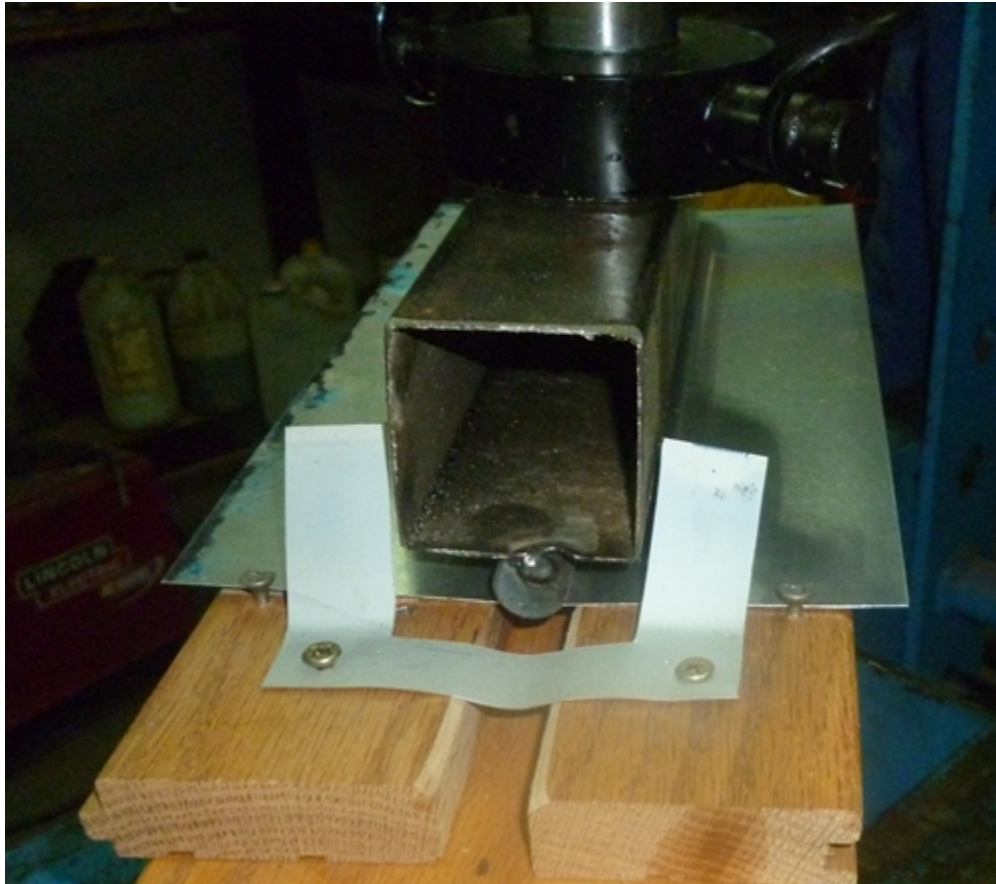
The upper die made from some other rests.



Here with a fin inserted against the position screws.



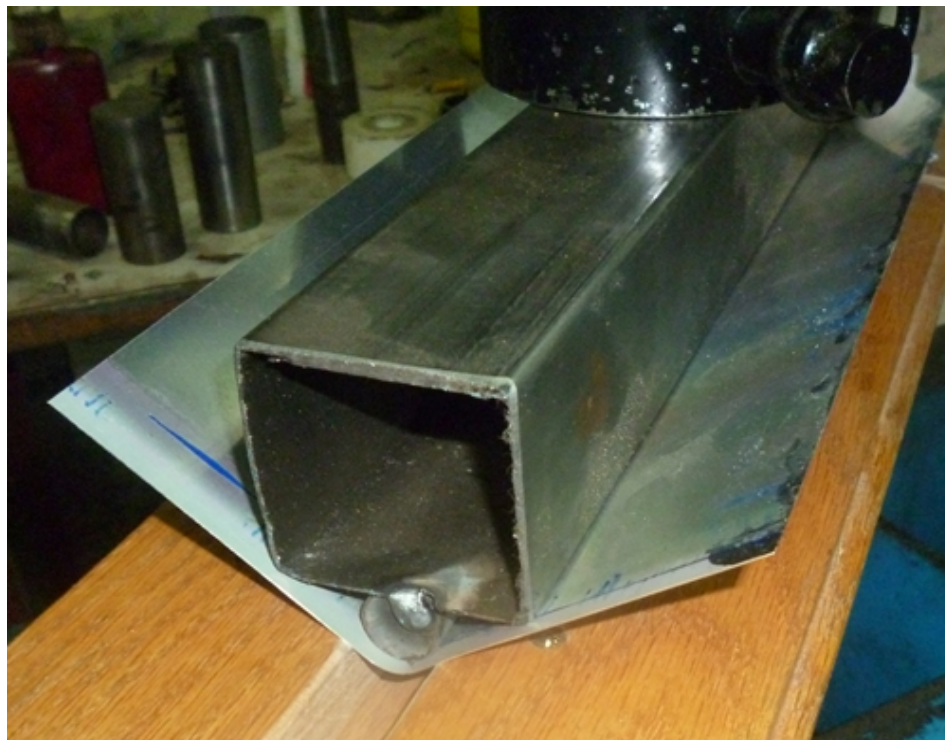
As I have a hydraulic press in my workshop I used that one for pressing the fins, it can be done with a pair of clamps or a bench vise, will be a little more time consuming and difficult though.
Dies in position



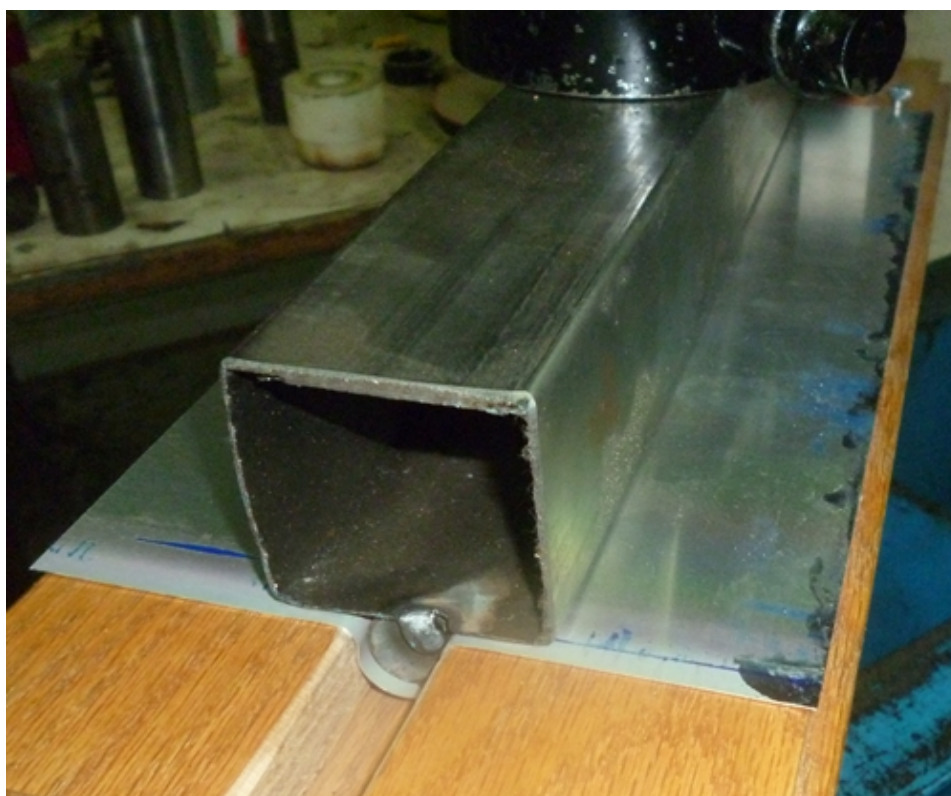
Ready to bend.



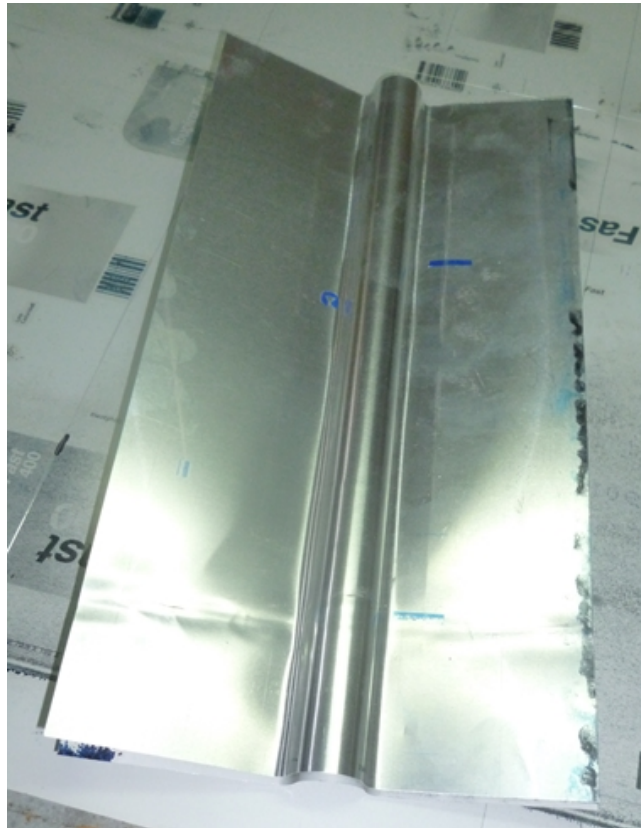
Half way through



Done



The fin



The die



Total costs, 2 beers to the printer, I had to drink 2 too. End of story, have fun