Last year I offered to make a wax seal stamp for the son of a long-standing friend. The son's 21st birthday was approaching and had mentioned that he was considering having his official Coat of Arms made into stamp for embossing wax seals. That's not my story to tell, interesting though it is, but he mentioned afterwards that I should make one for myself, as I had made several over the last few years for others. So I decided to have a go at designing a monogram of my initials, MJS, and engrave it.

I had evolved a few techniques while deciding what would work for the Coat of Arms stamp, given that it would need to fit on a 3cm brass stamp head, and the smallest engraving bit I could use was only 0.5mm in diameter, so that would fix the sharpness of any corners in an engraved shape, as well as the level of detailing.

I simulated various designs in Xara using bevels, and also in Xara3d so I could rotate them to see how various depths of the elements would work together without looking clumsy. A common feature of monograms is the interleaving of the initials, especially for couples wanting a joint monogram for wedding invitations, and that had implications for engraving, too. With the toolpathing s/w I have any cutting/engraving is done one flat layer at a time, often referred to as 2.5d as opposed to 3d.

Here are some image samples of various stages and tracks of the design evolution, taken from my working notes and images. Three designs ended up as actual engravings.







My initials, MJS, also Felix Titling with the J getting the 'T' bar



set up for Xara3d

That looks fine. But I wondered what else I could come up with, and spent some time looking at a large number of fonts for inspiration as to how to distinguish my MJS monogram from others. At one point I noted a chance resemblance to a dragon and decided to take that as a theme to pursue further.



I had two tracks, one made the dragon features explicit and that meant lots of optional elements to play with, while the other took a more subtle approach, encouraging the resemblance with only the slightest of details. In engraving the brass stamp heads, I had mounting issues because their shapes weren't easy to clamp properly, but a custom mount solved it. I used a ballnose bit, 0.5mm in diameter, which cuts round-bottomed grooves as it moves. It leaves a scalloped relief on the bottom of the cut areas which I like, as it catches the light, and so the eye.

In your face dragon 1. Added some features to make the dragon explicit, rather than just suggested; all of these evolved over several iterations. The 'J' became a perch.

In your face dragon 2. One of several other variants, with the wing phalanges ranging from none to 4, and on the outside or inside of the wings. The gape of the jaw also became wider.





Simulated stamped wax seal



A photo of the engraved brass

with the blank areas masked

The blue and green lines are the paths the toolbit's centre will follow

Flipped and

toolpathed

Flipped and

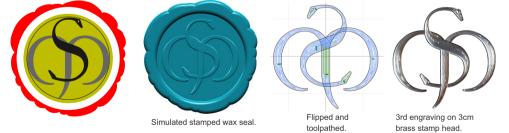
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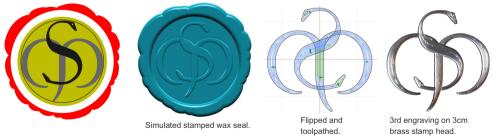
1st engraving on 3cm brass stamp head



2nd engraving on 3cm brass stamp head

The Subtle dragon. Only the eye spot, and a slight tweak of the tail, and the 'J' was smoothly intergrated







into the centre of the 'M'.

For your delectation, in higher resolution;

