

# Building the armature of the statue

Sculptor, Professor Alexander Stoddart provides the following commentary:

"What you see here is the completed, welded structure - the most taxing part of the technical process. All this has to be measured from the small model using a "chassis" square, replicated over the big model on (in this case) a 3.75 ratio of enlargement. All the points taken from the small model must be studiously avoided when the armature is being built, so that at no point will steel protrude through the clay which is to be laid over the structure. You can see a point being taken from the forehead of the smaller model, and the pendant square replicating that point on the big scale. See how the big point is well removed from the location of the armature? This is to allow for the clay thickness.



The structure has to be welded in stout angle-irons, for the object has to support a terrific weight of clay for a longish period. It must also be a very stable structure. No sculptor wants to be modelling on a wobbly armature. Also, the precision with which the final surface points are taken requires absolutely no movement. Seated figures are an advantage, since they tend to stabilise well, but you see how the raised foot is anchored to the base? The weight there will be considerable.

The next stage is to strap the welded structure with wooden laths, set horizontally to afford a tight grip for the clay. This is done in a couple of days, but it's a pest of a job because it involves a tweaking technique to bind the straps on with mild-steel wire, and that ends up hurting the hands. Once it's done the entire structure has to be thickly painted with rust-proofing red lead. You don't want to compromise the mild-steel bindings of the lath with encroaching rust, nor do you want rust stains disfiguring the clay model. The paint has a further advantage in sealing the wooden portions of the armature. This prevents the wood from sucking the water out of the clay, the constant hydration of which is the really big chore of a heroic-scale clay model. The very hollow areas of the armature (torso, thighs, head and chair) are either stuffed with polythene to prevent any body of air that might conspire with the exterior space to dehydrate the clay, or else actually lined with tough polythene stapled onto the interior of the chamber (this latter option will be the course in the chair area).



Perhaps you can see a subtle thing in this armature. One of the pictures, close up to the main torso of the big structure, shows a little silvery bolt on a horizontal beam. This marks the place where the entire armature can be split in two, removing the legs and lap structures to let the torso, head and arms stand alone. There are four such bolts forming the attachments of the two parts. At any moment the armature can be dismantled into two parts; there is never any permanent welded or joined attachment between them.

This is done for two reasons; the first to allow me access to model the face and bust areas of the statue, which otherwise would be inaccessible due to the presence of the lap, and the second to facilitate the eventual dismantling of the model and armature during the plaster-casting process - when the clay model and all this sterling work and preparation is destroyed in the most cavalier fashion! For what is being seen here is all merely provisional stuff. You can see a photo of the halved armature. I invented this way of tackling the problem of the seated figure. It is all rendered possible to do by virtue of the small model being quite accurate and dictatorial. Indeed, the small model is the benign autocrat whose orders are followed to a T. Under such a regime we find ease and opportunity, joy and general felicity and perfect liberation from our personal freaks and spasms! As a social model I think it cannot be beaten, and it is informative to note that Socrates, who is the grandfather of all such sentimental ruminations upon the virtues of closed societies, was himself a sculptor to trade and is thought to have made a Three Graces which once stood within the Acropolis precinct in Athens."

