

The Patina turns the metal to such traditional colors as green or brown;- there are however a full range of chemicals which will react to bronze to create an extensive palette of colors. Today the *polychrome patina* or militia colored bronze casting is quite popular with modern sculptors, as this element can further define and separate the elements of a sculpture and will often give it more life and realism.

This does however, remain a matter of choice.

Industrial lost wax casters use the term **investment casting** which is named for the plaster mixture which the wax is placed or invested in.

The *investment* like the *wax* is lost in the process. Neither item can be successfully reclaimed as a fully recyclable product although some of the wax and investment can be remixed.

In the mid twentieth century production casters began using *ceramic shell* as a replacement to *investment*. They could cast a variety of metals in ceramic shell including stainless steel. Much of that early industries knowledge was used to make golf club heads. Several people saw the adaptation of ceramic shell for Art Casting and so a number of new Art Casting Foundries were born out of the Ceramic Shell Method 1960's and early 70's. This methodology of *ceramic shell* gave Art foundries more of a production angle which was not present in investment casting.

Modern Electric Welding, such as, wire feed Mig welding gave the Art caster the luxury of cutting up a large sculpture to cast in sections rather than one unit. This greatly affected the turn around time, streamlined the method and helped the bottom line. Old fashion Foundry methods used right to the 1960's was for Art Casters to attempt to cast every sculpture in one piece because of poor joinery or welding. This meant that Kiln Burnouts may have to last for weeks on end and that the Bronze Pour had to be done completely for the estimated weight of the sculpture and it's gating.

Bronze Pours of 1,000 pounds to several Tons were necessary.