

LOST WAX CASTING

Lost Wax Casting is a very arduous and time consuming process that has been used for at least 5,000 years. It was the preferred method of bronze casting used by Rodin.

Website describing the process...

<http://www.cantorfoundation.org/resources/the-lost-wax-casting-process/>

Step 1 : The artist creates a sculpture in plaster or clay.

Step 2 : A mold of the sculpture is made from an elastic material.

Step 3 : A fireproof clay duplicate is made from the mold.

Step 4 : The entire surface of the clay duplicate is scraped down to create a shrunken core.

Step 5 : The core is placed in the middle of the mold, hot wax is poured in. When hardened a wax duplicate of the original sculpture is created (with a core of clay)

Step 6 : The wax sculpture is then finished with detail, the artist's signature, cast number... in preparation for the final casting.

Step 7 : Wax sprues and gates (pipes) are added to allow the wax to melt out and the molten bronze to pour in.

Step 8 : A finely granulated ceramic coating is applied to the entire surface, covering the sculpture. The entire structure is then fired (heated at a very high temp)... the wax melts out ("lost wax") creating a ceramic mold.

Step 9 : Liquid bronze (heated to 2000 degrees Fahrenheit) is then poured in.

Step 10 : Once cooled, the ceramic mold is broken off.

Step 11 : Finishing - removing sprues, grinding, chiseling, polishing...

Step 12 : Patina - oxides are applied to the surface to corrode a thin layer, creating a "patina" (brown, blue, green color)