Encaustic Technical Information: Sculptural Applications of Wax

Wax offers limitless possibilities to artists seeking to work sculpturally. You will find that there are many benefits to working with waxes (either encaustic medium or microcrystalline) including strength, fluidity, translucence and flexibility. Listed below are suggestions for beginning your exploration of wax as a sculptural material.

Handbuilding

One of the most accessible ways to employ wax in your work is to form and model it by hand. In order to work with wax in this way it has to at an optimal temperature where the wax is softened but solid. The best method for reaching this temperature range is to heat a contained amount of wax evenly so that it becomes fully liquid then evenly cools so that it remains malleable.

The temperature range for softened (malleable) medium is between 90°F-120°F; if working with R&F impasto (microcrystalline waxes and beeswax) the temperature range will be slightly higher at approximately 110°F-140°F. It is important to note that while the surface of the wax may appear to be cooled the wax which is closest to a heating source will remain molten longer than the surface does. Either wax medium (beeswax and damar resin) or impastos are the most stable types of wax to use for creating work that is three-dimensional.

After the wax has cooled to the point where it can be safely manipulated it can be scooped, troweled, rolled, modeled, cut and generally formed with the same ease as modeling clay. While actively working the wax it will retain heat and stay malleable, another way to continue to heat the wax is to use a heat gun or other fusing tools. After the final form has been achieved allow the wax to cool and stabilize. Additional layers can be added and your piece can be reworked at anytime with the addition of heat.

Armatures

In addition to forming wax on its own, wax can be applied to the surface of other materials, like bisque fired clay, wood, plaster, cement/brick, and sculptural paper. The only prerequisite is that the base material or substrate be absorbent enough for the wax to adhere to it.

To create stable forms using wax over these materials first apply several layers of liquid wax thoroughly fused to the surface to create a base. Wherever the wax is to be built up the base layer will have to be heated to the

melting point using a fusing tool and then warm wax can be added. Fusing at the point of connection is very important for stability. For finer more delicate pieces it may be necessary to build the wax around a wire armature for added stability.

Embedding wax in fabric or paper will give those materials greater ability to be sculpted. These materials should first be dipped into liquid wax and cooled slightly. Additional wax layers can be added by brushing on liquid wax and fusing. The infused material can either be manipulated into a form or applied like a skin over an armature.

Casting

Another option for creating form with wax is casting. Wax can quickly and easily be cast into molds made of plastic or rubber. A release agent is not usually necessary, but for highly detailed or delicate forms, linseed or mineral oil can be applied to the inside surface for easier de-molding. To cast, heat the wax to it's melting point using a container with a spout then pour at an even pace into the mold cavity. Filling the mold completely and allowing the wax to cool will create a solid casting. To make a hollow casting fill the mold with molten wax and let it sit until the wax that is visible begins to look cloudy (this indicates it is cooling). Pour out the liquid wax that will be pooled in the center of the casting. The wax along the walls of the mold will cool faster than the wax in the center of the mold. For thicker wax build up allow the molten wax to remain in the mold longer. Beginning with a mold that has been cooled in a freezer will help build up the casting faster. After de-molding the wax piece more layers and texture can be added to the casting.