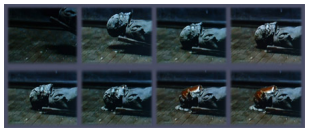
A Scene from the PJ's

Wax has been used on more modern puppets as well. Will Vinton's PJ's TV show used flat cast wax replacement mouths which were painted. This works a lot better then simple clay because it is flexible and holds the sculpted details really well. The wax can be formed to cast plastic heads without getting squished and out of shape as easily.



A scene from Fred Stuhrs Prison Sex Tool video

Another person who used wax in a stop motion puppet was Fred Stuhr in his video for Tool called Sober. The main puppets head was cast in wax and painted. A heat gun melted the wax using time lapse to create a creepy decaying/melting effect.

Some of the benefits of wax is the fact that you can sculpt, carve, tool and melt it. You can literally place a block of wax on a lathe and make it to an exact dimension, down to a thousandth of an inch. So for mechanical puppets, it is a great way to sculpt robotic forms that have to meld accurately to an armature. A mechanical stop motion puppet like Robocop could have used a similar technique where tolerances are tight.

For puppets like Mrs Spider in James and the Giant Peach, or Jack Skellington in the Nightmare

Before Christmas, registration of the replacement head parts is easily done in wax. If a metal aspect of a ball and socket armature needs to be plugged into a replacement head, the armature part can be heated and pressed into the wax casting of the head.

This leaves an exact impression on the wax, even if the metal armature part pressed into the wax is hexagonal in shape. Creating a hexagonal plug-in part in a plastic cast part would be extremely difficult using drill bits - If not impossible. The benefit with such a shape would make registration much more accurate for animation purposes then a basic round hole for example.

Once a replacement face of head is made from wax and tested on frame grabbers, the wax can be later cast in plastic for durability in animation. The same goes for making mechanical robotic puppets. Once you remove the junctions where the wax connects to an armature, simply cast those parts in plastic and re-attach them. Plastics can be painted more realistically and are more durable in animation under hot lights. It's really the best of both worlds.

Part 2 | **Part 4**