Dermatos Prostheses Alyssa Williams, Biomedical Engineering, University of Rhode Island



Dermatos Prostheses are a new and upcoming way for amputees to be seen as normal people. The organization Alatheia created Dermatos to make prosthetics look as real and true to life as possible. In Ancient Greek, Alatheia means "true" and Dermatos means "of skin".

The Dermatos skin has pores, creases, and fingerprints like real human skin does. The Dermatos skin has epidermis, dermis and subcutaneous layers just like human skin. It also mimics the specific layers.



One way Dermatos mimics the human skin is that it has a simulation of the pigment named melanin. If the user gets a tan, he can use a bottle of melanin that gradually tans the prosthetic. It also acts like human skin by the tan gradually fading away.

Dermatos is made from a custom made silicone so it is the strongest and longest lasting out of all the silicone prosthetics. The silicone suctions to their real skin and is form fitting. The edge of the prosthetic is transparent so it is hard to tell where it is. Each prosthetic is custom made to each customer so it will never fall off accidentally.

Another advantage of Dermatos is that their products don't stain and are fireproof. Some permanent inks will stain it and if you get one on it, you can send it back to get it cleaned with their special silicone stain remover.

There are many different kinds of Dermatos Prosthetics. They make fingers, hands, arms, legs, feet, and facial. They also can cover up a prosthetic that someone has become attached to with the Dermatos skin to make it look lifelike.

The user can choose if he wants to be more mobile with his arm to have a myoelectric (electronic) hand made instead of a non-moving hand. A myoelectric hand can grasp things and it's covered with Dermatos so it will look lifelike.



The prostheses can be worn all day unless there is large nerve damage. They can even sometimes be worn in the shower and can swim with them on.

Dermatos is usually covered by insurance, and one good thing about this organization, is that they will check with your insurance company before they take any money from you.

References: http://www.alatheia.com/ http://www.dermatos.com/