Terminal Devices

A terminal device is the component of the prosthesis that replaces a person’s hand. Terminal devices can be active, where they open and close or they can be passive, where they can assist in holding items and are primarily for cosmetic purposes. Terminal devices can be in the form of a hook or in the form of a hand and they can be body powered or electric powered. Terminal devices can also be in the form of a piece of equipment – such as a hammer, a knife, a device to hold a golf club, or a mitt for sporting events.

Passive Hands

A passive hand is used primarily for cosmetic purposes. Some cosmetic hands have fingers that can be repositioned or bent. Various sizes of cosmetic hands are available in order to match the measurements of the person’s sound side hand. Gloves are made to fit over the cosmetic hand and are available in many different skin tones. Gloves are typically made of vinyl or silicone. Custom-made silicone gloves are also available at a substantially higher price. Custom-made gloves are individually made to match the person’s sound side hand details (size, veins, fingernails, and coloring).

Hosmer Child Passive Hand
Cable Operated

Cable operated terminal devices are controlled by the person’s muscle movements. The person wears a harness that is connected under the opposite arm. Attached to the harness is a cable that is attached to the prosthesis and the terminal device. By moving the shoulders and upper arms, the person can either open (voluntary opening) or close (voluntary closing) the terminal device. The person can also control how far the terminal device opens or closes.

Figure 9 harness and hand - voluntary closing

TRS Lifetouch
Most hooks are voluntary opening terminal devices. Hooks come in various sizes and types of material depending on the age of the user and the activities that will be performed. Aluminum hooks are the lightest weight while stainless steel hooks are considered heavy duty. Hooks are also made with special functions. A work hook can hold a nail, a chisel, a broom or a shovel and also has a hook on the end that can carry a bag. Rubber bands (hook tension bands) are used to regulate the amount of force needed to open the hook. By adding a rubber band around the base of the hook, it will take more force to open the hook. This will prevent the hook from opening just from random body movements.
Hosmer Model 7 Work Hook        Hosmer Model 5 Hook

Hosmer Model 12P Hook        Hosmer Hook Tension Bands
Most mechanical hands are voluntary opening as well. Hands are generally in the shape of an anatomical hand with a cosmetic glove covering. Hosmer and TRS both supply a hand that does not require a glove.

Hosmer CAPP hand - voluntary opening

TRS Lifetouch Hand – voluntary closing

Hosmer SVO Hand – voluntary opening
Myoelectric Operated

A myoelectric prosthesis uses muscles of the affected arm to control the opening and closing of the terminal device (hand or hook). Electrodes are fit within the prosthesis. Rechargeable batteries are used to supply the power to operate the motor of the hand. By contracting the muscles of the arm that formerly controlled the movement of an anatomical hand, electrical outputs are sent to a motor that opens and closes an artificial hand. Electrical outputs can be used to control the speed that the hand opens and closes and can also rotate the wrist with the addition of a wrist rotator.

Otto Bock Electrode

Otto Bock Myoelectric Hand

Otto Bock Greifer Hand

Motion Control ESP Hook
Myoelectric Hands with Motorized Digits

High tech myoelectric controlled hands are now available with individual motorized digits. The hands allow digit by digit strength and various grip options. The hands can hold objects more easily, can vary the grip strength, and function more similar to a real hand.

Touch Bionics i-limb™ quantum

Steeper bebionic™

Otto Bock Michelangelo™ Hand
Alternative Terminal Devices

TRS Free-Flex hand – gymnastics

TRS Swimming Terminal Device

TRS Guitar Accessory

TRS Baseball/Softball Accessory
Texas Assistive Devices Hammer

Texas Assistive Devices
Adjustable Wrench Set

For more information on terminal devices and assistive devices, please visit the following websites:


Hosmer: www.hosmer.com

Texas Assistive Devices: www.nabler.org

TRS: www.oandp.com/products/trs/