

## Sizing Chart

Product Number	Size	Length	Proximal Circumference
700-S	Small	15"	8"-12"
700-M	Medium	15"	13"-18"
700-L	Large	15"	18"-24"



...innovative  
Casting Technology **CASTING SOCK**

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## STS Trans-Tibial Molding Sock

### INFORMATION AND INSTRUCTIONS FOR USE

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The STS Trans-Tibial Molding sock is intended for use primarily to obtain a model of a Trans-Tibial amputated limb. Application suitability should be the responsibility of qualified personnel.

#### PRODUCT CHARACTERISTICS:

The STS Trans-Tibial Molding sock consists of polyester fabric that has been impregnated with a water curable polyurethane resin. Exposure of the material to moisture or water initiates a chemical reaction, which causes the fabric to become rigid. The rigid model is lightweight and approximately 1/16" in thickness making it the ideal choice for scanning as there is no "roping" nor overlapped material.

#### PRODUCT STORAGE:

One molding is packaged in each sealed foil pouch. Care should be taken to avoid puncturing the pouch, as this will cause the sock to harden prematurely in the package. The product should be stored in a cool, dry atmosphere. Extremes of temperature and humidity should be avoided. Each pouch should be gently squeezed prior to opening to check suitability for application.

## PRECAUTIONS:

The polyurethane resin in the sock will adhere to unprotected skin and to clothing. Protective latex examination or surgical gloves should be worn while handling the material. Care should be exercised to avoid contacting unprotected areas of the skin of the patient during the application.

Swabbing lightly immediately with alcohol may help in removing resin from the skin.

!! It is very important to smooth out all wrinkles and not overlap the material before it cures. Excessive heat caused by overlapping may cause irritation, discomfort or possible thermal injury to the patient. Always use cool water (68°-70°F) for the immersion of the compression sock. The patient should be instructed to report any irritation or “burning” sensations. Patients with neuropathy may not feel any heat sensation. **If the patient complains of heat the impression material should be removed immediately** and the cause of the complaint determined before re-starting the process.

## CONSTRUCTION OF A MOLD:

The trans-tibial amputee often requires a 3-D scan in order for fabrication of the definitive socket. The STS Trans-Tibial Sock is designed both for scanning and as a negative mold.

It is recommended that the residual limb be maintained in a fixed position during casting to avoid excessive wrinkling in all areas especially in the popliteal region.

Apply a traditional liner &/or apply protective plastic wrap over the residual limb to be casted. For maximum protection it is best to cover all skin 4-5” proximal to the area.

### Note;

**Latex gloves must be worn while applying the sock as the resin in the material will transfer and adhere to the skin.**

Remove the casting sock from the pouch. Activate it by dipping the sock in cool temperature water and by squeezing the roll several times while submerged. (Note: The working time may be lengthened by decreasing the amount of water saturation prior to application. Conversely, the working time can be shortened by increasing the amount of water saturation prior to application. Orient the sock so the stitched end is lined up with the distal aspect of the residual limb. Now unroll the sock onto the limb making certain that there are not wrinkles or bunching of the material. Apply the sock to the limb gradually, as well as gently pulling it proximally. Be certain that no unnecessary force is created that would shorten or compress the limb.

Proceed to apply the sock over the amputated limb. Completely apply all material. If the sock is too long for the limb cut away any excess material. Once the casting sock covers the limb begin to massage the casting sock working from distal to in order remove any wrinkles and to achieve maximum molding of all anatomic areas. Excessive wrinkling in any area can be removed by gently pulling up on the top front rim to “stretch out” the wrinkles (Be certain not

to shorten the limb). If desired, add water using a spray bottle to enhance slipperiness and accelerate cure time. Continue to massage the scanning cast during the curing process in order to achieve a glass smooth exterior. **A second casting sock can now be applied over the first one in a similar manner if additional strength is required. Make certain the second molding sock is massaged well onto the first one in order to achieve a firm bonding.**

## REMOVAL INSTRUCTIONS:

Feel the sock to determine if any portion is uncured and feels soft or tacky. If the material feels soft or tacky, apply more water (with gloved hands) and allow additional time to cure (Usually 4-6 minutes).

Once hardened, gently pull and wiggle the hardened mold off the limb making certain not to deform any aspects. The socket mold should be set aside for about 1-2 hours to allow for a complete curing of the material.