FABRICATION OF THE SOFT INSERT (SOFT SOCKET) FROM POLYETHYLENE FOAM (PELITE)

Hossein Gholizadeh
TECHNICAL INFORMATION

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by:

Hossein Gholizadeh- Prosthetist & Orthotist
gholizadeh@um.edu.my
gholizadeh87@yahoo.com

Nooranida Bt Arifin- Tutor

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Brace and Limb Laboratory

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Fabrication of soft socket from Polyethylene foam (Pelite)

1-Preparing the pattern

Measure the distal of the positive cast

...and proximal circumferences of the positive cast

...as well as the total length
Transfer measurements to the Pelite sheet (5 or 6 mm thick); increase the measurement about 5 to 10 percent for distal and proximal and about 10 cm for length.

Connect the lines to form a trapezoid, and then cut along these lines.
Mark 1 or 2 cm in from each joining edge, then make a continuous line the entire length on both surfaces of both edges of the polyform.

Skive the marked edges, one inside, the other edge outside, using sanding drum
Tape adjacent skived edges to ensure a clean line

Apply adhesive to the skived surfaces of the opposite sides of the sheet, then remove tape
Put inside the oven (140 c) for 1 minute

Carefully overlap, stick both edges together and hammer the seam
Dust positive cast with French chalk or talcum

Put the Pelite cone inside the oven (140) for 3 to 5 minutes
Remove cone from oven and pull over positive cast

Wrap the polyethylene foam with elastic bandage; leave the foam for 3 to 5 minutes to be cool

After that open the elastic bandage
Cut the excess foam material in distal and proximal
Skived the distal end about 1 cm

Measure the distal cap about 1 or 2 cm more than trim line

Transfer on the polyethylene sheet and cut
Put the disk of Pelite inside the oven (140c) for 1 minute

Remove from the oven and pre-shape over distal end

Mark the distal cap
Apply adhesive to the trim line, and inside the distal cap

Allow adhesive to become touch dry

Bond the cap to the distal end, pressing from the center outwards
Blend the edge of the cap to the sleeve with sanding drum

Cut about 2 cm above the trim line on positive cast
Take of the soft socket with air pressure

Smooth the trim line with sanding drum

The finished soft insert (soft socket) from polyethylene foam