



# xtremity

## Quick Start Guide

### XtremityTT™ FLEX



#### Equipment Needed:

- Vacuum nylon, Benchtop Heating Unit (BHU) Lid Cover, Heat Gun, Thin Heat Gloves, Powder, Scissors

REFER TO CHART BELOW FOR SIZE SELECTION OF XtremityTT FLEXIBLE INNER SOCKET (FIS)

1 → Size	SIZE 24	SIZE 28	SIZE 33
Distal Circumference:	Distal 24-27.9cm	Distal 28-32.9cm	Distal 33-38cm
2 ↓ Limb Length: MPT to Distal End (cm)	3 → MPT Circumference (cm)		
	Standard	Standard	Standard
7	26.9 – 34.9	28.5 – 37.0	32.5 – 42.3
8	27.2 – 35.4	28.7 – 37.3	32.7 – 42.6
9	27.5 – 35.8	29.0 – 37.6	32.9 – 42.8
10	27.9 – 36.2	29.2 – 38.0	33.1 – 43.1
11	28.2 – 36.7	29.5 – 38.3	33.3 – 43.3
12	27.6 – 30.5	29.7 – 38.6	33.5 – 43.6
13	28.9 – 37.5	29.9 – 38.9	33.7 – 43.9
14	29.2 – 38.0	30.2 – 39.3	33.9 – 44.1
15	29.6 – 38.4	30.4 – 39.6	34.2 – 44.4
16	29.9 – 38.9	30.7 – 39.9	34.4 – 44.7
17	30.2 – 39.3	30.9 – 40.2	34.6 – 44.9
18	30.6 – 39.7	31.2 – 40.5	34.8 – 45.2
19	30.9 – 40.2	31.4 – 40.9	35.0 – 45.5
20	31.2 – 40.6	31.7 – 41.2	35.2 – 45.7
21	31.6 – 41.1	31.9 – 41.5	35.4 – 46.0
22	31.9 – 41.5	32.2 – 41.8	35.6 – 46.2
23	32.3 – 41.9	32.4 – 42.1	35.8 – 46.5
24	32.6 – 42.4	32.7 – 42.5	36.0 – 46.8
25	31.9 – 42.8	32.9 – 42.8	36.2 – 47.0
26	33.3 – 43.3	33.3 – 43.3	36.2 – 47.3
27	33.6 – 43.7	33.6 – 43.7	36.6 – 47.8

\*The distal circumference is taken 4cm from the distal end of the model. The XtremityTT FLEX comes in one profile and three sizes which can accommodate a wide range of limb shapes and sizes. If using an XtremityTT preform socket to pull over the XtremityTT FLEX flexible inner socket (FIS), make sure to size your socket preform to the measurements taken over the FIS.

## Fabrication Guide



#### Preparation of Positive Limb Model:

- Plan global reductions for a 1-ply fit due to material shrinkage (approximately .75% less global reduction than 0-ply fit); i.e., a 4% reduction would now only be a 3.25% reduction. Make sure that the model is smooth as the FIS will pick up even minor defects.
- Do not use nylon stockinette when pulling FIS over the positive limb model; powder can be used on plaster model and inside FIS immediately after taking out of BHU.

#### Benchtop Heating Unit (BHU) Settings:

- Make sure to place the Benchtop Heating Unit (BHU) Lid Cover onto the opening of BHU lid to seal in heat. (Fig. 1) Lift up lid and place the XtremityTT FLEX preform carefully onto the pedestal in the BHU so that it is not tilted in any direction.
- With cover back in place and fully sealed, power the unit on and press the "FIS" button to select FIS mode. The FIS temperature should read **335** degrees. To accept this press "start", then press "start" again to accept the **5:00** minute timer. This begins the 20-25 minute heating process. When using the BHU for an FIS for the first time, it must be programmed to the proper settings - refer to the XtremityTT FLEX Instructions for Use (IFU) guide.

## Shaping the XtremityTT FLEX:

- Once heated, remove Preform with gloves, apply powder to inside of socket, gently pre-stretch and pull over model. **(Fig. 2)** Refer to IFU for proper pulling technique and strategies to obtain desired material wall thickness.
- Place latex or similar sealing sleeve over Preform to achieve vacuum; leave on the mold until FIS reaches room temperature – approximately ten minutes.
- If using an XtremityTT Socket, take new measurements over your newly formed FIS to ensure proper sizing.
- Place a nylon stockinette and powder over the FIS before pulling the proper size XtremityTT Socket.
- If planning to use Velcro to adhere FIS to socket walls, place “dummy” patches on your FIS and then cover with nylon and apply powder (double sided tape can also be used to adhere FIS to Socket walls).
- After forming the XtremityTT Socket, leave over the FIS for one hour to avoid shrinkage of the FIS material.

## Finishing the XtremityTT FLEX:

- Finish the XtremityTT FLEX and XtremityTT Socket as directed in IFU’s and according to the desired suspension system. **(Fig.3)**
- It is critical to place a hole in the distal end of the finished XtremityTT FLEX to achieve optimal suspension with pin-lock, suction or vacuum. Hole placement and size is important to not block the pin from engaging or air from passing through.
- Do NOT trim or remove the FIS or XtremityTT Socket from the limb model before drilling a guide hole. Mark the distal end of the FIS in the exact center of the hole in the XtremityTT Socket. For all three suspension systems, use a 5/32” drill bit to drill the guide hole through the FIS until it reaches the limb model.
- Refer to the XtremityTT FLEX IFU for specifics on finishing out the FIS depending on which of the three suspension systems is being utilized. Each suspension system has specific guidelines to obtain the ideal fit and function.
- Heat adjustments can be made to the XtremityTT FLEX independently, or in combination with the XtremityTT Socket (see IFU for detailed information). Traditional laminated socket adjustment methods can be replaced by heating either section of the XtremityTT system and pushing out and in on the material, as well as flaring edges.
- The FIS can be cleaned with soap and water, isopropyl alcohol or any water-based spray cleaner; solvents such as Goo-Off can be used to remove tape gum and may change the surface texture but will not harm the proprietary polymer.



Fig. 2



Fig. 3



- XtremityTT FLEX decreases plastic waste by 40-50% or 1 - 2.5 lbs of plastic from landfills per socket
- Improve energy efficiency with the XtremityTT FLEX using our Benchtop Heating Unit for a simple fabrication process