Multiflex

Multiflex uses a flexible articulation design attached to a foot with a keel that allows plantarflexion and controlled tibial progression, all the while remaining durable. It is adjustable in increments of approximately 5mm throughout its range via serrations at the interface of the Multiflex foot and the ankle.

Multiflex Slim also uses a flexible articulation design attached to a foot with a keel that allows plantarflexion and controlled tibial progression, all the while remaining durable. The main difference with the standard Multiflex is the nominal heel height. It is higher than a standard Multiflex foot, so not suitable for lower heeled shoes. It is adjustable, like a standard Multiflex foot, in increments of approximately 5mm throughout its range via serrations at the interface of the Multiflex foot and the ankle.

Multiflex SE also uses a flexible articulation design attached to a foot with a keel that allows plantarflexion and controlled tibial progression, all the while remaining durable. It was designed to negate the need for an ankle fairing to be used, as is common with regular Multiflex feet. This allows a shin fairing to interface directly with the SE foot. It has the same ROM as a conventional Multiflex foot.

Multiflex Ankle Standard 30mm allows customisable planterflexion and dorsiflexion by the appropriate selection of the rubber elements within the ankle. It is designed for use in conjunction with Multiflex feet. Multiflex Pyramid Ankle has a male pyramid attachment, rather than a 30mm tube clamp adaptor.

Clinical Outcomes using Multiflex feet

Multiflex was the “habitual” foot for all or majority of participants in 13 different studies[1-13].

With respect to **SAFETY**

- Low stiffness at weight acceptance leads to early foot-flat and greater stability for lower mobility patients[14]
- No loss of stability during standing with Multiflex than fixed ankle/foot[15]
- Easier to walk on uneven ground with Multiflex than fixed ankle/foot[15,16]
- Easier to walk up a slope with Multiflex than fixed ankle/foot[15]

With respect to **MOBILITY**

- Little to no difference in gait mechanics compared to flexible, “energy storing” prosthetic feet[17]
- Increased prosthetic ankle range-of-motion with Multiflex compared to fixed ankle/foot[15,16,18-20]
- Increased prosthetic ankle power with Multiflex compared to fixed ankle/foot for bilateral users[16]
- Prosthetic rollover shape closer to natural biomechanics than fixed ankle/foot[18]
- Bilateral users can walk longer distances and report “smoother” gait with Multiflex compared to fixed ankle/foot[16]
- Benefits in mobility for bilateral users[15,16,18,19]

With respect to **RESIDUAL LIMB HEALTH**

- Equivalent socket comfort to higher technology, energy-storing feet[21]

With respect to **LOADING SYMMETRY**

- Improved stance phase timing symmetry with Multiflex compared to fixed ankle/foot[20]
- Reduced sound limb loading with Multiflex compared to fixed ankle/foot[20]

With respect to **USER SATISFACTION**

- Majority of users rate Multiflex as either “good” or “acceptable”[22] and bilateral users prefer Multiflex to fixed ankle/foot[16]

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