

Dynamic response feet



Description

Dynamic response feet are usually made from stiff carbon fibre elements which act like springs: deforming under load and returning to their original shape when unloaded. This is beneficial in propelling the user from heel strike through to mid-stance and giving the user a 'push off' as they step off the toe.

Dynamic response feet are often incorrectly classed as "energy storing" feet. While the feet do not store energy, they do return some of the energy developed during walking. This lowers overall energy expenditure.

The carbon elements are usually shaped in a characteristic "J" curve at the ankle and are often covered by a separate foot shell.

Advantages

- Reduced energy expenditure.
- Significant shock absorption.
- Generally quite lightweight.
- Adapts to uneven terrain. A great off-road foot for trampers & runners.
- Suited to medium and higher levels of activity.

- Natural gait.
- About the same weight or lighter than multiaxial feet.
- Highly durable.
- Split toe options to enable inversion/eversion of the forefoot.
- Generally tolerant of wet conditions.

Disadvantages

- May become noisy when wet.
- Prone to failure if abused.
- Higher cost than multiaxial feet.
- Quite stiff at low activity levels.
- Not held in stock as each order is individualized. This may incur delays.