

Single axis foot



Description

A single articulated joint set at or just below ankle height is the unique design feature of Single Axis feet.

The joint allows the toe to raise (dorsiflex) and lower (plantarflex) in relation to the shin. The amount of movement is determined by rubber bumpers within the ankle unit.

The bumpers absorb shock and cushion the user as they transfer their weight over the foot from heel strike to toe off.

Advantages

- SACH Heel height can be modified within limits.
- Increased stability and comfort on non-level surfaces.
- Quite waterproof.
- Reasonably durable.
- Improved function compared to passive SACH feet.
- Suited to low to medium activity levels.

Disadvantages

- An old design now largely surpassed by other types of feet (multiaxial and dynamic response).
- Quite heavy for the function they provide.
- Movement is restricted to one plane i.e. no inversion/eversion or rotation.
- Intolerant of wet conditions.
- Limited option to tune the foot to a users requirements.
- Become looser as they wear, giving the user less control.