Wrists

Description

Prosthetic wrists connect the terminal device to the rest of the prosthetic arm.

Wrists commonly use a standardized thread, so they can accept a range of terminal devices. A common thread allows the user to change devices themselves without tools.

Wrists are manufactured from plastic, aluminium alloys or steel. The choice of materials depends on the strength and weight requirements of the user. Naturally, steel with be heavier and stronger than plastic or aluminium.

Wrists sometimes have a tensioner which controls rotation of the terminal device by applying friction to the device thread. Wrists can also feature multiple positions where the terminal device can be rotated and locked into place.

A few wrists offer the ability to change the flexion angle of the terminal device, while others include a quick disconnect feature so terminal devices can be rapidly swapped.

Advantages

- Cheap.

- Robust.
- Simple to use.
- Plastic wrists are very light.
- Flexion wrists offer more device positioning options.
- Quick disconnect version allow rapid swapping of terminal devices.

Disadvantages

- Friction components can wear leading to loosely held terminal device.
- Steel wrists are heavier than plastic or aluminium.