

Cuffs, Straps & Belts



Description

Cuffs, strap and belts are the historically prevalent system for suspending a prosthesis.

While research is presenting more effective suspension systems, there is still a place for bespoke cuffs, straps and belts. Much of their appeal is their simplicity, durability and reliability.

These systems are usually fabricated at the Limb Centre.

In each form, the suspension system attaches to the prosthesis and encircles the next highest (proximal) joint.

- Patella Tendon Bearing (PTB) cuffs suspend a transtibial prosthesis by extending from the sides of the socket and over the top of the patella (knee cap). Most use nylon cord to tension the leather cuff.
- Silesian belts are used to suspend a transfemoral prosthesis by tightening diagonally over pelvis or hip on the contra-lateral (opposite) side. Silesian belts are generally made of webbing with leather attachments.
- Pelvic Band belts also suspend transfemoral prostheses. They differ from Silesian systems by their use of a laterally placed external hip joint and a horizontal leather belt.

- In transradial prostheses, a cuff extending from the socket and encircling the lower region of the upper arm can be effective. These are generally custom made from leather.

Advantages

- Simple
- Durable
- Reliable
- Inexpensive

Disadvantages

- Can cause chaffing and bruising
- May not be effective on all body shapes