

Empowering people with impaired hand function



Carbonhand – A hand orthosis for functional support and stabilization

Carbonhand is a hand orthosis for mobilization, stabilization, and functional support. Pressure sensors detect and amplify the user's grip. The more force the user applies, the more Carbonhand enhances it. By compensating for the loss of grip strength and hand function, the use can perform daily activities that they find difficult to perform or cannot do without the glove.

For people with hand weakness or impaired hand function

Carbonhand is a revolutionary device that enhances grip strength and fine motor skills, providing increased independence for people with impaired hand function, significantly improving quality of life. It can make a lifechanging difference for people with conditions such as:

- Central nervous system disorders such as Spinal Cord Injury, ALS, MS, and Stroke
- Orthopedic injuries such as fractures, nerve damage, and brachial plexus injury
- Rheumatic diseases or osteoarthritis.



Provides functional support

Artificial tendons and microprocessor controlled motors dynamically add power to the glove. It supports daily activities for people with hand weakness or impaired hand function. Worn like a regular glove, it connects to a compact power unit worn close to the body.



Adapts to your needs

A control pad on the wrist lets users switch between three customizable profiles or activate the lock assist for stabilization. Profiles can be tailored for individual needs and different tasks. The profiles are configured via an app.

The system includes a glove and a small power unit worn on the back or waist, allowing for easy customization.

Main features

- A three-finger glove that compensates for loss of grip strength and hand function
- Can be worn on Index and middle fingers or middle and ring fingers
- Multiple sensors on each finger and in the palm
- Control Pad with three programmable profiles and an activation button, configured via smart app
- Various glove sizes and carrying options to fit individual needs





Clinical Evidence

Several clinical studies have been performed with Carbonhand, including more than 360 study participants with reduced grip strength and/or impaired hand function due to various reasons and diagnoses.

The results from the studies show:

- Using Carbonhand made handling everyday objects easier.
- The strongest benefit was feeling a more steady and powerful grip.
- Participants noticed their grip strength improved with Carbonhand.
- Carbonhand was rated as easy to use.
- It is also safe to use



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