



Empowering people with
impaired hand function



Carbonhand – The smart and intuitive grip-strengthening glove

Carbonhand is an assistive device with pressure sensors that detect and amplify the user's grip. The more force the user applies, the more Carbonhand enhances it. Designed for daily activities, it can be used indoors, outdoors, and in public places. Worn like a regular glove, it connects to a compact power unit worn close to the body.

For people with 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 life-changing difference for people with conditions such as:

- Central nervous system disorders such as stroke, MS, and spinal cord injury
- Orthopedic injuries such as fractures, nerve damage, and brachial plexus injury
- Rheumatic diseases or osteoarthritis.



Enhances grip and endurance

Artificial tendons and electric motors dynamically add power to the glove ensuring a firm grip and endurance. It supports daily activities, work, or rehabilitation for people with impaired hand function.

Adapts to your needs

A control pad on the wrist lets users switch between three customizable profiles or activate the glove for grip assistance. Profiles can be tailored for different tasks, such as needing more support for leisure and less for household activities. 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 enhances the grip strength during usage
- Multiple sensors on each finger and one on the first MCP joint
- Control Pad with three programmable profiles and an activation button, configured via smart app
- Various glove sizes and carrying options to fit individual needs
- Proven to enhance the user's ability to perform activities in daily living.





Clinical Evidence

Several clinical studies have been performed with Carbonhand, including more than 320 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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about Carbonhand