

Supporting Recovery for Moderate Arm Impairments

Armeo®Spring

The Armeo®Spring is an arm and hand rehabilitation exoskeleton. Through the use of robotic technology, in conjunction with virtual reality simulation, the Armeo®Spring uses functional, intensive, task-specific, and self-initiated skills to facilitate arm and hand recovery.

How does the Armeo®Spring Work?

Ergonomic and adjustable, the Armeo embraces the whole arm, from shoulder to hand, counterbalancing the weight of the patient's arm. It enhances any residual function and neuromuscular control, assisting active movement across a large 3D workspace. Patients complete tasks from a large library of real-life simulation movement exercises, supported by a virtual-reality training environment. A pressure-sensitive handgrip, which detects even small amounts of grip force, facilitates grasp and release exercises.

What are the advantages of using Armeo®Spring?

The Armeo®Spring provides real-life simulation to make therapeutic exercises applicable in a safe environment while motivating patients with game-like goals. The device efficiently supports simultaneous arm and hand therapy, while also evaluating and documenting the patient's progress. Individuals who may benefit from treatment with the Armeo®Spring include:

- Stroke survivors with varying degrees of hemiparesis, a movement impairment in which one side of the body suffers from weakness or paralysis
- Individuals recovering from brain or spinal cord injury with reduced function of their arm or hand
- Persons with upper-extremity impairments resulting from multiple sclerosis, Parkinson's, cerebral palsy, or other neurological disorders.



MARIANJOY

Assistive
Rehabilitation
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The **Marianjoy Assistive Rehabilitation Technology Institute** offers solutions to everyday problems of daily living encountered by individuals with disabilities. The Institute consists of seven distinct centers which apply advancements in technology to benefit individuals with disabilities through maximizing functional independence, as well as expanding educational, vocational, recreational, and communicative opportunities.

- **Assistive Communication and Daily Living Center**
- **Balance and Vestibular Center**
- **Driver Rehabilitation Center**
- **Gait Analysis and Mobility Center**
- **Prosthetic and Orthotic Center**
- **Swallowing and Voice Center**
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To make an appointment or
for more information, call

630-909-7150

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