

ROBOG: Robotic Gait Trainer for Rehabilitation of Spinal Cord Injury Patients

Robotic Gait Training:

Gait training involves exercises and corrections that aim to improve one's independence in walking. Patients with stiffness, paralysis, weakness caused by nerve and muscle-related pathologies can benefit from gait training. Neuro and Musculoskeletal therapists use the Robotic gait trainer.

Robotic-assisted gait therapy is an effective method in the rehabilitation of neurological and orthopaedic patients. Robot-assisted therapy is known to **produce 50% greater results than conventional therapy.**

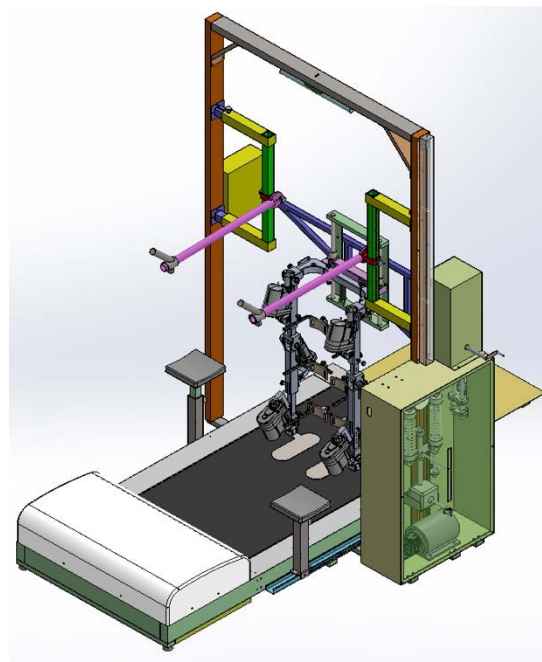
1. **Bodyweight supported** standing helps the patient slowly adjust to standing after several significant weeks/ months in the wheelchair
2. **Energy-efficient:** It simplifies the process of walking independently. Patients can practice a higher step count in the same amount of time as compared to body weight support therapy on treadmill.
3. **Posture correction, body alignment:** Intelligent robotic technology allows for correct alignment of the lower back, hips and ankle alignment in all three directions.
4. **Quantification of progress:** Seamlessly tracks gait length, step count, speed and stride length over the course of rehabilitation. This helps plan and reset the goals of therapy and note progress of the patient.

Patients with the following conditions **can benefit** from robotic gait training:

- Stroke
- Parkinson's disease
- Multiple sclerosis
- Spinal cord injuries
- Traumatic brain injury

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CSIO Designed ROBOG