

Maciej TOMIK¹, Klaudia LEPA¹

¹ PHU Technomex Sp z o.o., Gliwice

ROBOTIC SOLUTIONS IN NEUROLOGICAL PATIENT REHABILITATION

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An innovative approach to gait re-education in neurological patients involves the use of advanced technologies such as stationary robots and exoskeletons. Studies show that the application of these technologies can significantly improve the effectiveness of rehabilitation, leading to faster and more lasting improvements in gait function. Stationary robots offer precise control and repeatability of movements, allowing the therapy to be tailored to the individual needs of the patient and enabling monitoring of rehabilitation progress. In contrast, exoskeletons, with their mobility and support of natural movement patterns, allow for rehabilitation in conditions similar to daily life, which promotes the generalization of acquired skills to real-life situations. Both methods provide comprehensive rehabilitation tailored to the specific needs of neurological patients.