
Otto Bock. Or how to Improve the Quality of Life of People and Athletes with a Physical Handicap

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Résumé

If people with a physical handicap (Pwaph) want to participate in sports, they need the right equipment. In addition to the usual sporting goods special prostheses, orthotics, wheelchairs etc. are necessary. This is not only a business, but at the same time a service to assure that disabled people have a chance to perform as well as possible under their physically limited conditions. Every invention has consequences for training and the quality of life of Pwaph. The development of new materials and cutting-edge designs as well as major advances in engineering and surgical techniques have provided unprecedented opportunities for ever more Pwaph to actively pursue the sports of their choice. Just down the street from our department there is the research lab of Otto Bock, Inc, their HQ is at Duderstadt 20 km east. With an annual sales volume of 1.6 billion €, 52 representations in 45 countries, 9,100 employees, and 2,600 active or applied patents OttoBockTM is the world market leader for prostheses. The third-generation family business (founded 1919 with prostheses for amputee war veterans) went public for a 20 % minority holding in October 2025 to generate funds to apply AI to its artificial limbs. Using myoelectrics, they revolutionized prosthesis as of 1965. Their C-leg, a computerized prosthesis which mimics the actual leg movement, was a world's first in 1997. Partner of the Paralympics since 1988, it serves the whole spectrum from freshly operated novice to experienced world record holder. The current communication will show the development of the company in the context of sports for the physically disabled. The research is based on official company records, personal communications, newspaper records, as well as the archives of the Lower Saxony Institute of Sport History (NISH) with its extensive holdings of sports for disabled people.

Mots-Clés: Prosthesis, Paralympics, Orthotics, Quality of live, Otto Bock, Inc., Blade Runner, Interface human + technical device

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