

Otto Bock[®]

QUALITY FOR LIFE



Helix^{3D} Hip Joint System

Information for Practitioners





Helix^{3D}



Helix^{3D} Hip Joint System

The Otto Bock brand stands for trend-setting innovations in prosthetics.

The new Helix^{3D} Hip Joint System also is a trend-setter. It sets new standards in terms of safety, dynamics, and comfort, and redefines the mobility of hip amputees.

Let's Open up New Dimensions

Thanks to unique functions, Helix^{3D} offers the user noticeable advantages:

+ The patented multi-axis joint structure

- produces a three-dimensional hip movement to compensate for pelvic rotation and promotes a symmetrical and natural gait pattern (Fig. 1).
- allows for leg length reduction during the swing phase with the aim to reduce the risk of falling and thereby to increase functional safety.
- ensures optimal sitting characteristics and reduces pelvic obliquity to a minimum.
- makes a large flexion angle possible, to facilitate everyday situations like putting on shoes or getting into a car.

+ The new kind of spring-hydraulics combination

- supports initiation of the swing phase of the prosthesis wearer with integrated expansion springs. Energy stored during the stance phase is used to compensate during the swing phase initiation for the lacking hip muscles and to reduce the amount of energy needed for walking (Fig. 2).
- controls the three-dimensional movement during the entire step cycle.
- allows for dampened, controlled heel strike in the stance phase with significantly reduced hyperlordosis as well as harmonious hip joint extension. Controlled and smooth roll-over on the prosthesis under full load becomes possible.
- allows for individual stride length setting and to control the pendulum motion in the swing phase.

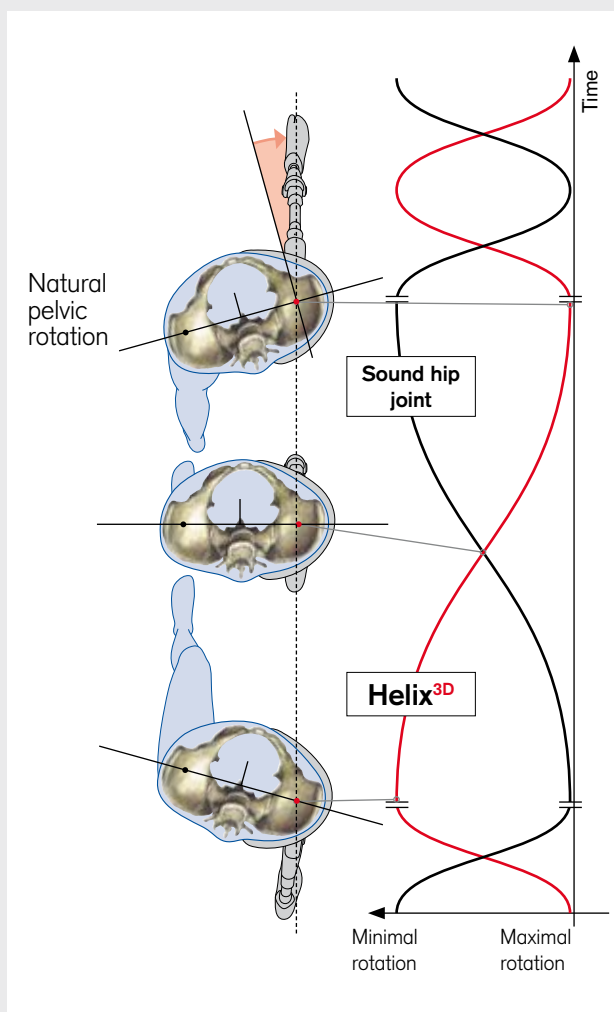


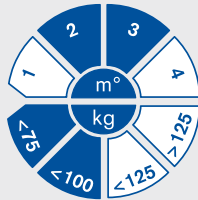
Fig.1 Compensation of pelvic rotation with Helix^{3D}



Fig. 2

Indication and Field of Application

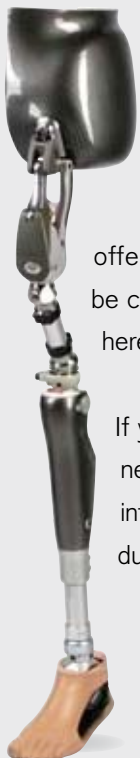
The Helix^{3D} Hip Joint System is suitable for hip disarticulation and hemipelvec-tomy amputees. It offers amputees of all age groups maximum safety and comfort for a wide range of everyday activities.



Recommended according to the Otto Bock MOBIS[®] Mobility System for amputees with Mobility Grades **2** and **3** (restricted outdoor walkers, unrestricted outdoor walkers).
Maximum body weight: **100 kg/220 lbs**

Helix^{3D} – Systematic Fitting

The Helix^{3D} Hip Joint's functions are specially adapted to the characteristics of selected Otto Bock components. The advantages of the individual components can be made optimal use of in this way.



System Components at a Glance

In dependence of the mobility grade and requirements of the prosthesis wearer we offer a corresponding fitting package that can be composed of the system components shown here:

If your patient has already been fitted with the necessary system components, it is possible to integrate them into the new Helix^{3D} system fitting during the workshop.

Helix ^{3D} Hip Joint	<p>7E10=L-1.2 7E10=R-1.2</p> 
Adapter	
C-Leg [®] Knee Joint	
Tube Adapter	
Prosthetic Foot	

Certification Workshop

for the Helix^{3D} Hip Joint System

Are you already a C-Leg[®] certified prosthetist? Are you, in addition, interested in carrying out professional patient fittings with the new Helix^{3D} Hip Joint? Then simply participate in one of our certification workshop. This workshop is a prerequisite for carrying out independent fittings with the Helix^{3D} Hip Joint System.

Contents of the Workshop

After introduction of the technology and application of the Helix^{3D} Hip Joint System, it is demonstrated on the prosthesis wearer. The most important work steps from the special plaster cast technique up to the system's fine adjustment are shown. During the workshop you have the occasion to carry out the fitting of your patient up to the completion of the test prosthesis under the supervision of our experts.

Target Group

C-Leg[®]-Certified Prosthetists (CCP) and a patient according to the indications (imperative for the participation).

What You Will Learn:

- A special plaster cast technique for the Helix^{3D} Hip Joint
- Correct component selection and alignment instructions
- Biomechanics and functionality of the Helix^{3D} Hip Joint System
- Fabrication, setting, and fine adjustment of a test prosthesis
- Special walking techniques to enable your patient to make optimal use of the Helix^{3D} Hip Joint System

After successful participation in the certification workshop you will receive a person-related certificate.

If you have any other questions, please do not hesitate to contact your local Otto Bock branch.

Patents

The 7E10 is covered by the following patents:

China: ZL 00121494.2
Germany: D.B.P. DE 199 35 203
Japan: Patent No. JP 3 708 797
Russia: RU 2 222 291
USA: Patent US 6,322,594

European Patent:
EP 1 072 240 in CH, DE, ES, FR, GB, IT, NL and SE,

Patents pending in Brazil and Germany.

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