

# EXOSTAB 3D BK

The world's first 3D-printed brace for below knee amputees, that reproduces the natural movement of the knee

# **FEATURES & BENEFITS**

# VERSION 1 DIRECT-TO-SOCKET



# VERSION 2 OVER SUSPENSION SLEEVE



## **REPLICATES THE NATURAL MOVEMENT OF THE KNEE**

Our patented Asymotion<sup>™</sup> helicoidal hinge system replicates the knee's normal 3D kinematics, ensuring natural internal and external rotation, abduction, and adduction as well as anteroposterior and vertical displacements of the knee. The smooth, fully fluid and natural motion helps reduce pain in other joints as well.



## LOCATOR PIN SYSTEM

Ensures the brace is perfectly positioned and aligned for every use.



## **NO MIGRATION**

Superior fit and precision leg-motion tracking ensure added hold that helps eliminate migration.



## PERFECT FIT ON ALL MORPHOLOGIES

Each leg gets its own unique brace thanks to our scan-to-print design using digital modeling and additive manufacturing.



## **3D-PRINTED AND MODELIZED TO FIT ANY BK SOCKET**

Can accommodate any size BK socket

# AN UNPARALLELED FIT FOR ULTIMATE STABILITY

# EXOSTAB 3D – BK DESIGN

The ExoStab 3D is designed to provide below knee amputees with greater knee stability. Thanks to digital custom modelization, it perfectly shapes any any finished BK socket and patient's thigh morpohology, thus allowing for immediate control. Patient's with knee instabilities before or after amputation will feel the biomechanical benefits from stabilizing the limbs.



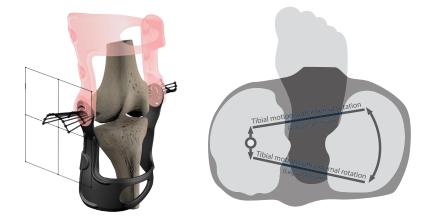
# **FRONTAL PLANE**

By applying compression during 3D modelization, the perfect fit of the brace eliminates all gaps between the leg and the brace, thus ensuring valgum loads are being transferred to the reinforces uprights of the ExoStab 3D.

This results in an instanteneous resistance at inital moment of valgus load.

# ASYMOTION™ HINGE SYSTEM

The knee's "screw-home" mechanism is a result of asymmetry of the medial and lateral condyle motion. As a result of our unique asymmetrical hinge system, ExoStab 3D is the only knee brace that perfectly mimics this movement on both sides, preventing the ankle, hip and other joints from compensating. The result: unbeatable comfort.



# ADVANCED 3D PRINTING

OssKin's additive manufacturing process was created by the aerospace industry. We use a laser to fuse layers of polyamide powder, producing a dense, rigid material. This super-resilient and abrasion-resistant material is also used in automotive airbags, rock-climbing equipment and military-grade protective glasses.



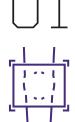




DonJoy OA NanoOSSKIN(Claims as the world'sEXOSTAB 3Dlightest knee brace)

Average top 5 selling OA hinged knee braces

# SCAN-TO-PRINT SOLUTION



#### **SCANNING**

Healthcare professional makes an assessment, scans the patient's lower limb and sends files to OssKin.



#### **DIGITAL MODELING**

A qualified technician uses OssKin's proprietary technology and works with a 3D model to create a fully customized knee orthosis that corrects leg and thigh alignment.



#### ADDITIVE MANUFACTURING

A process known as additive manufacturing is used in the 3D printing of each personalized frame.



#### OPTIMIZED OA KNEE BRACE

Each knee orthosis is assembled and shipped to the patient's healthcare professional for fitting and delivery.

# **PARAGON BRACE INFORMATION**

#### PATIENTS

Amputee patients with knee stabilities

## COLORS

TIBIAL SECTION (BOTTOM HALF)



## STRAPS AND PADDING

#### ADDITIONAL ADJUSTABLE STRAPS

Tibial anterior Tibial posterior

## EXTRA PADDING

Supra condyle Lateral condyle Media condyle

## INDICATIONS

Torn ACL, MCL, LCL Torn meniscus Knee Instability

## FEMORAL SECTION (TOP HALF)



## WARRANTIES

Osskin warrants the frame components to be free of defects in materials and workmanship for 3 years of the original patient. Straps, liners/covers, pads, pins and other soft components shall be warranted free from defects in materials and workmanship for 6 months.

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