Titanium nails with optimized anatomical designs for femoral and tibial fractures
Designed by Trauma surgeons for use by every surgeon.

In collaboration with leading traumatologists, Zimmer designed a titanium nail system incorporating a natural anatomic design for femoral and tibial fractures. The advantages of this innovative approach include: the ability to treat different sizes of patients, minimally invasive implantation, and easy insertion.

The *Sirus* Nail System is designed for reamed and unreamed intramedullary femoral and tibial surgical techniques. Femoral and tibial instrumentation is provided in a single, easily accessible tray.

**Femoral Nails**

While many intramedullary nails come in different sizes and have an anterior bow, Zimmer’s anterior bow has a radius proportional to the length of the nail. The *Sirus* Femoral Nail mimics the natural bone contour, minimizing the risk of insertion-related complications. The nail’s optimized anatomical shape—with antecurvature and lateralization—allows easy insertion through the tip of the greater trochanter, reducing the risk of injury to the circumflex femoral artery.

An anteversion of 12° in the three proximal recon screws enables additional stabilization for ipsilateral femoral neck fractures.

Slots in the distal and proximal region of the femoral nail allow for dynamization of both distal and proximal diaphyseal fractures. Even very distal and difficult fractures can be stabilized, given the alignment and positioning of the nail’s distal locking holes.
Anatomic Delta Cross Section

Tibial Nails

A 4° anterior bend in the distal portion of the Sirus Tibial Nail helps ease insertion and assists the surgeon in the placement of interlocking screws in order to stabilize a variety of metaphyseal fracture patterns near the joint.

The runner-shaped tip allows the implant to slide freely along the posterior cortex of the canal to facilitate nail insertion using a reamed or unreamed technique.

The proximal curvature of the nail as well as the alignment, position, and locking options of the proximal multi-planar locking holes helps in treatment of complicated fractures.

The nail’s anatomic delta-shaped cross-section offers room for revascularization thus encouraging fracture healing.

Instrumentation

Sirus Nail Instruments are designed and engineered for precision and reliability. Femoral and tibial instruments are concisely housed in one instrument tray.
Preoperative and Postoperative X-rays

Proximal diaphyseal fracture of the femur, preoperative

Proximal diaphyseal fracture of the femur, postoperative

Distal fracture of the tibia, preoperative

Distal fracture of the tibia, postoperative

Notes
1. The anterior bend in the distal portion of the tibial nail varies depending on the length of the nail. The average bend is about 4°.