Foot and Ankle Repair Solutions

Complete solutions for foot and ankle surgeons.
How to use this product guide

This product guide has been developed to introduce you to our complete range of repair solutions. Products are organized by procedure, with detailed product information in the front of the brochure and ordering information in the back.

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Patient Positioning

**SPIDER2 Limb Positioner**

The SPIDER2 Limb Positioner brings measurable traction and unimpeded access to arthroscopic ankle procedures. Its hands-free, multiple-position operation means easy traction and trouble-free positioning.

- Quick and simple setup.
- Measurable traction using the TENET Traction Accessory.
- Ideal positioning for any angle of knee flexion, including horizontal.
- Provides unobstructed support from underneath the operative foot.
- Requires counter traction support (FERKEL™ Thigh Holder or TENET Traction Accessory)
GUHL™ Non-Invasive Ankle Distractor

The GUHL Non-Invasive Ankle Distractor provides a cost-effective approach to non-invasive ankle distraction, without compromising quality or versatility.

- Designed for arthroscopic foot and ankle applications, include Ankle Arthrodesis and Lateral Ankle Ligament Staple Repair.
- Easy to set up and access all portals.
- Easy to control, adjust force, maintain and monitor during distraction, for a variety of ankle set-ups.
- Facilitates gross distraction within the sterile field.

FERKEL™ Thigh Holder

Successful ankle distraction requires counter traction – a force opposite to the mechanical pull. The FERKEL Thigh Holder provides the necessary counter traction needed for ankle arthroscopy procedures, and stabilizes the thigh. Designed to complement the GUHL Non-Invasive Ankle Distractor, the FERKEL Thigh Holder clamps to the bedrail of a surgical table and is used with disposable pads for easy cleanup.

- Clamps to bedrail for easy setup.
- Holds leg securely to provide necessary counter traction and prevent leg movement.
- Uses disposable pads for quick and easy cleanup.
- Allows non-invasive ankle distraction, with simple setup and precise force adjustment.
Instrumentation

Foot and Ankle Instrumentation

The complex structures of the foot and ankle demand specialization, which is why Smith and Nephew offers instrumentation designed specifically for these structures and the procedures you routinely perform. The tray offers convenient storage for manual and handheld instruments as well as cannulas, obturators and the MICROVECTOR® Drill Guide System, delivering an all-inclusive solution for ankle arthroscopy.

- Includes microfracture picks, curettes, osteotomes, elevators and probes.
- Handles are color-coded according to instrument type for quick identification.
- Curved instruments allow easy access to spaces surrounding the talar dome.

* Patent Pending
**MICRO VECTOR™ Drill Guide System**

The MICRO VECTOR™ Drill Guide System provides a precise path for cannulated drills, fixation pins and screws, and is the only guide wire targeting and insertion system specifically designed for extremity procedures.

- Easy-to-handle system provides the stability required for the precise guide wire insertion and placement necessary for the repair of osteochondral lesions of the talus, arthroscopic fracture fixation with cannulated screws, and arthroscopic arthrodesis.
- Compact design is ideal for the small joint spaces encountered in the foot and ankle.
- Probe Lever allows easy, one-handed control of probe movement.
- Exclusive offset drill guide facilitates placement of both .045” and .062” K-wires in the precisely-patterned tunnel series needed for arthroscopic arthrodesis.
- Tapered, rounded probe tip eases advancement to desired drill site, protects articular surfaces, and enhances arthroscopic visualization for proper positioning.
- Articulating arm ensures constant alignment of distal ends for precise K-wire placement.
- Designed to accommodate both arthroscopic and open techniques.
- Facilitates gross distraction within the sterile field.
Soft Tissue Repair

- Fast, easy deployment
- Ergonomically designed solid handle
- Twist-and-release anchor delivery system

Titanium Suture Anchors

Providing strength and stability for reliable fixation.

TWINFIX° Ti 3.5 mm Suture Anchor

Designed for lateral ankle instability repairs, the TWINFIX Ti 3.5 mm Suture Anchor offers the strength and stability of titanium, and includes an ideally-sized inserter.

- Transitional thread design provides secure fixation with distal cutting threads for easy insertion and proximal locking threads to provide effective pull-out strength, even in poor bone quality.¹
- Elongated distal trocar tip allows anchor to be self-tapping, eliminating the need to predrill in most bone qualities.
- Accompanied by drill and drill guide (sold separately).

**TWINFIX Ti 2.8 HS Anchor**

Designed for demanding foot and ankle procedures, the TWINFIX Ti 2.8 HS Anchor features an easy-to-use delivery system and is preloaded with ULTRABRAID® Suture.

- No predrilling required.
- Made of radiopaque titanium.
- Inserter is preloaded with anchor and (1) size 2-0 ULTRABRAID Suture with tapered needles.

**MINITAC® Ti 2.0 Suture Anchor**

The MINITAC® Ti 2.0 Suture Anchor is a strong, reliable and ergonomic anchor designed for demanding foot and ankle procedures.

- Provides superior pull-out strength.
- Short inserter shaft gets your hands closer to the surgical site.
- Inserter is pre-loaded with anchor and two size 2-0 ULTRABRAID suture with tapered needles
- No predrilling required

**Non-absorbable PEEK-OPTIMA® Suture Anchors**

Made from radiolucent PEEK-OPTIMA polymer, a biocompatible, non-absorbable stable polymer with high strength and a modulus comparable to cortical bone.

**RAPTORMITE® 3.0 PK Suture Anchor**

This easy-to-deploy non-absorbable, biocompatible anchor features a twist-and-release delivery system.

- Preloaded with (2) size 0 ULTRABRAID Sutures and needles. sterile field.
SPYROMITE PK 2.0 Anchor

This anchor’s screw-in design makes it ideal for soft-bone matrix.

- Inserter offers excellent tactile feel.
- Inserter is preloaded with anchor and (1) size 2-0 ULTRABRAID® Suture with tapered needles.

DYNOMITE® PK 2.0 Anchor

The tap-in design of this anchor makes it ideal for hard-bone matrix.

- Fine depth control aids in cortical bone fixation.
- Inserter is preloaded with anchor and (1) size 2-0 ULTRABRAID® Suture with tapered needles.

Absorbable PLLA Suture Anchors

Made from radiolucent PLLA (p-l-lactic acid), a bioabsorbable polymer.

RAPTORMITE® 3.7 PLLA Suture Anchor

This easy-to-deploy absorbable, biocompatible anchor features a twist-and-release delivery system.

- Inserter is preloaded with anchor and (2) size 0 ULTRABRAID Sutures and needles.
Knotless Suture Anchors

Made from radiolucent PEEK-OPTIMA, a biocompatible, non-absorbable stable polymer with high strength and a modulus comparable to cortical bone.

FOOTPRINT ULTRA PK 4.5 and 5.5 mm Suture Anchors

This tap-in anchor has a unique, offset barbed geometry that ensures easy insertion and optimal pull-out strength.

- Anchor allows adjustment of suture tension after implantation and up to the point of inserter removal.
- Inserter is sized for mini-open Achilles tendon procedures.
- Sliding, self-locking anchor permits the surgeon to secure repair without tying knots on top of the tissue, creating a low-profile repair with no knot stack.
- Available as a stand-alone anchor as well as in an Achilles Tendon Repair kit with 2 anchors, 3 sutures, and a disposable drill.
Lesser Toe Deformities

HAT-TRICK™ MTP Joint Repair System, PIP Fusion System and Osteotomy Guide

Designed to provide improved anatomical alignment and joint repair in patients suffering from lesser toe deformities, the HAT-TRICK™ System is a unique and versatile three-part solution featuring an MTP Joint Repair System, PIP Fusion System and an Osteotomy Guide. All three systems are designed to provide improved patient outcomes with reproducible results.

MTP Joint Repair System

- Offers fewer steps, a less invasive approach and specialized instrumentation.
- Allows for anatomic reattachment of the collateral ligaments and plantar plate.
- Provides the ability to mimic normal physiological anatomy reducing laxity and increased stiffness commonly associated with other techniques.
**PIP Fusion System**

- Provides controlled compression with multiple locking positions allowing the surgeon to dial in the compression needed.
- Less invasive approach designed to reduce complications commonly seen with other standard-of-care treatments.
- Offered in multiple diameters with both a 0° and 10° angulation option.
- Made of radiolucent PEEK material offering improved visibility of the fusion site on x-ray.

**Osteotomy Guide**

- K-wire provisional fixation offers improved control by holding the guide in place, while minimizing the risk of rotation during reduction.
- Multiple spacer options provide precise length of shortening
- Two parallel cut system maintains the longitudinal axis of the metatarsal.
- Tab in the MTP joint space allows the surgeon to reproducibly line up the osteotomy.
Resection

DYONICS® POWERMINI™ Shaver System

The DYONICS POWERMINI Shaver System packs the power and features of a full-size shaver into a compact handpiece that is designed to access the small, tight joints encountered in the extremities. This lightweight shaver allows the freedom of movement required for precise control, plus the power to swiftly resect the toughest tissue and bone.

- Powerful, ergonomically-designed solution for foot and ankle procedures.
- Fast resection rates help to remove tough soft tissue, quickly.
- High operating torque helps to remove dense bone such as found in the ankle joint, and protects against sudden stalls.
- The resection rate using the POWERMINI Shaver with a 3.5 mm full radius blade is nearly the same as using our full-size POWERMAX ELITE Shaver with a 3.5 mm full radius blade.1

1. 2009 data on file with Smith & Nephew.

VULCAN™ RF Arthroscopy System

The VULCAN™ RF Arthroscopy System is designed to help improve procedure efficiency and outcomes, and offers a complete line of extremity radiofrequency probes.

- Autoprobe recognition takes the guesswork out of selecting power settings.
- Temperature control and impedance monitoring capabilities aid in optimizing energy delivery to produce the desired effect.
- Troubleshooting is facilitated with audible alarms and error message displays.
- All probes are bendable, enhancing the ability to access small spaces.
- Offers the Micro ABLATOR-S Probe – the only extremity probe available today with suction.
- Monopolar design ensures that treatment occurs only to tissue where probe is directly applied.
Internal Fixation

Plating Systems

**PERI-LOC™ Ankle Fusion Plating System Overview**

This complete ankle fusion plating system can be used with anterior and lateral approaches to address the ankle and hind foot, in addition to posterior solutions for both Tibiotalar and Tibiototalocalcaneal fusions.

- Four anatomic plate designs for anterior, lateral and posterior approaches satisfy the needs of different indications.
- Dedicated instruments are designed for compression and distraction.
- PERI-LOC technology provides a rigid, threaded, locking-plate construct.
- The posterior approach minimizes soft tissue irritation and preserves the fibula.

![Tibiotalar Joint Fusion](image1)

![Tibiotalocalcaneal Joint Fusion](image2)
PERI-LOC® Periarticular Locked Distal Tibia Plates

This lower-extremity product portfolio combines the advantages of locked plating with the flexibility and benefits of traditional plating, in one system. Utilizing both locking and non-locking screws, PERI-LOC offers a construct that resists angular (e.g. varus/valgus) collapse while simultaneously acting as an effective aid to fracture reduction. Its simple and straightforward instrument set features one screwdriver, standardized drill bits, and color-coded instrumentation, making PERI-LOC efficient and easy to use.

- Anatomically contoured locking plates and stainless steel implant system.
- Unique locking screw hole allows you to lag, lock and provide axial compression in a single hole.
- Radiolucent targeting systems with offset handles for clear imaging.
- Anterolateral and medial options available
PERI-LOC™ VLP Variable Angle Locked Plating System

The PERI-LOC VLP System offers a stable, low-profile means of fixation for fractures of the fibula and partial articular fractures of the tibia. It gives surgeons the freedom to control fixation and helps restore not just the patient’s anatomy, but their lifestyle. Locking screws can be angled and locked up to 15° in any direction allowing for the creation of customized, multi-directional locked plating constructs. Each screw hole accepts 3.5 mm Cortex, 3.5 mm Locking and/or 5.0 mm Osteopenia Screw.
The broad range of screw types and plate designs in the VLP™ FOOT Variable-angle Locked Plating System solves one of the key issues facing foot and ankle surgeons: matching the internal bone fixation technology to the patient’s sometimes difficult bone type. VLP FOOT is a versatile system offering low-profile versions of both classic and anatomic plate designs along with multiple screw options providing surgeons with an unrivaled breadth of fixation options.

• Includes innovative locking screws that can be placed at 15-degrees off the center axis in any direction, providing the surgeon tremendous flexibility when choosing how to position the plate over the fracture.

• An array of screw thread designs addresses every type of bone, including younger patients with harder bone, older patients with softer bone, and even diabetic patients who may have neuropathic diseased bone.

VLP™ FOOT Locked Plating System

Wallon et al. described the benefits of extra-long screws. The VLP™ FOOT Locked Plating System utilizes extra-long screws for added stability and for use in areas where bone stock is lacking.

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Forefoot System: | Hindfoot System:
---|---
2.7 mm Cortex Screws | 3.5 mm Cortex Screws
2.7 mm Locking Screws | 3.5 mm Locking Screws
4.0 mm Osteopenia Screws | 5.0 mm Osteopenia Screws
4.0 mm Locking Osteopenia Screws | 5.0 mm Locking Osteopenia Screws

VLP Foot Percutaneous Calcaneus Plating System

Studies have shown that the extensile lateral approach has up to a 25% soft tissue complication rate post op.1 The VLP™ FOOT Percutaneous Calcaneus Plating System allows for a smaller incision while providing surgeons with the tools they need for an efficient procedure.

The TRIGEN Hindfoot Fusion Nail (HFN) brings the simplified instrumentation of the TRIGEN NAIL SYSTEM to the hindfoot, featuring an oblique locking configuration that allows surgeons to maximize thread purchase by locking into better bone. One of its key advantages is to allow surgeons to target screws through the calcaneus and into specific bones to attain the most stable construct, while simultaneously gaining fusion between the calcaneus and surrounding bones. Fusion is further aided by allowing screws to cross the articulating surfaces of the calcaneus and talus, as well as the calcaneus and cuboid bones.

- Offers simplified instrumentation and anatomically designed implants.
- Diverging screw angles allow the surgeon to target specific bones and joints.
- Distal threaded screw holes help to reduce risk of screw back out while adding stability.
- Internal hex captured locking screws help to ease screw insertion.
- Rotational stability achieved with proximal static locking hole or dynamic compression slot.
- Dynamic compression slot allows up to 5mm of late controlled compression.
- 16 cm, 20 cm, 25 cm nail lengths
- 10 mm and 11.5 mm nail diameters

**Cannulated Screw System**

Sizes include:

- 2.0 mm QFX screw*
- 2.5 mm
- 3.0 mm
- 4.0 mm
- 5.5 mm
- 6.5 mm
- 7.0 mm
- 8.0 mm

*Not Cannulated

**TRIGEN® Hindfoot Fusion Nail**

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TAYLOR SPATIAL FRAME™

The TAYLOR SPATIAL FRAME (TSF) is an external device for limb correction, lengthening and/or straightening, based on the ILIZAROV™ Method, and gives the surgeon the ability to accurately move bones to their precise anatomic alignment. Its six telescopic struts can be independently lengthened or shortened relative to the rest of the frame, allowing for six different axes of movement (anterior/posterior, varus/valgus, lengthen/shorten). This gives the TAYLOR SPATIAL FRAME the ability to correct even the most difficult congenital deformities and trauma cases, providing treatment for a variety of skeletal fractures, malunions, and nonunions.

- Provides a single solution for correcting the most challenging cases.
- Takes advantage of the body’s natural ability to grow healthy new bone tissue.
- Unlike ORIF, the TAYLOR SPATIAL FRAME system allows for postoperative fracture reduction and alignment correction.
- Circular construct allows near immediate weight bearing, accelerating fracture healing and increasing bone strength.
- Using fixed angled pins in multiple planes offers optimized stability, while minimizing soft tissue damage.

We have a dedicated web application that makes planning for cases and correction areas easier. Visit www.spatialframe.com to see a video demonstration.

ILIZAROV™ External Fixator

For nearly 60 years, the ILIZAROV™ method has produced excellent postoperative results in the treatment of foot deformities and ankle fractures. The ILIZAROV External Fixator system provides a minimally invasive treatment solution by requiring fewer incisions, saving valuable OR time and contributing to improved patient outcomes.

- Provides greater stability to internal fixation.
- Enables almost immediate weight bearing.
- Rocker Ring protects the bottom of the foot and provides increased patient comfort.
- Pre-assembled frame constructs speed procedures and saves valuable OR time, while still providing adjustability.
- One-tray system with removable Mayo Stand caddy and organized compartments simplifies foot and ankle procedures, providing easy access to hardware.

We have a dedicated web application that makes planning for cases and correction areas easier. Visit www.spatialframe.com to see a video demonstration.

Jet-X° External Fixation System

Compared to common clamshell designs, the JET-X External Fixation System bar is 175 times more likely to stay in its clamp while you are reducing a fracture. Your days (and nights) of tightening/loosening/retightening are over.¹

You have the freedom to use the frame to manipulate the fracture before final tightening. The integrity of the cartridge mechanism allows the pin or bar to be captured in the clamp. The clamp, in turn, remains free to rotate and angulate. This allows the frame to perform double duty as a fixation device and as a reduction tool.

All28® Foot and Ankle Solutions
Exceptional solutions in foot and ankle care

If you are interested in more detailed product information, visit www.snfootandankle.com.
If you would like to be among the first to hear about related product launches and education events from Smith & Nephew, simply send an email to All28info@smith-nephew.com or scan the QR code and you will be added to our distribution list.