MEDLINE UNITE® Foot & Ankle System
Intelligently designed implants and instrumentation.

INNOVATION IN ACTION.
Engineered for precision performance.

We’re perfectionists in the name of precision. It’s that meticulous attention to detail that makes all the difference, elevating your surgical performance at every step. Driven by the specialized needs of foot and ankle surgeons, Medline UNITE puts innovation into action.
25+ unique plate families

30+ unique screw families

10+ procedure-specific trays with color-coded implants and instruments intuitively arranged in order of use for maximum surgical speed and efficiency, and reduced sterilization and processing costs

1 system, united. Driven by ingenuity, our comprehensive system is meticulously engineered to work together intuitively
Intelligently designed.

The Medline UNITE Foot and Ankle System is based on our single-minded philosophy of Intelligent Design: To develop clinically advanced products with optimal functionality that are intuitive to use.

Anatomically contoured

Our plates are contoured to the unique anatomical structures of the foot for a closer fit. Machined using state-of-the-art, five-axis CNC technology, every plate is milled from a single block of titanium alloy to ensure greater strength.

Minimal profile

Plates are fabricated with a low profile and exceptionally smooth, beveled edge to minimize soft tissue irritation and provide greater patient comfort.
Dual-mode compression technology
Our advanced compression technology gives the surgeon the freedom to select either traditional dynamic compression or cross-plate interfragmentary compression.

Polyaxial locking technology
Universal plate holes accept polyaxial locking or non-locking screws in three different diameters, allowing for maximum intraoperative flexibility and patient-customized fixation.
Articulating Pin Distractor

» Articulating arms allow the surgeon to converge or diverge the joint space and fold the handle out of the way for improved exposure and faster joint preparation.

» Allows for more complete, unrestricted access to small joint spaces or osteotomies compared to traditional hintermann distractors or lamina spreaders.

» Utilizes short, robust 2.5 mm distractor pins to resist bending.
Small Joint Arthrotome

» Short, curved, compact design enables greater control and easier access to small joints compared to longer traditional osteotomes.

» Dual-cutting feature allows the surgeon to push or pull to scrape and remove cartilage more quickly and effectively.

» AO quick connect to fit into the silicone-grip screwdriver handle for greater comfort and ergonomic use. It also ensures easy replacement and assured sharpness.

Fenestration Drill Pin

» 2.0 mm fluted cutting feature effectively removes bone, promotes bleeding at the joint surface, and reduces the likelihood of thermal necrosis compared to a k-wire.¹

» Short design with beaded stop helps deliver more controlled joint fenestration compared to a longer standard drill bit.

» Smooth proximal shaft fits into a standard wire driver.
Cutting-edge instrumentation

Reduction instruments and guides.

Fibula Lengthening Distractor
When standard reduction instrumentation and techniques prove insufficient to elongate a shortened fibula, the Fibula Lengthening Distractor can help restore proper length, similar to a push-pull technique. The distractor’s unique locking tower arms thread into the plate for greater control during use.

DrillGauge™ 3-in-1 System
Designed to drive speed, efficiency, and accuracy, the DrillGauge system features a solid drill bit connected to a spring-loaded drill guide that’s engineered with depth-gauge functionality.

This 3-in-1 instrument system allows the surgeon to guide the drill into the center of the desired plate hole, up to 15 degrees off-axis, and measure the appropriate screw length with a simple one-handed technique.

AVAILABLE SIZES

<table>
<thead>
<tr>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0 mm</td>
<td>(blue) For use with 2.7 mm locking and non-locking, or 4.0 mm cancellous screws.</td>
</tr>
<tr>
<td>2.8 mm</td>
<td>(green) For use with 3.5 mm locking and non-locking screws.</td>
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</table>
5th Metatarsal Hook Plate Technique

Aids in proper plate alignment, fracture reduction, and final plate fixation.

**Reduction and Plate Alignment**

1. Use the distal end of the hook plate guide as a template to determine the proper plate alignment and positioning and secure the guide to the metatarsal using a temporary fixation pin.

2. Place a 1.4 mm guidewire through the center wire hole of the guide for provisional fixation of the fragment and to determine trajectory for the 4.0 mm cannulated hook plate screw.

3. Pre-drill for each of the plate's hooks using the flexible 1.4 mm nitinol drill pin.

**Provisional Plate Placement**

1. Nest the desired plate within the inserter and secure it by threading the spring-loaded knob into the plate.

2. Slide the inserter/plate construct over the guidewire to ensure that the hooks penetrate the pre-drilled holes.

3. Slide the hook plate impactor over the guidewire and into the hook plate inserter and gently impact using a mallet, taking care not to displace the fragment.

**Final Construct**

1. After removing the hook plate guide and securing the plate with a temporary fixation pin, measure the hook plate screw length using the cannulated depth gauge.

2. Pre-drill if desired, and insert the 4.0 mm hook plate screw to compress the fracture.

3. Place a non-locking screw in the compression slot and finish the construct using locking screws.
Foot and ankle plate indications

Our system is designed to address the complexity of the foot and ankle anatomy with intelligent solutions for every major indication.
HALLUX RIGIDUS | MTP FUSION

MTP Fusion plates are designed with a narrower, elongated distal cluster for reduced prominence over the proximal phalanx and easier soft tissue closure. Plates are available in various dorsiflexion angle and length options to address variations in patient size as well as revision cases.

*By request only

HALLUX VALGUS | LAPIIDUS

The extensive Lapidus plate family offers a number of unique implant options to address various scenarios encountered during 1st TMT joint arthrodesis. Available options include primary plates with or without the dual-mode compression feature, graft-spanning revision, intercuneiform joint-bridging and step-off plates.

*By request only
LISFRANC | TMT FUSION

Unique deconstructed U-style Lisfranc plates address variations in injury pattern and patient anatomy. The non-constraining designs provide the intraoperative flexibility to choose the most appropriate construct for isolated TMT joints.

STRAIGHT MIDFOOT UTILITY

Midfoot Fusion Straight plates provide an alternative option when anatomically designed plates may not be ideal for a specific patient or procedure. The plates are available in a variety of lengths and accommodate 2.7 mm, 3.5 mm, or 4.0 mm polyaxial locking or non-locking screws in any hole for maximum versatility.
DORSAL MIDFOOT RECON

The Dorsal Midfoot Recon plate family provides a robust offering of innovative and exclusive implants, designed to address complex clinical scenarios involving the dorsum of the foot. Plate options include TN Fusion, TNC (Talo-Naviculo-Cuneiform) Extension Revision, TNCM (Talo-Naviculo-Cuneiform-Metatarsal) Extension Revision and Middle Column Fusion (Naviculo-Cuneiform-Metatarsal). Plates may be used to address primary and revision TN fusions. Navicular AVN (Mueller-Weiss Syndrome), degenerative flatfoot cases with midfoot collapse/sag, Lisfranc injuries that extend proximally through the NC/TN joints and other deformities and arthritis patterns. Plates with fixation in the talus include our advanced dual-mode compression technology.

MEDIAL COLUMN AND NC FUSION

Medial Column Fusion plates feature our advanced dual-mode compression technology, giving the surgeon the freedom to select either traditional dynamic compression or cross-plate interfragmentary compression. Additionally, these plates are up to 2.5 mm thick in certain sections and accommodate up to 4.0 mm locking and non-locking screws for patients requiring more robust fixation.
FLEX AND STRAIGHT FIBULA

Flex Fibula plates feature a low-profile, scalloped, malleable design with a closely spaced two-hole in-line distal cluster. This design provides a unique, hybrid solution when neither anatomical nor conventional one-third tubular plates are ideal for the patient’s anatomy or fracture pattern. The standard straight plates are more rigid than the Flex plates, yet stronger and more malleable than stainless steel one-third tubular plates.
LATERAL FIBULA AND MALLEOLAR HOOK

Lateral Fibula plates feature syndesmotic slots designed to accommodate suture button fixation devices, as well as 3.5 mm or 4.0 mm syndesmotic screws up to 60 mm in 2 mm increments to avoid medial soft tissue irritation. The Malleolar Hook plates feature long, sharp hooks for enhanced small fragment fixation, while its guide aids in proper plate alignment and trajectory for the optional homerun screw.

ANATOMIC POSTERIOR TIBIA | FIBULA

Optimized for the treatment of tri-malleolar ankle fractures and the posterior approach, the Posterior Fibula plates offer superior distal fixation and fit compared to conventional one-third tubular plates, while the Posterolateral Tibia plates feature a built-in anterosuperior screw trajectory to avoid impinging the tibiotalar joint space.
5TH METATARSAL AND TARSAL FRACTURE

The 5th Metatarsal Hook plate system utilizes a unique guide and inserter to aid in proper plate alignment, fracture reduction, and plate placement for increased speed and efficiency. Anatomically contoured, tarsal-specific plating options allow for greater fixation when addressing comminuted fracture patterns.

Utility Metatarsal Fracture

Metatarsal Z plates provide a more robust option for fixation of 1st and 5th metatarsal fractures. The short, 4-hole Straight, T, and L Metatarsal plates feature a bridge to span fractures or osteotomies and increase strength.
Precision performance at every turn.

Medline UNITE Screws are color-coded with instruments and intuitively arranged in order of procedure flow for greater efficiency.

### Plate screws

#### MINI POLYAXIAL LOCKING SCREWS
- **2.0 mm**
  - MFSL20xx Series | 8 mm – 20 mm
- **2.4 mm**
  - MFSL24xx Series | 8 mm – 30 mm
- **2.7 mm**
  - MFSL27xx Series | 8 mm – 40 mm

#### SMALL POLYAXIAL LOCKING SCREWS
- **2.7 mm**
  - MPSL27xx Series | 10 mm – 30 mm
- **3.5 mm**
  - MPSL35xx Series | 10 mm – 60 mm
- **4.0 mm**
  - MPSL40xx Series | 14 mm – 60 mm

### Specialty plate screws

#### CANCELLOUS SCREW
- **4.0 mm**
  - MPSL40xx Series | 10 mm – 20 mm

#### CROSS PLATE SCREW
- **3.5 mm**
  - MPSL35xx Series | 24 mm – 50 mm

#### ULTRA LOW PROFILE HOOK PLATE SCREW
- **4.0 mm**
  - MPSL40xx Series | 16 mm – 60 mm

### Jones fracture screws

- **4.5 mm**
  - MJSF40xx Series | 36 mm – 55 mm
- **5.5 mm**
  - MJSF55xx Series | 26 mm – 60 mm
- **6.0 mm**
  - MJSF60xx Series | 40 mm – 60 mm

### Digital fusion implant

- **2.3 mm**
  - MSD023xx Series | 30 mm – 50 mm

### Snap-off screws

- **2.0 mm**
  - SNAP20xx Series | 11 mm – 14 mm
- **2.7 mm**
  - SNAP27xx Series | 13 mm – 21 mm

### Headless compression cannulated screws

- **2.0 mm**
  - MSD020xx Series | 10 mm – 24 mm
- **2.5 mm**
  - MSD025xx Series | 10 mm – 36 mm
- **3.0 mm**
  - MSD030xx Series | 10 mm – 40 mm
- **3.5 mm**
  - MSD035xx Series | 12 mm – 50 mm
- **4.0 mm**
  - MSD040xx Series | 14 mm – 60 mm
- **4.5 mm**
  - MSD045xx Series | 14 mm – 70 mm
- **5.5 mm**
  - MSD055xx Series | 34 mm – 80 mm
- **5.5 mm full thread**
  - MSDF35xx Series | 34 mm – 80 mm
- **7.0 mm (16 mm thread)**
  - MSD070xx Series | 40 mm – 125 mm
- **7.0 mm (32 mm thread)**
  - MSD170xx Series | 50 mm – 125 mm
- **7.0 mm fully threaded**
  - MSDF70xx Series | 40 mm – 100 mm

### Low-profile headed cannulated screws

- **2.0 mm**
  - MSD020xx Series | 10 mm – 24 mm
- **2.5 mm**
  - MSD025xx Series | 10 mm – 36 mm
- **3.0 mm**
  - MSD030xx Series | 10 mm – 40 mm
- **3.5 mm**
  - MSD035xx Series | 12 mm – 50 mm
- **4.0 mm**
  - MSD040xx Series | 14 mm – 60 mm
- **4.5 mm**
  - MSD045xx Series | 14 mm – 70 mm
- **5.5 mm partial thread**
  - MSD055xx Series | 34 mm – 80 mm
- **5.5 mm full thread**
  - MSDF35xx Series | 34 mm – 80 mm
- **7.0 mm (16 mm thread)**
  - MSD070xx Series | 40 mm – 125 mm
- **7.0 mm (32 mm thread)**
  - MSD170xx Series | 50 mm – 125 mm
- **7.0 mm fully threaded**
  - MSDF70xx Series | 40 mm – 100 mm

### Note:
Certain screw styles are available across multiple systems. Always refer to a specific tray bill of materials to determine exact options.
Advanced Orthobiologic Solutions

Activate your fusion.

**OPTIMIZED COMBINATION** and ratio of biomaterials to support bone healing at all stages

**Bioglass** facilitates a rapid biological response and stimulates the formation of an osteoconductive apatite layer

**Optimized granule structure and porosity** mimics human cancellous bone

**Controlled resorption profile** with biphasic granules (β-TCP and HA components)

**Highly moldable and waxy consistency** in a rapidly resorbing Alkylene Oxide Polymer carrier

- **Item No.**  |  **Size**
- MSBG0375    |  3.75 g
- MSBG0750    |  7.5 g

**VERSATILE GRAFT OPTION** for small voids

**3D interwoven fiber scaffold** offers greater osteoconductive surface area vs. traditional crushed cancellous bone

**Improved handling and wicking** vs. traditional putties and chips

**Carrier-free formulation** allows for immediate start to the bone healing process

- **Item No.**  |  **Size**
- MDBM1010    |  1 cc
- MDBM1025    |  2.5 cc
- MDBM1050    |  5 cc
- MDBM1100    |  10 cc

**UNIQUE PROCESSING TECHNOLOGY** protects healthy cell population and viability by reducing cell-damaging processing steps.**

**Greater osteogenic potential** and cell proliferation capability vs. traditionally processed cellular bone allografts***

**Greater osteoinductive potential** and BMP-2/BMP-7 levels vs. traditional demineralized bone

**3D interwoven fiber scaffold** offers greater osteoconductive surface area versus traditional crushed cancellous bone

**Improved handling, wicking** and mixing vs. traditional cellular allografts

- **Item No.**  |  **Size**
- MVBG0010    |  1 cc
- MVBG0020    |  2 cc
- MVBG0050    |  5 cc
- MVBG1010    |  10 cc

*Compared to 1-4 mm cancellous chips.
***Including MSCs, osteoprogenitors and osteoblasts.
Ready when you are.

Pre-Hydrated Reconstructive Bioimplants

Pre-hydrated for speed and strength
Bioimplants are processed, packaged and stored fully hydrated for immediate use.
- Eliminates idle time
- Preserves structural integrity of the graft
- Reduces the likelihood of intra- and post-operative graft crumbling and subsidence

Pre-shaped for stronger performance
Made of dense cancellous bone, each bioimplant is pre-shaped to eliminate the time and waste of cutting a bone block.
- Withstands the physical demands placed on structural grafts
- Full incorporates and resorbs
- Removes easily if needed

## Associated instrumentation

### Articulating Pin Distractor
Allows you to adjust the correction, while providing unobstructed access to the osteotomy.

### Wedge Trials
Allows you to view the correction visually and fluoroscopically before selecting the appropriate size wedge.

### MTP Reamers
Cup, Cone and Acorn reamers allow you to match up the graft and the patient’s bone for a perfect fit.

## Item Table

<table>
<thead>
<tr>
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<th>Description</th>
<th>Size</th>
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<tbody>
<tr>
<td>MWCT0005</td>
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<td>MWMP0018</td>
<td>MTP Revision</td>
<td>18MM</td>
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</table>
Expertise in practice.

UNITE is guided by the expertise of our surgeon design team, down to the finest details. Ongoing collaboration at every step of the way is at the heart of the process in order to address the complex unmet needs of surgeons and advance clinical performance through intelligent design.

Medline UNITE Surgeon Design Team

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R. James Toussaint, MD, Gainesville, FL\textsuperscript{4}

\textsuperscript{1} Foot Recon Plating | \textsuperscript{2} Advanced Midfoot Recon Plating
\textsuperscript{3} Mini Foot Plating | \textsuperscript{4} Ankle Fracture Plating

To schedule a case, contact your Medline UNITE Representative or visit medlineunite.com for more information.