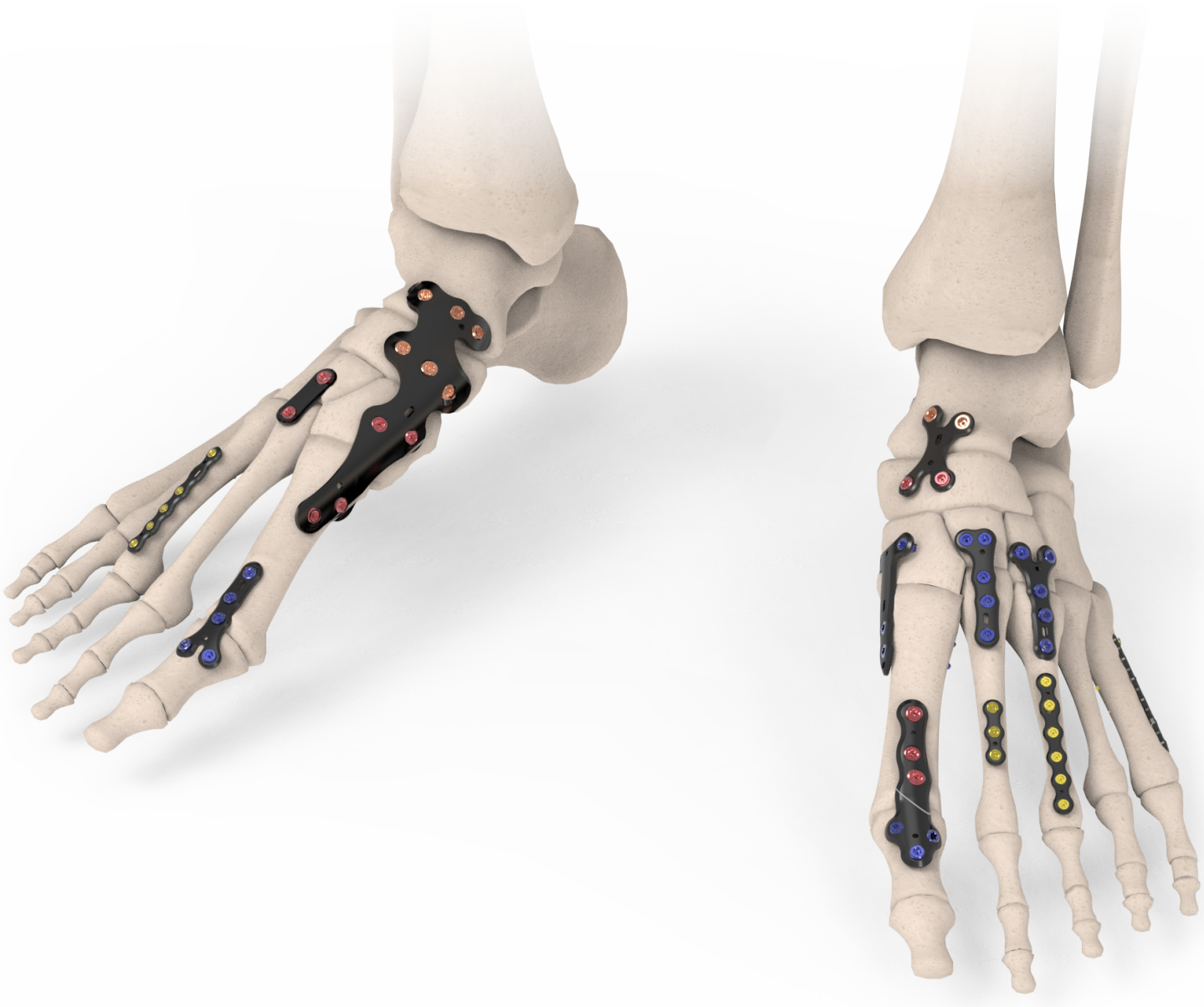
Biologically Oriented Prostheses

BIOPRO

Comprehensive Foot Plating System

Surgical Technique



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This surgical technique alone does not provide sufficient background for the direct use of the instrument and implant set. Instruction by a surgeon experienced in handling these instruments is highly recommended.

For safe and effective use of this implant system, the surgeon should be familiar with this recommended surgical technique for the device that has been chosen from the system.

In every case, an accepted surgical practice should be followed in postoperative care and the patient should be made aware of the devices and the allowed activities with these implants.

Indications & Contraindications

Indications for use:
The intended use of the BioPro Foot Plating System is to draw two or more aligned bone fragments together to facilitate healing in an adult patient. It is composed of the following bone plate categories:

I. Forefoot System:
The BioPro Forefoot Plating System is indicated for use in fixation of small bones and small bone fragments in the foot (Phalanges and Metatarsals) for stabilization of fractures, joint fusions, osteotomies, nonunions, malunions, reconstruction of small bones, revision surgeries and replantations in an adult patient. The Forefoot System is not for Spinal Use.

II. Mid & Hindfoot System:
The BioPro Mid & Hindfoot Plating System is indicated for use in fixation of medium/large bones and medium/large bone multi-fragments in the foot (Cuneiform, Cuboid, Navicular, Talus and Calcaneus) for stabilization of fractures, joint fusions, osteotomies, nonunions, malunions, reconstruction of medium/large bones, revision surgeries and replantations in an adult patient. The Mid & Hindfoot System is not for Spinal Use.

Contra-indications for use:
1. Infection.
2. Patient conditions including blood supply limitations, obesity and insufficient quantity or quality of bone.
3. Patients with mental or neurologic conditions who are unwilling or incapable of following postoperative care instructions.
4. Foreign body sensitivity. If material sensitivity is suspected, testing is required prior to implanting the device.

Adverse Effects:
In all surgical procedures, the potential for complications and adverse reactions exist. The risks and complications with these implants include:
- Fracture of the implant due to excessive loading
- Incomplete or inadequate healing
- Implant migration and/or loosening
- Pain, discomfort or abnormal sensations due to the presence of an implant
- Nerve damage resulting from surgical trauma
- Bone necrosis or bone resorption
- Delayed or nonunion of bone fragments
- Allergic reaction to the implant materials

Warnings & Precautions:
- Re-operation to remove or replace implants may be required at any time due to medical reasons or device failure. If corrective action is not taken, complications may occur.
- Implants which comes in contact with human blood or tissue must not be re-used or re-sterilized.
- Improper insertion of the device during implantation may result in implant loosening or migration.
- Loosening or migration and loss of fixation due to incorrect implantation, delayed union, nonunion and incomplete healing may occur.
- Bending or fracture due to applied excessive stresses and load bearing.
- Failure to follow postoperative care instructions may result in procedure complications or failure.
- Electrolytic action and corrosion due to implanting with other metallic devices of different chemical composition may occur.

MR Safety Information:
The BioPro Foot Plating System has not been evaluated for safety and compatibility in the MR environment. It has not been tested for heating, migration or image artifact in the MR environment. The safety of the BioPro Foot Plating System in the MR environment is unknown. Scanning a patient who has this device may result in patient injury. Contact surgeon if a change in performance or pain level is noticed.

WARNING: Please note that a single use device (SUD) which comes in contact with human blood or tissue should not be re-used and should be returned to the manufacturer or properly disposed. The instrument tray must be wrapped in FDA cleared wraps or containers for the steam sterilization process.

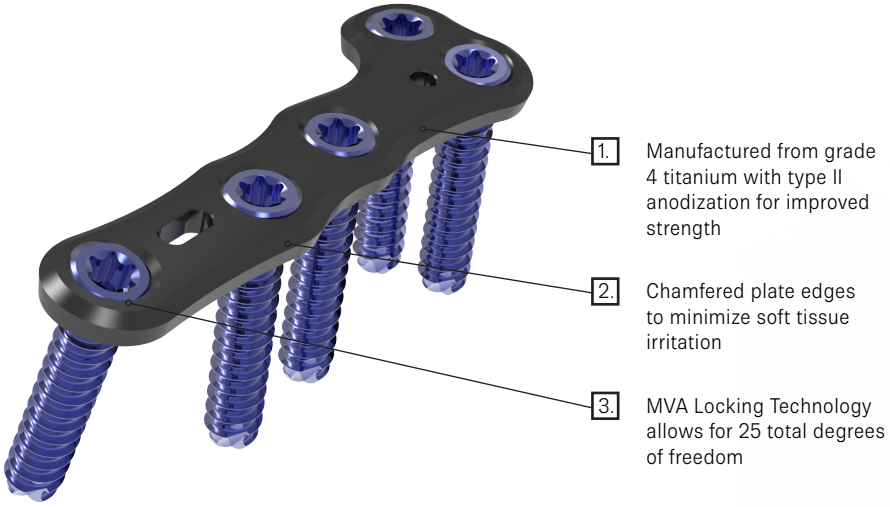
System Overview

A comprehensive forefoot, midfoot and hindfoot plating system merges modern technology with plating basics. This system is truly balanced by a comprehensive selection, providing surgeons with plates of all sizes and shapes to match the anatomical structures of the foot while not overloading the tray with unnecessary options.

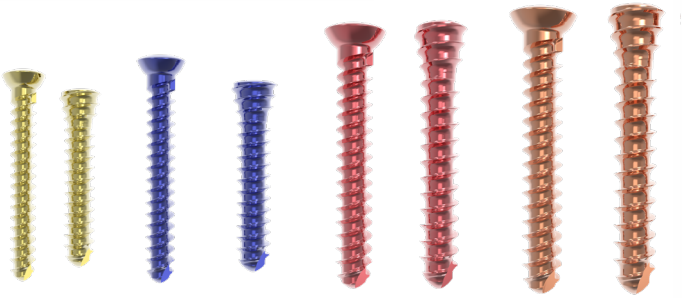
The 45 universal plates are categorized by screw diameter including 2.0mm plates, 2.8mm plates and 3.0-3.5mm plates. The indication specific plating options address a variety of procedures including MTP arthrodesis, TMT-1 arthrodesis, basal (opening wedge) osteotomy, calcaneal sliding osteotomy, lateral column lengthening (Evans osteotomy), calcaneal fractures and medial column arthrodesis.

Each plate features MVA (multiple variable angle) locking technology that allows screws to lock into the plate up to 25 degrees. The plates range in thickness from 1.3 to 1.8mm, depending on the procedure needs, and feature chamfered edges to minimize soft tissue irritation. Manufactured from grade 4 titanium with type II anodization, the plates have greater wear resistance, higher fatigue strength and improved biocompatibility.

The multi-level tray utilizes a modular design allowing the user to customize the tray with the individual modules necessary for the case which streamlines the procedure and reduces the footprint in the operating room.



1. Manufactured from grade 4 titanium with type II anodization for improved strength
2. Chamfered plate edges to minimize soft tissue irritation
3. MVA Locking Technology allows for 25 total degrees of freedom

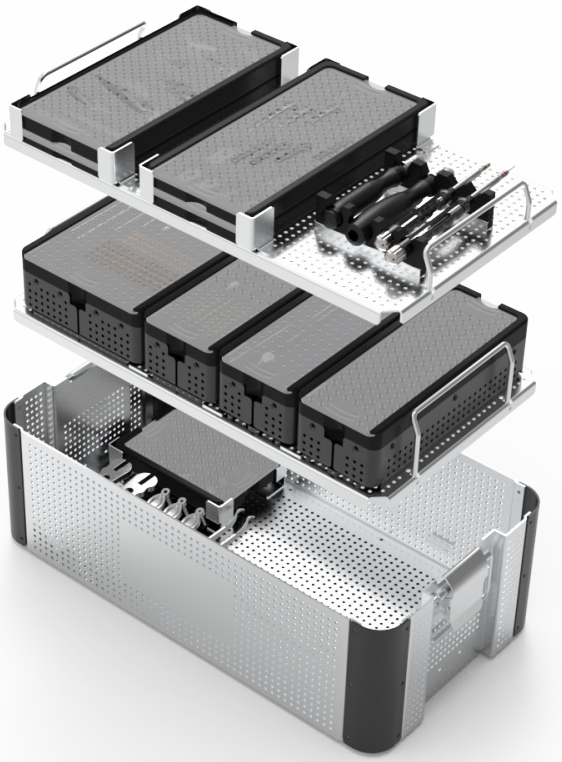


2.0mm Non-Locking MVA Locking

2.8mm Non-Locking MVA Locking

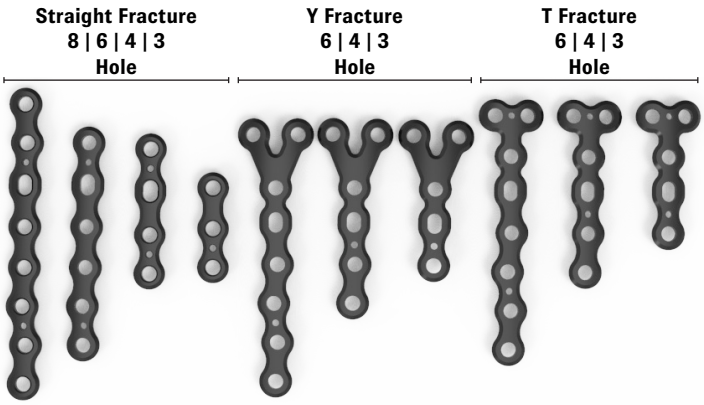
3.0mm Non-Locking MVA Locking

3.5mm Non-Locking MVA Locking



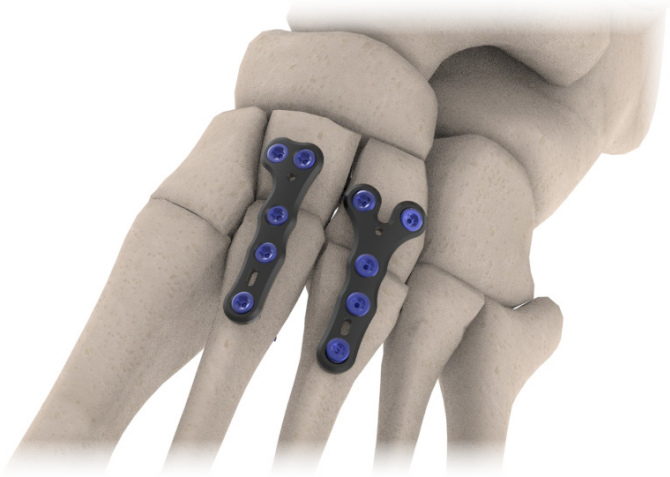
2.0mm Universal Plates

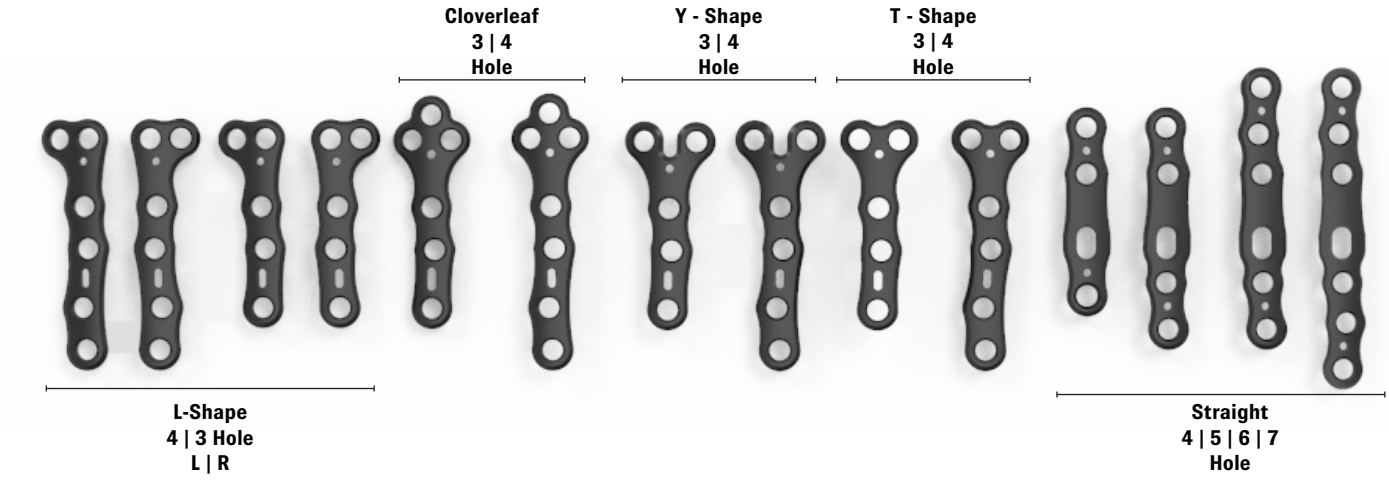
The 2.0mm Universal Plates feature 10 total plate options and are available in Straight, Y, and T shape designs. These low-profile plates are only 1.3mm thick and range from 17-50mm in length. The plates are offered in 3 to 8-hole designs, making them an ideal solution for metatarsal fracture fixation.



2.8mm Universal Plates

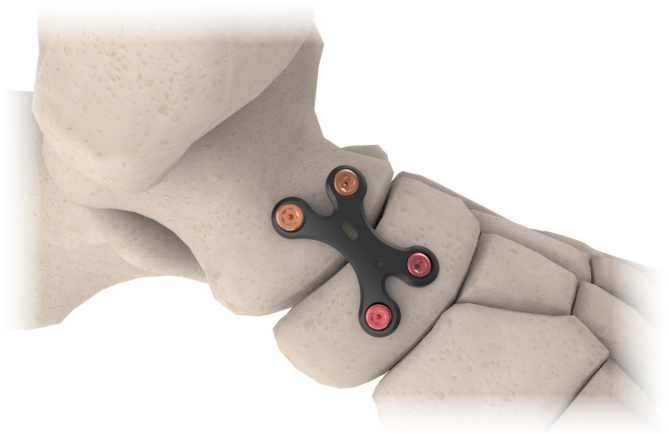
The 2.8mm Universal Plates feature 14 total plate options and are available in Straight, T, Y, L and Cloverleaf shapes. These low-profile plates are 1.5mm thick and range in lengths from 32-50mm. The variety of options and increased strength over smaller plates make them ideal solutions for Lisfranc injuries, forefoot, and midfoot arthrodesis.

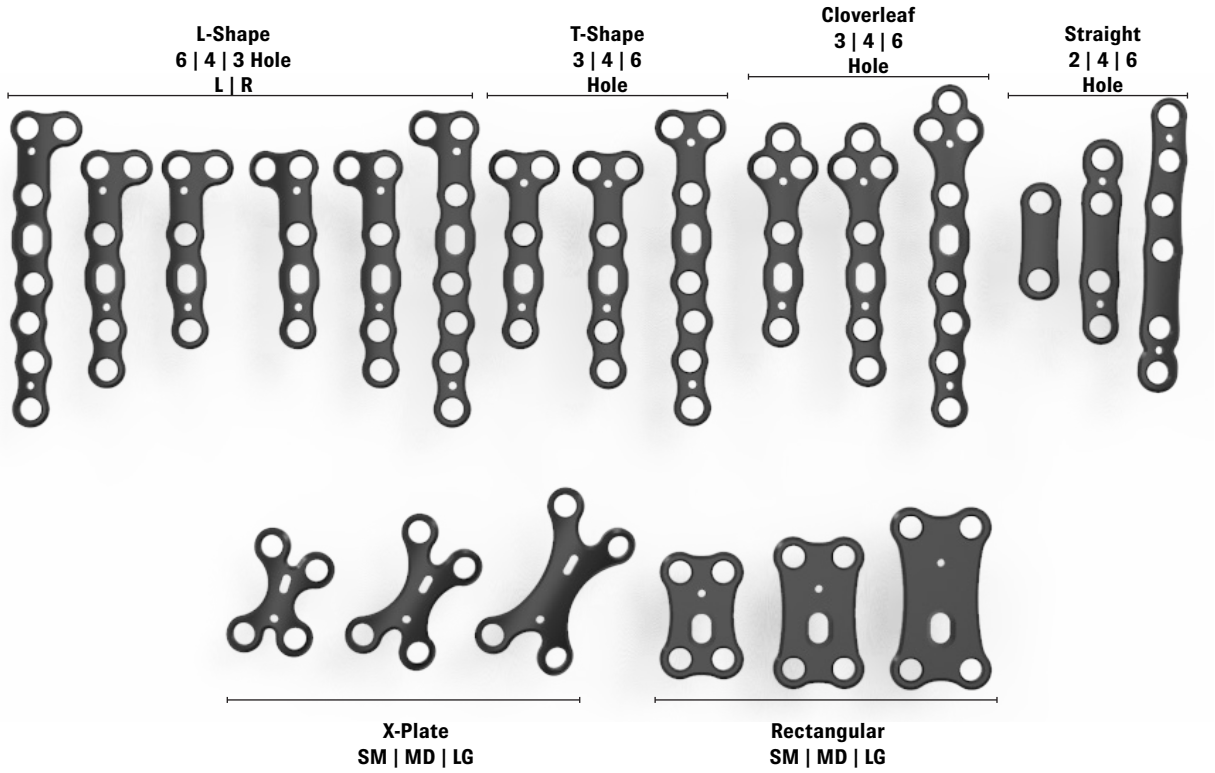




3.0-3.5mm Universal Plates

The 3.0-3.5mm Universal Plates feature 21 total plate options ranging from 23-67mm in length. The Straight, T, L and Cloverleaf plates are 1.6mm thick while the chamfered edges minimize soft tissue disturbance. The T, L and Cloverleaf plates feature an oval compression slot available for providing in-line compression. These universal plates were designed to be used in a variety of applications, but the larger screw diameters are ideal for midfoot applications such as TMT-1 arthrodesis where additional strength may be needed. The Rectangular and X plates are 1.8mm thick and range in size from 21x17mm up to 36x20mm. These plates were engineered for strength and are ideal for midfoot fusions.





Lapidus TMT-1 Fusion was performed to address Hallux Valgus correction with an L-Shape 3 Hole plate using 3.5mm screws and a lateral headless compression screw.

Talonavicular & calca-neocuboid arthrodesis was performed to address Chopart with small and large X-Plates.

MTP Fusion Plates

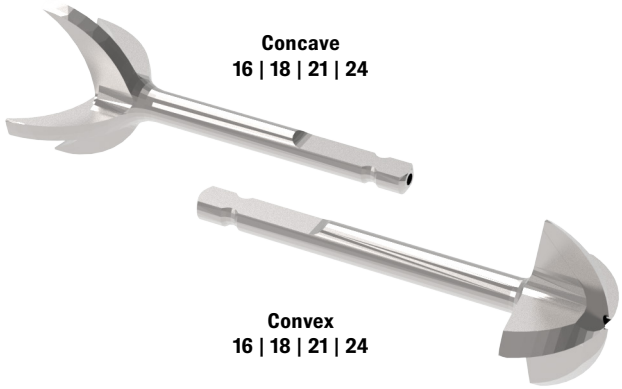
The system offers both standard and revision MTP plates, available in left/right orientation for fusion of the first metatarsophalangeal joint.

The standard construct was designed to act as a neutralization plate in combination with a lag screw across the joint while revision plates feature an oval compression slot for in-line compression as lag screw placement may not be possible. The standard plates are 1.6mm thick and pre-contoured with 5 or 10 degrees of dorsiflexion. The distal cluster allows for the placement of three 2.8mm screws in the narrow phalanx, while the proximal shaft accepts 3.0mm or 3.5mm screws for improved strength.

Note
The distal cluster accepts Ø2.8mm screws while the proximal shaft accepts Ø3.0mm or Ø3.5mm screws.

Standard 5 ° Standard 10 ° Revision

MTP Joint Reamers are also available in the set to assist the surgeon in cartilage removal and joint preparation prior to plate placement. The concave (metatarsal head) and convex(phalanx) reamers are available in 16, 18, 21, and 24mm diameters.



Concave
16 | 18 | 21 | 24

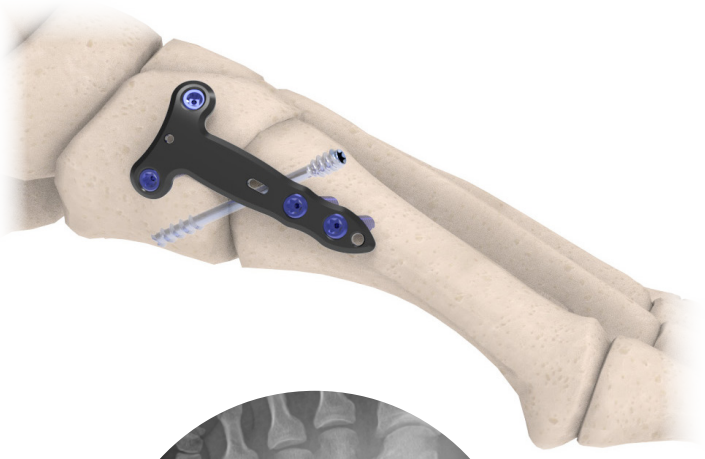
Convex
16 | 18 | 21 | 24

TMT Fusion Plates (Lapidus)

The system offers a low-profile Medial TMT-1 plate for the fusion of the first tarsometatarsal joint.

The Medial TMT-1 plate accepts 2.8mm screws and is designed to function as a neutralization plate with accompanying lag screw(s) on the lateral side of the TMT-1 joint. This construct was chosen due to its inherent strength and ability to prevent plantar gapping through primary lag screw compression. The low-profile plate features a 4-degree contour that fits the curvature of medial cuneiform while avoiding the anterior tibialis tendon insertion. The 3-degree plate bend maintains the metatarsal corrected position while minimizing the possibility of under-correction during the distal screw placement. Lastly, the screw directions are pre-determined at a convergent angle and multi-direction to maximize pull-out strength.

*Dorsal plates are available upon special request in 0 - 4mm steps in both left and right orientation.

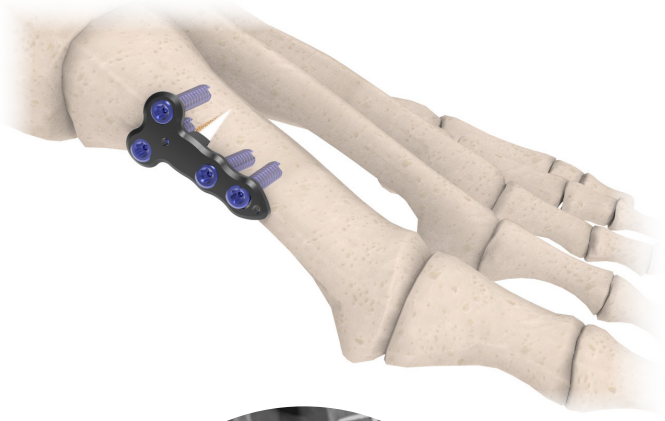


Medial TMT

***Dorsal TMT**

Opening Wedge Plate (Basal Osteotomy)

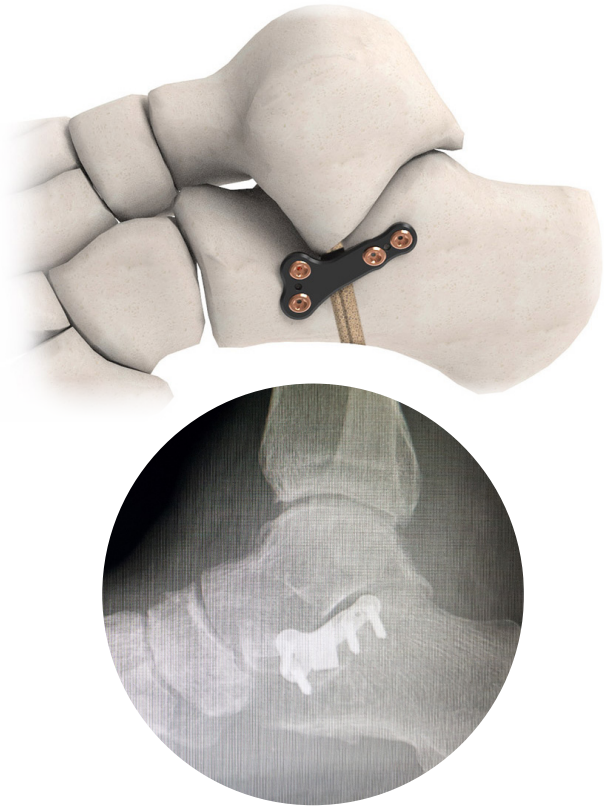
The system offers a total of six Opening Wedge plates for the correction of hallux valgus. Opening Wedge plates are available in 0, 2, 3, 4, 5 and 6mm wedges each accepting 2.8mm screws. The Opening Wedge Plates were designed to provide 2-degrees of correction per 1mm wedge, while lengthening the metatarsal. The plates are engineered with dual proximal screw holes and a narrow shaft to minimize plate prominence often found in rectangular plates. The 4, 5 and 6mm plates all feature a 5-degree bend to maintain the metatarsals corrected alignment during insertion of the two distal screws.



Flat Foot Reconstruction

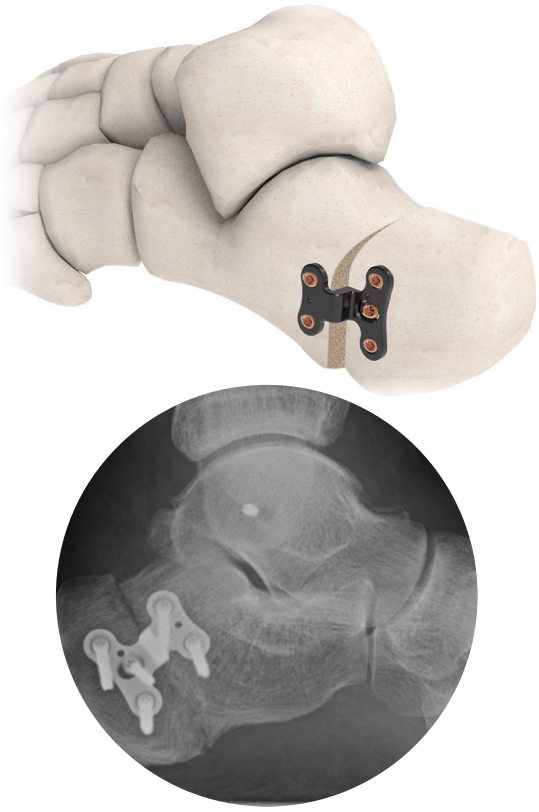
Evans Plates

The system offers a total of ten Evans Plates to allow surgeons to restore the arch of the foot through lengthening of the lateral column in cases of flatfoot. Evans plates are available in a left/right orientation with 4, 6, 8, and 10mm wedges and accept either 3.0 or 3.5mm screws. Unlike traditional designs, our plates are designed with follow the curve of the posterior facet which allows the wedge to rest on hard cortical bone while minimizing contract with the peroneal tendons.



Calcaneal Slide Plates

The system offers a total of four Calcaneal Slide Plates and may be used in both lateral and medial sliding osteotomies to allow for correction of hindfoot varus or valgus. Calcaneal Slide Plates are available in 4, 6, 8, and 10mm steps and accept either 3.0 or 3.5mm screws. The plate was engineered for strength at 2mm thick and features an oval screw slot that allows the surgeon to deliver compression through dorsiflexion of the foot.



Note

Cotton Wedge plates are also be available upon special request.

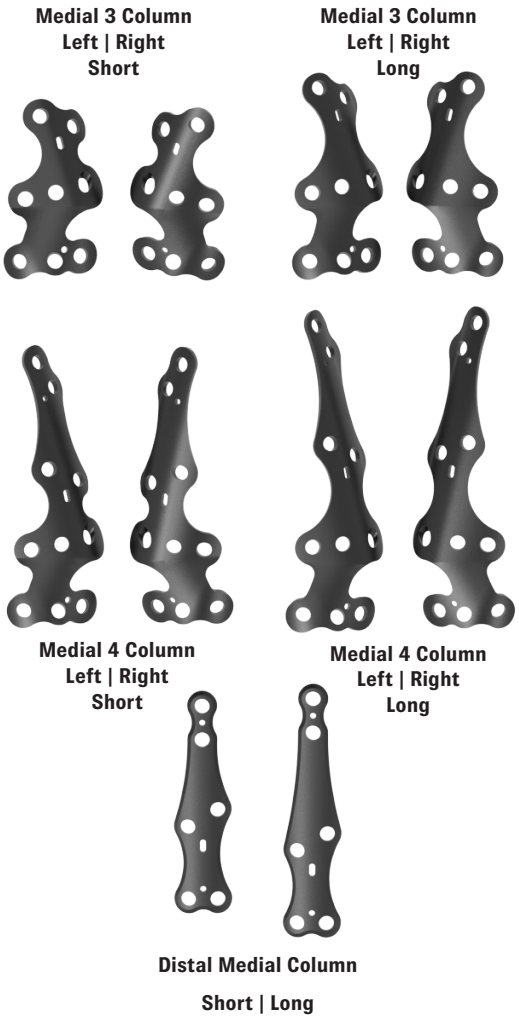
Medial Column Plates

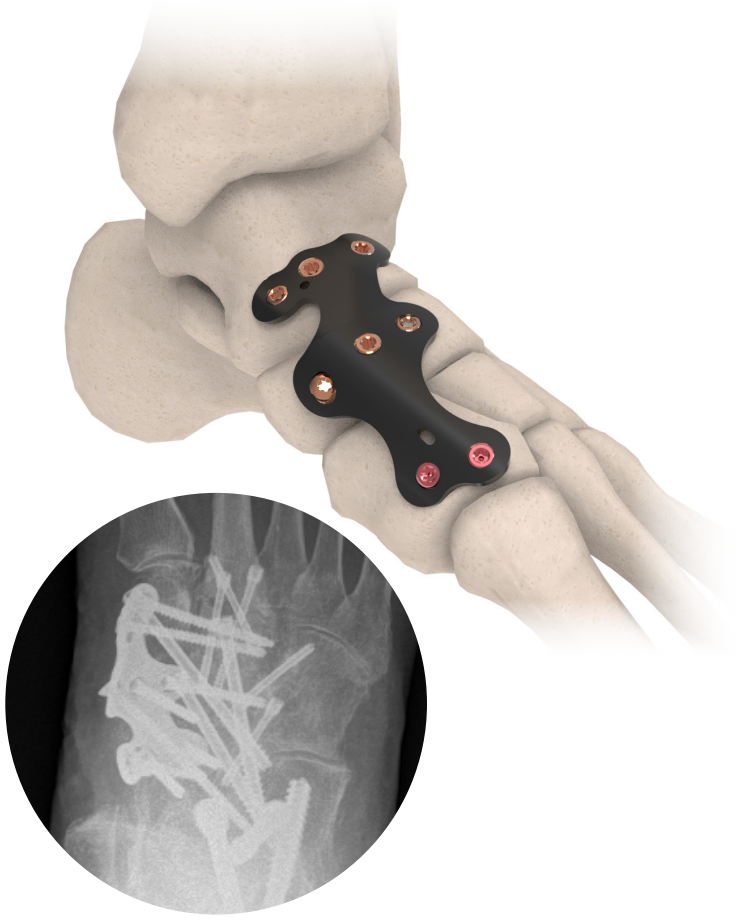
The system offers a total of 10 Medial Column Plates comprised of 3 Column, 4 Column and Distal Column plates to allow surgeons to stabilize the medial column of the foot in cases of arthritis, instability or Charcot reconstruction. Our Medial Column plates are 1.8mm thick and accept 3.0 or 3.5mm screws. The plates are designed to be truly anatomic for a low-profile fit without the need to bend the plate.

Medial 3 Column plates span from the talus to the cuneiform in left/right orientations and are available in short (51mm) and long (60mm) lengths.

Medial 4 Column plates span from the talus to the metatarsal in left/right orientations and are available in short (82mm) and long (94mm) lengths.

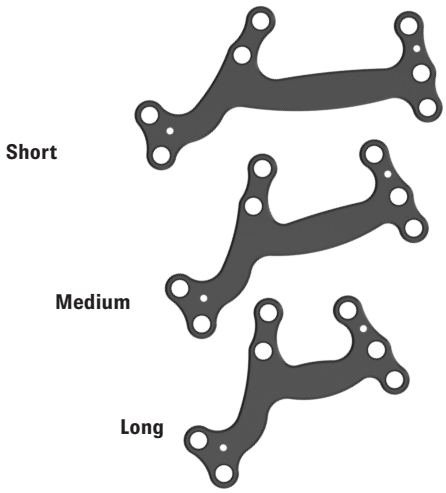
Distal Medial column plates span from the navicular to the metatarsal and are available in short (66mm) and long (75mm) lengths.





Calcaneus Plates

The system offers low-profile ORIF Calcaneus Plates to address fractures of the calcaneus through a minimally invasive approach. The plates are 1.6mm thick, accept 3.0 or 3.5mm screws and are available in short (60mm), medium (69mm) or long (79mm). The plates are engineered around a three-point fixation principle, which allows for improved strength to where the surgeon can draw the calcaneal tuberosity into the plate.

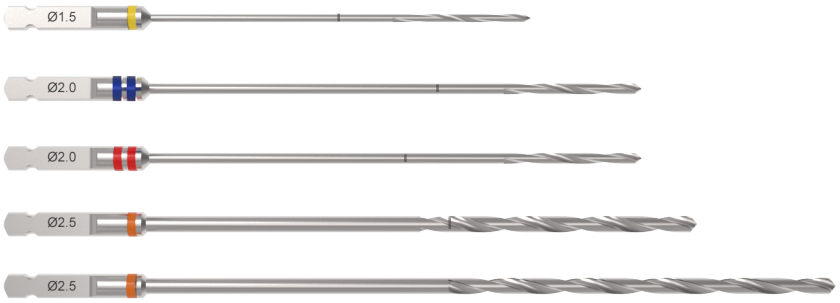


Drills and Drivers

The BioPro Foot Plating System screws and instruments follow a color coding system that allows for easy identification. The drills and drivers are marked with color rings that coordinate with the anodized screw color.

Caution

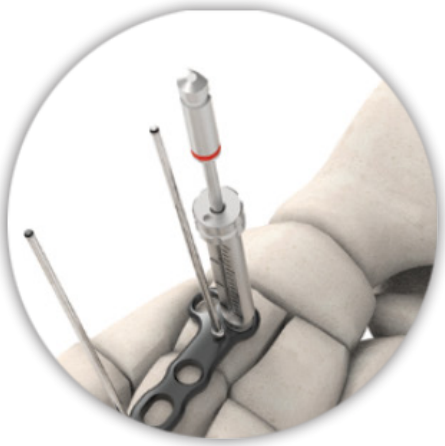
Always ensure that the color ring on the instrument matches the color of the screw.



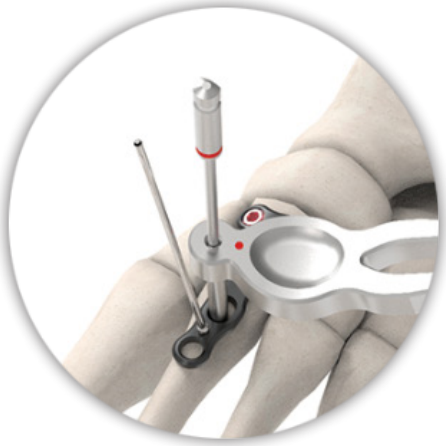
Drill Guides

The BioPro Foot Plating System offers three standard drill guide types: locking drill guides, MVA drill guides and double drill guides. Each drill guide features color coded dots that coordinate with the drill and screw color.

When inserting a compression non-locking screw, a double drill guide should always be used. Always use an MVA drill guide when drilling at a variable angle.



Locking Drill Guide



Double Drill Guide

MVA Drill Guide

Plate Contouring Options

The system includes pre-contoured anatomically shaped plates, but in some cases additional contouring may be required. The plate may be contoured with the bending irons or the bending pins.

Caution

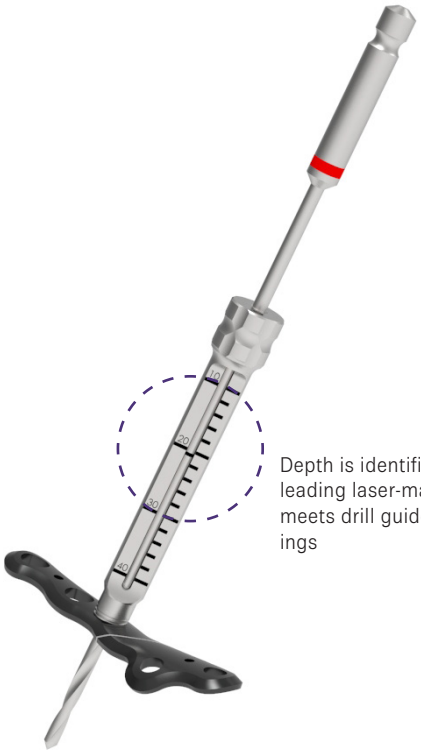
Reverse bending and over bending can cause reduced fatigue life and should always be avoided. Avoid excessive bending through the locking holes. If the plate is contoured through the locking holes, a non-locking screw is recommended to avoid cross threading of the fixed angle locking screw.

Bending Pins

Bending Irons

Depth Measurement

The BioPro Foot Plating System offers various options to evaluate screw length. A standard depth gauge may be used after drilling either independently or through the plate hole. If using a locking drill guide, screw length may be measured through the locking drill guide window.



Depth is identified where leading laser-marking line meets drill guide laser-markings

Compression

Compression can be achieved when a non-locking screw is inserted and tightened into an oval compression hole. A non-locking compression screw should be placed in the narrower section of the hole so that the screw may glide from the initial position into the final locking position when tightened.

Caution

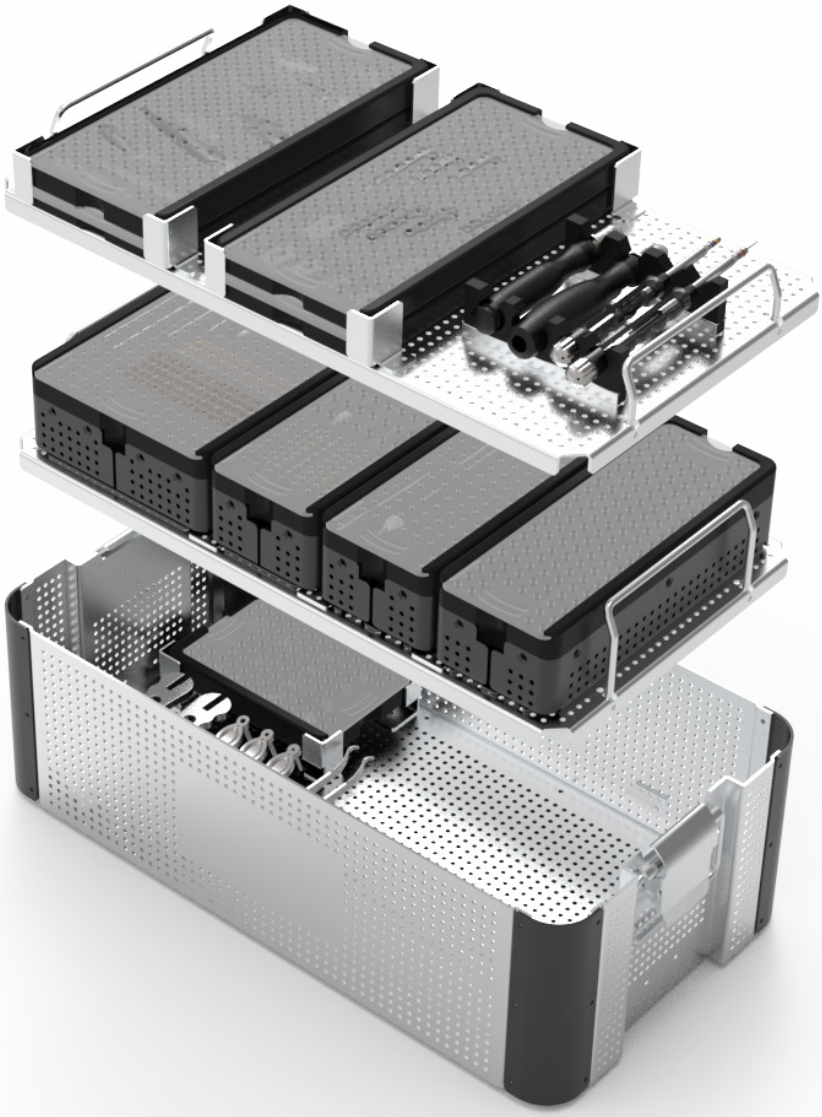
Not all plates feature a compression screw hole. Ensure the plate features an oval compression hole before applying this technique.

Modular Tray Design

The BioPro Foot Plating System tray utilizes a modular design allowing the user to customize the tray, thereby reducing the footprint in the operating room.

The system includes the base tray [ref #22925] and nine modules

- 2.0 Screw + Plate Module [ref #22926]
- 2.8 Screw Module [ref #22927]
- 2.8 Plate Module [ref #22930]
- 3.0/3.5 Screw Module [ref #22928]
- 3.0/3.5 Plate Module [ref #22931]
- MTP Plate Module [ref #22929/23179]
- Medial Column Plate Module [ref #22932]
- Osteotomy Plate Module [ref #22934]
- Calcaneal Plate Module [ref #22933]

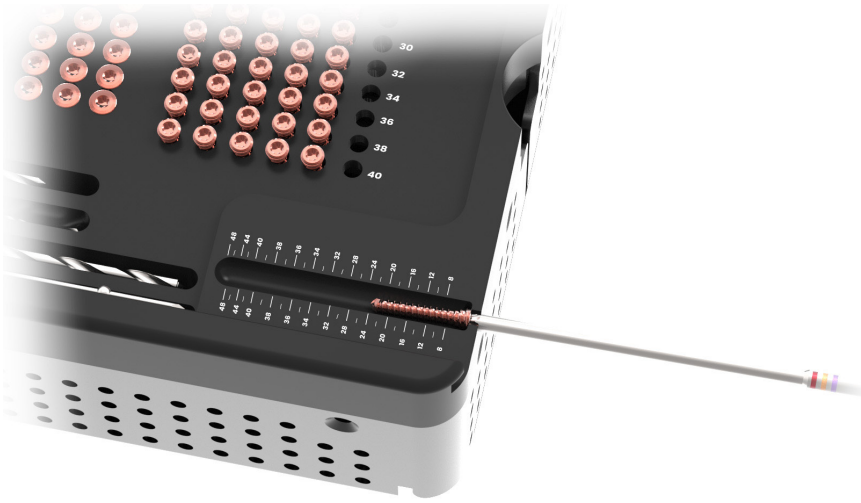


Removing Plates

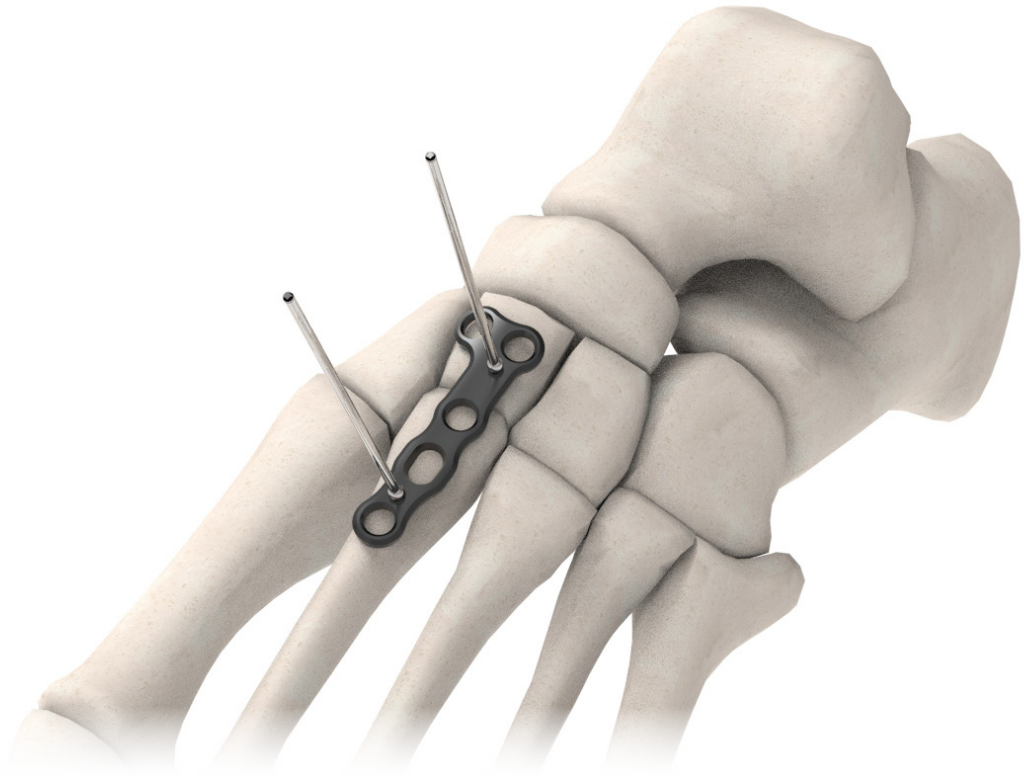
The BioPro Foot Plating System tray utilizes custom formed modules to secure plates. BioPro always recommends using a threaded locking instrument, such as a bending pin, to remove the plate from the tray to avoid damaging the implant.

Screw Measurement

Always measure a screw before implantation to verify proper screw length. Our screw modules feature internal steps to prevent improper placement.



General Plating Technique



Step One: Incision

An incision is made at the midline of the fusion site.

Step Two: Plate selection

Select an appropriately sized plate based on the size and type of indication. Plates are available in various lengths and styles. Bending irons or bending pins can be used if the plate needs to be contoured to the bone surface.

Caution

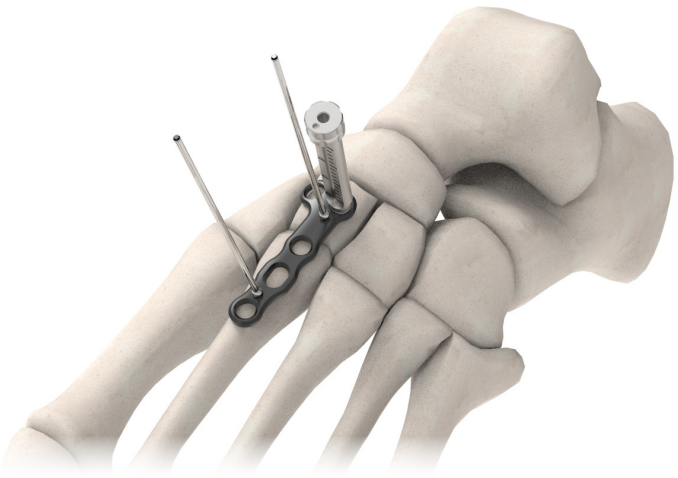
Reverse bending and over bending may cause reduced fatigue life and should always be avoided. Avoid excessive bending through the locking holes. If the plate is contoured through the locking holes, a non-locking screw is recommended to avoid cross threading of the fixed angle locking screw.

Step Three: Temporary fixation

After reduction the plate is placed on the bone. Ensure that at least one screw hole is on each side of the fusion site. Drive the included, appropriately sized olive k-wires into the k-wire holes for temporary fixation. Fluoroscopy is recommended to confirm proper plate placement.

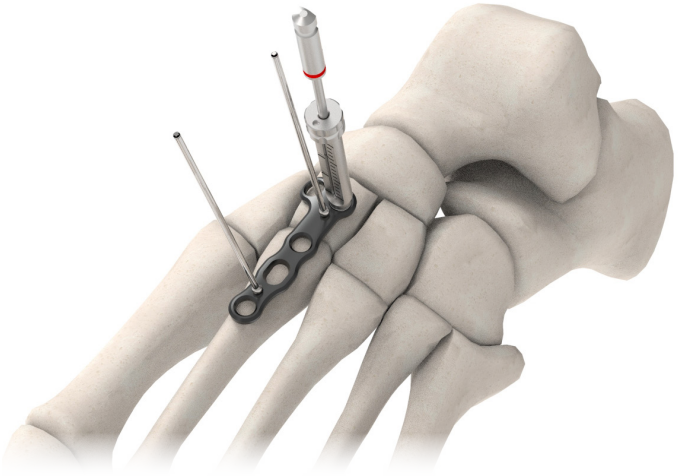
Caution

Please be careful with the plate and avoid scratches and notches when using the implants. The system offers a complete range of different plates and sizes so consider the anatomy of the foot and use the appropriate plate solutions for larger bones or higher load bearing applications.



Step Four: Use of locking drill guide

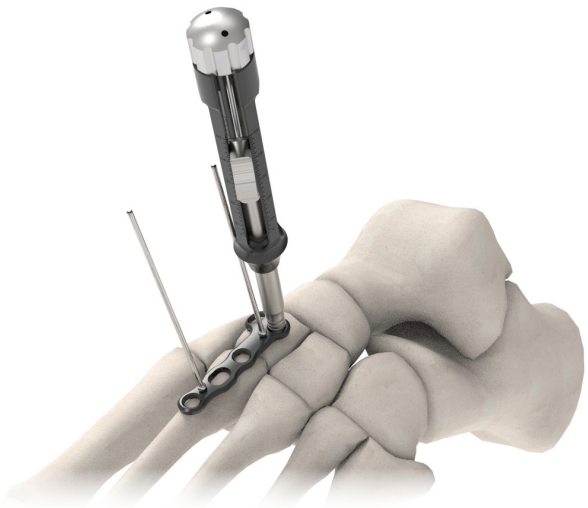
Once the plate is temporarily fixated to the bone, a standard locking drill guide is threaded into one of the threaded plate holes.



Step Five: Drilling pilot hole

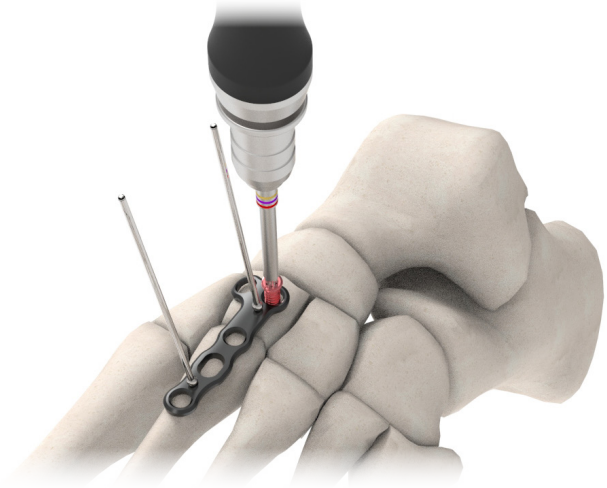
After the locking drill guide is locked in the first threaded plate hole, drill a pilot hole with a color-coded drill bit.

Note
The screw holes in the plate are compatible with the MVA locking and non-locking screws. The non-locking screws can be used with either the locking holes or compression slots. The locking screws are only provided for the locking holes. Depending on surgeon preference and indication, a combination of the locking screws and the non-locking screws can be used in the plate.



Step Six: Screw measurement

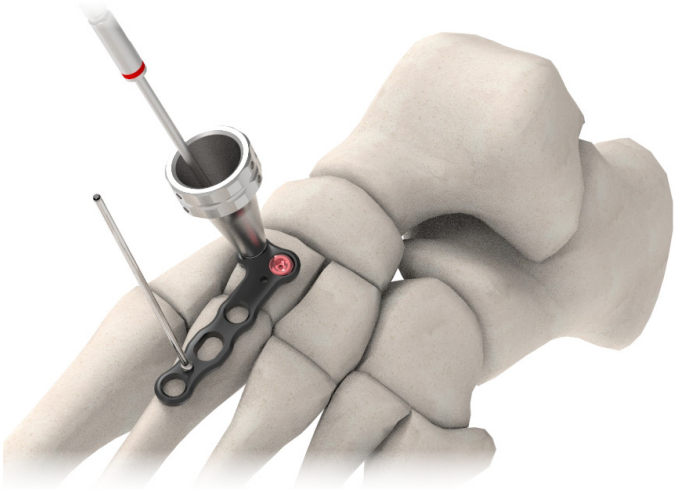
The appropriate screw length can be determined through the measuring windows in the locking drill guide or can be determined using the provided color coded depth gauge. (see page 8)



Step Seven: Screw insertion

Remove the desired screw from the screw caddy using the corresponding star driver and insert into the pilot hole.

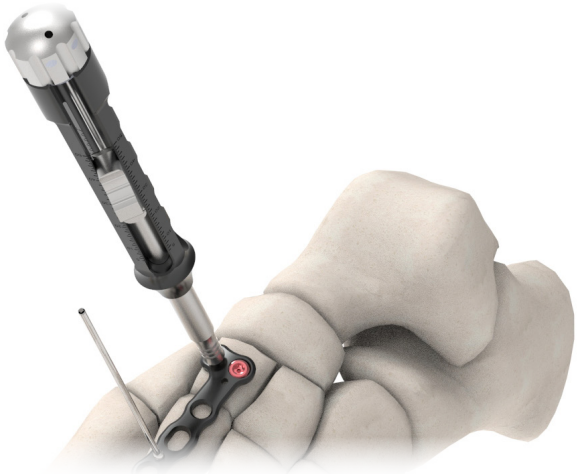
Caution
For all screws used throughout the procedure, verify the screw length using the appropriate gauge on the screw caddy.



Step Eight: Drilling for MVA locking screw

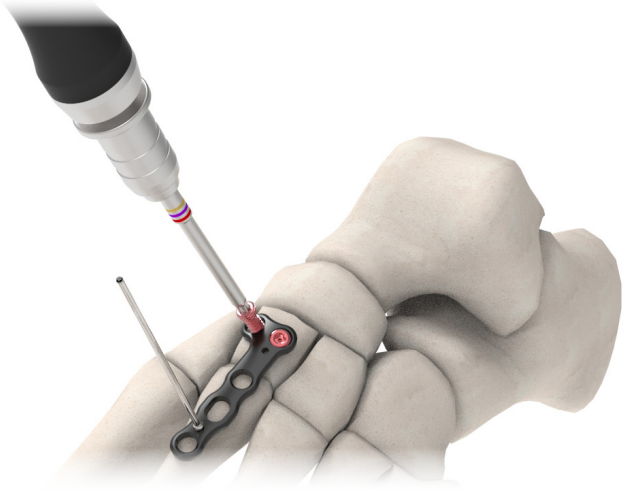
If inserting an MVA locking screw at an angle the cone drill guide must be used. Drill to the desired depth and angle. The cone drill guide allows screws to be inserted up to 12.5° with a total variability of 25°.

Caution
Never drill a variable hole without the centering MVA drill guide.



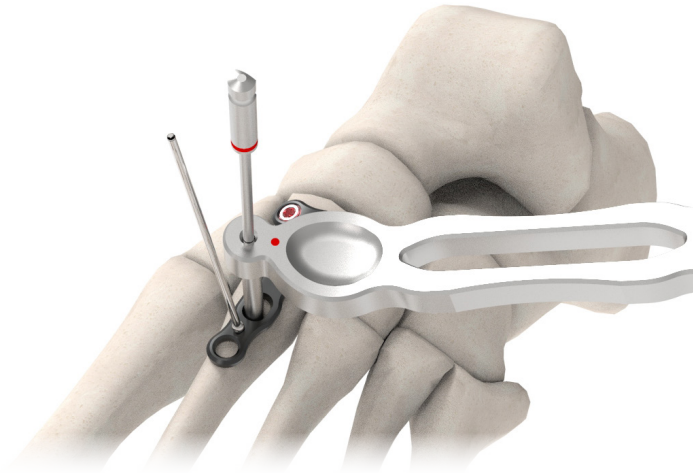
Step Nine: Screw measurement

After drilling for an MVA locking screw, determine the screw length using the provided color coded depth gauge.



Step Ten: Insertion of the MVA Locking Screw

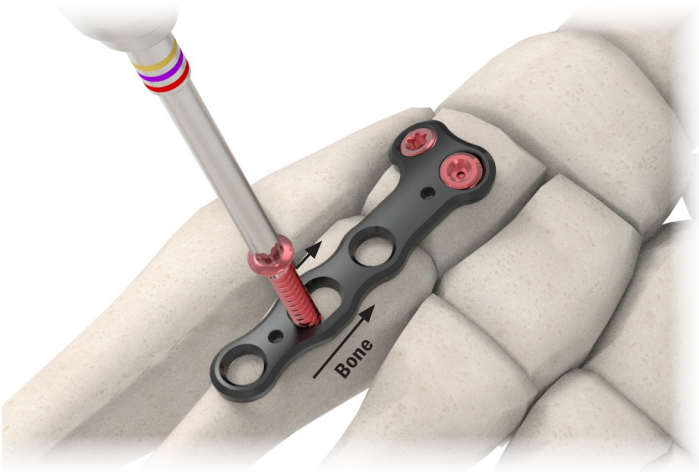
Remove the desired screw from the screw caddy using the corresponding star screwdriver, insert the screw into the pilot hole and drive the screw into the plate.



Step Eleven: Drilling for Compression Screw

When drilling for a compression screw the double drill guide should be used. The drill guides are color-coded to match the corresponding drill bit and screw diameter. In order to generate compression, the plate is first fixed on one side of the fusion using locking or non locking screws through a locking hole. Once all screws on one side are in place, select the appropriate drill bit and the corresponding double drill guide for the desired non-locking screw size. Insert the double drill guide into the compression slot at the side of the compression slot that is away from the fusion side. Insert the appropriate drill through the drill guide and drill to the desired depth. The hole may go through one or both of the cortices.

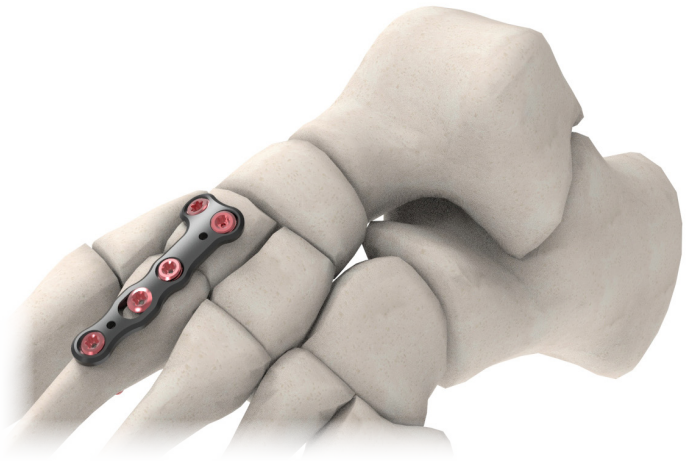
Note
If planning to insert a compression screw, always ensure to fixate the side of the plate opposite the compression slot first.



Step Twelve: Insertion of the Compression Screw

Remove any olive wires, if present, adjacent to the compression screw slot.

Remove the desired non-locking screw from the screw caddy using the corresponding star screwdriver, insert the screw into the pilot hole and drive the screw into the plate. When inserting the screw, it should glide in the oblong hole, creating compression at the fusion site.

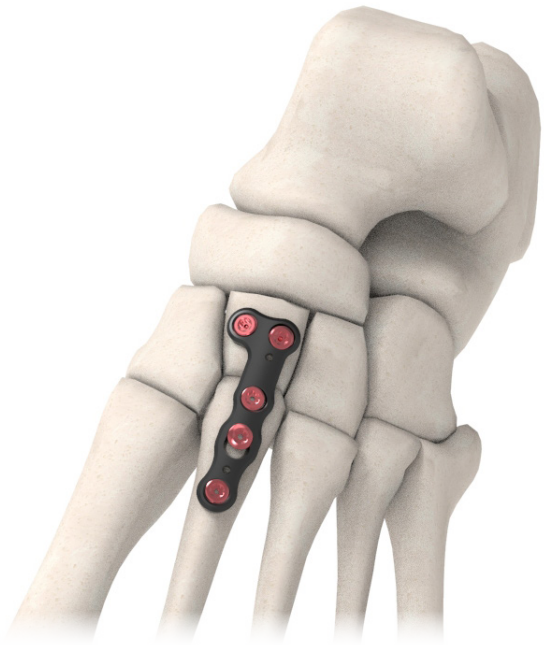


Step Thirteen: Filling all remaining screw holes

Fill all remaining screw holes as desired. Completely tighten all remaining screws.

Caution

During final tightening of the screws take caution to not over torque the screws as this could strip the screw head and/or driver.



Step Fourteen: Wound closure and postoperative care

After all screws are tightened into the plate all temporary instruments are removed from the patient and the wound closure is completed per surgeon's preferred method.

Common Plating Options

MTP Fusion

Suggested Plates - Standard MTP Fusion Plate or 2.8mm Universal Plate with 2.5mm or 3.0mm Headless Compression Screw

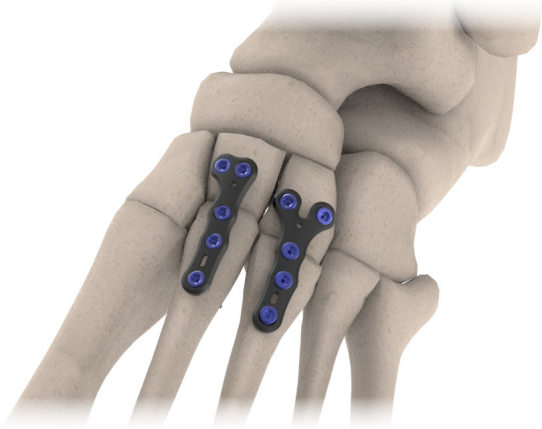
Medial TMT Fusion

Suggested Plates - Medial TMT Plate or 3.0mm/3.5mm Universal Plate with a 2.5mm or 3.0mm Headless Compression Screw

TN (Talo-navicular) Fusion

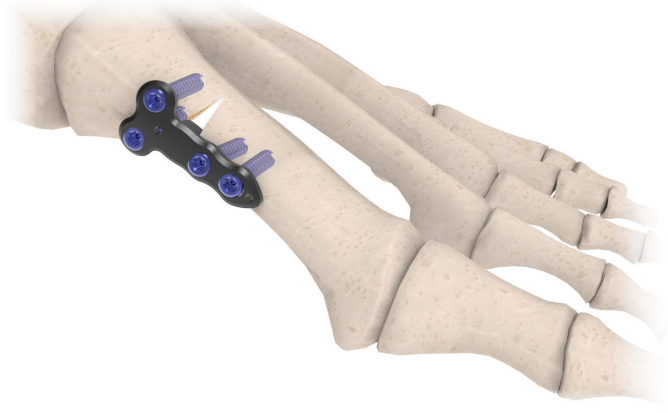
Suggested Plates - X-plate (SM, MD, LG)

Lisfranc (Tarsal-metatarsal) Fusion



Suggested Plates - 2.8mm Universal Plate

Base Opening Wedge Osteotomy



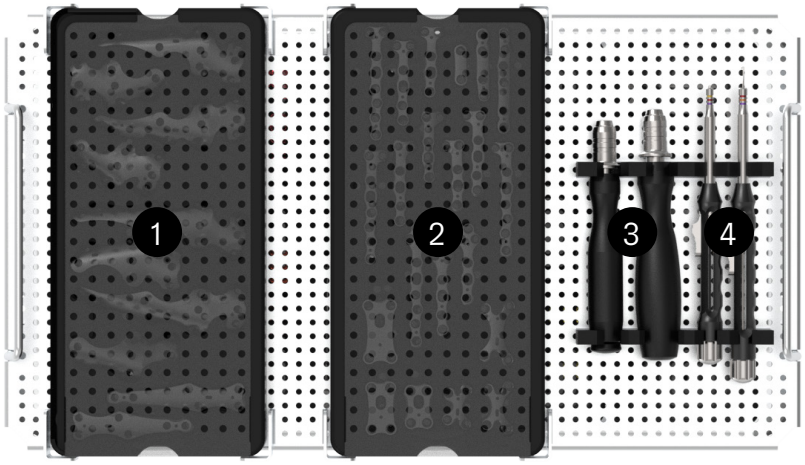
Suggested Plates - Open Wedge Plate (0, 2, 3, 4, 5, 6mm)

Metatarsal Fractures

Suggested Plates - 2.0mm or 2.8mm Universal Plate

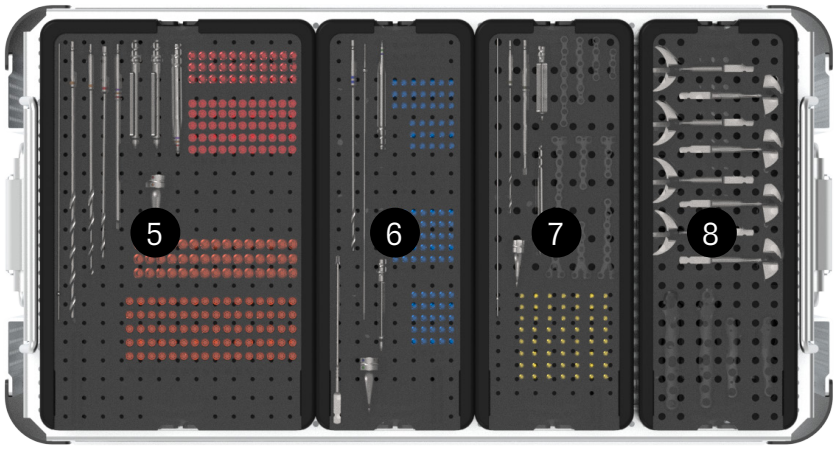
Tray Overview & Ordering

The Foot Plating System Main Tray [ref# 22925] is constructed with 3 levels. Each module is to be ordered separately.



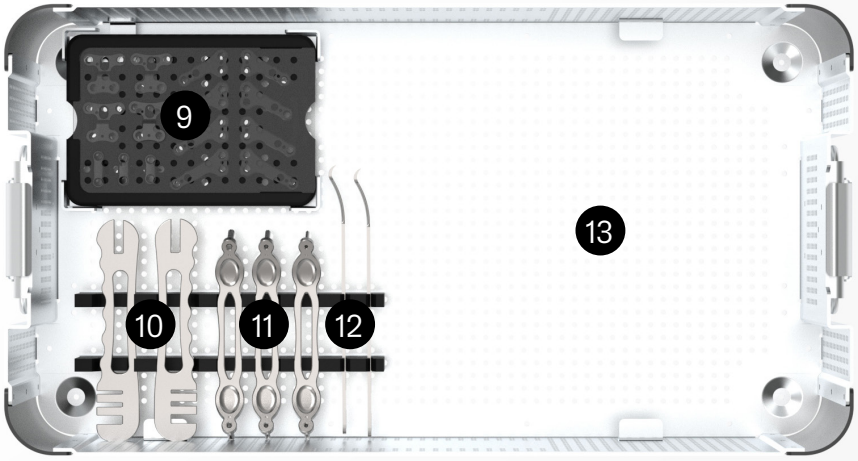
Top Level

1	Plate Modules (ordered separately) • Medial Column Plate Module [ref #22932] • Calcaneal Plate Module [ref #22933]
2	Plate Module (ordered separately) • 3.0/3.5 Plate Module [ref #22931] • 2.8 Plate Module [ref #22930]
3	Drivers
4	Depth Gauges



Middle Level

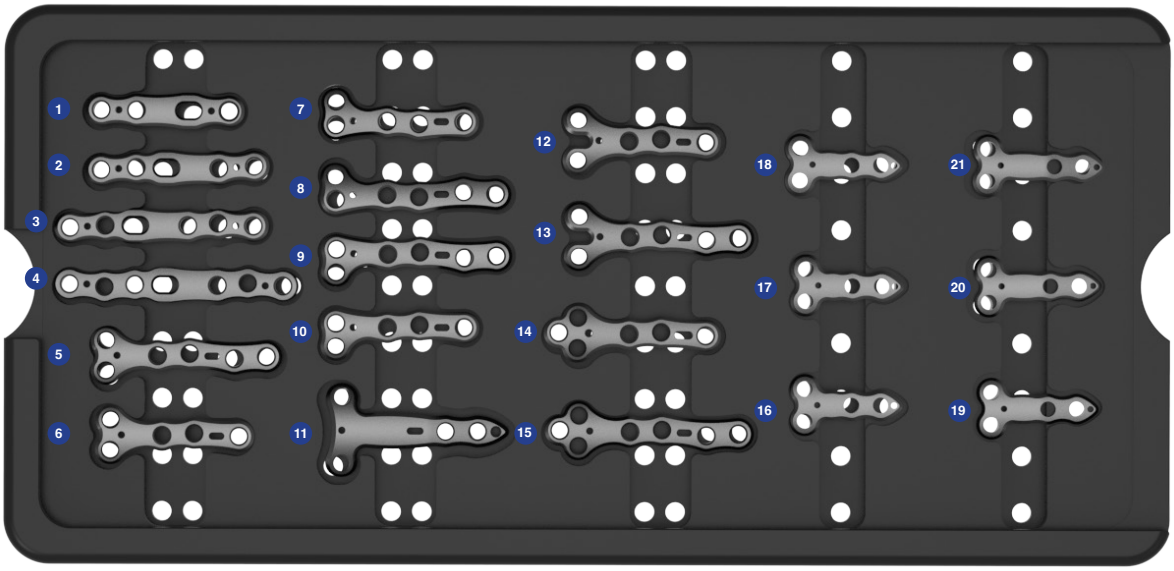
5	3.0/3.5 Screw Module [ref #22928] (ordered separately)
6	2.8 Screw Module [ref #22927] (ordered separately)
7	2.0 Screw & Plate Module [ref #22926] (ordered separately)
8	MTP Module [ref #22929/23179] (ordered separately)



Bottom Level

9	Osteotomy Plate Module [ref #22934] (ordered separately)
10	Bending Irons
11	Double Drill Guides
12	Hohman Retractors
13	Miscellaneous Instruments (ordered separately)

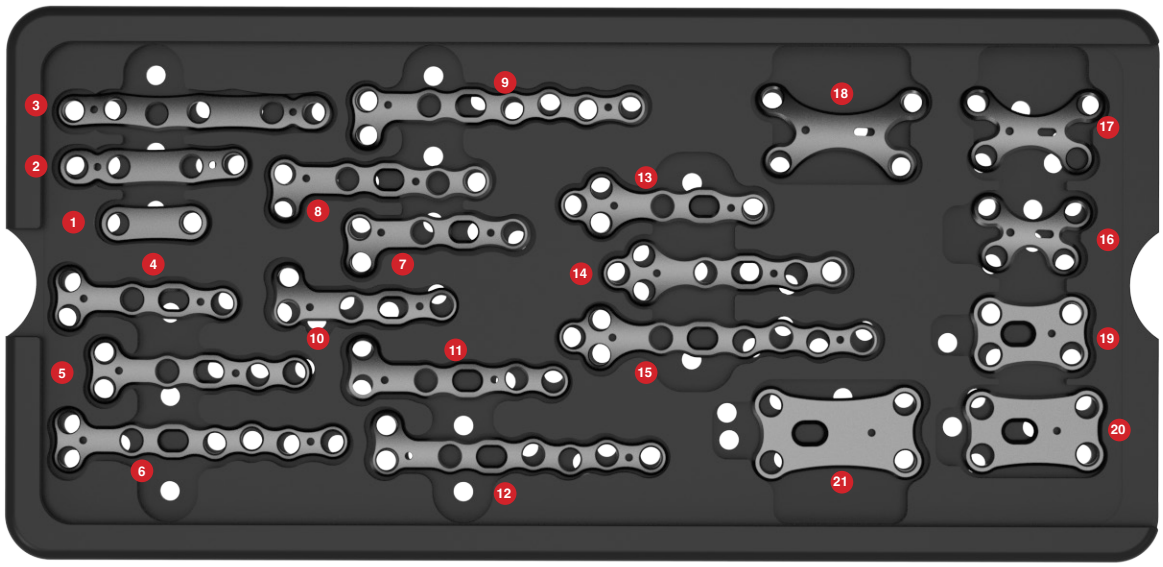
2.8 Plate Module [ref# 22930]



2.8 Plate Module - 22930

Location	Screw Color	Item #	Description	Qty
1	•	20614	Straight Fracture Plate, 2.5-2.8mm, 4 Hole	1
2	•	20615	Straight Fracture Plate, 2.5-2.8mm, 5 Hole	1
3	•	20616	Straight Fracture Plate, 2.5-2.8mm, 6 Hole	1
4	•	20617	Straight Fracture Plate, 2.5-2.8mm, 7 Hole	1
5	•	20624	T-Shape Fracture Plate, 2.5-2.8mm, 3 Hole	1
6	•	20625	T-Shape Fracture Plate, 2.5-2.8mm, 4 Hole	1
7	•	20622	L-Shape Fracture Plate, 2.5-2.8mm, 3 Hole, Right	1
8	•	20623	L-Shape Fracture Plate, 2.5-2.8mm, 4 Hole, Right	1
9	•	20620	L-Shape Fracture Plate, 2.5-2.8mm, 3 Hole, Left	1
10	•	20621	L-Shape Fracture Plate, 2.5-2.8mm, 4 Hole, Left	1
11	•	20756	Medial TMT-1 Fusion Plate, 2.8mm, 4 Hole	1
12	•	20618	Y-Shape Fracture Plate, 2.5-2.8mm, 3 Hole	1
13	•	20619	Y-Shape Fracture Plate, 2.5-2.8mm, 4 Hole	1
14	•	20626	Cloverleaf Plate, 2.5-2.8mm, 3 Hole	1
15	•	20627	Cloverleaf Plate, 2.5-2.8mm, 4 Hole	1
16	•	20628	Open Wedge Plate, 2.5-2.8mm, 0mm Wedge	1
17	•	20629	Open Wedge Plate, 2.5-2.8mm, 2mm Wedge	1
18	•	20630	Open Wedge Plate, 2.5-2.8mm, 3mm Wedge	1
19	•	20631	Open Wedge Plate, 2.5-2.8mm, 4mm Wedge	1
20	•	20632	Open Wedge Plate, 2.5-2.8mm, 5mm Wedge	1
21	•	20633	Open Wedge Plate, 2.5-2.8mm, 6mm Wedge	1

3.0-3.5 Plate Module [ref# 22931]



3.0-3.5 Plate Module - 22931

Location	Screw Color	Item #	Description	Qty
1	• •	20868	Straight Fusion Plate, 3.0-3.5mm, 2 Hole	1
2	• •	20869	Straight Fusion Plate, 3.0-3.5mm, 4 Hole	1
3	• •	20870	Straight Fusion Plate, 3.0-3.5mm, 6 Hole	1
4	• •	21209	T-Shape Fracture Plate, 3.0-3.5mm, 3 Hole	1
5	• •	20877	T-Shape Fracture Plate, 3.0-3.5mm, 4 Hole	1
6	• •	20878	T-Shape Fracture Plate, 3.0-3.5mm, 6 Hole	1
7	• •	21197	L-Shape Fracture Plate, 3.0-3.5mm, 3 Hole, Left	1
8	• •	20871	L-Shape Fracture Plate, 3.0-3.5mm, 4 Hole, Left	1
9	• •	20872	L-Shape Fracture Plate, 3.0-3.5mm, 6 Hole, Left	1
10	• •	21199	L-Shape Fracture Plate, 3.0-3.5mm, 3 Hole, Right	1
11	• •	20873	L-Shape Fracture Plate, 3.0-3.5mm, 4 Hole, Right	1
12	• •	20874	L-Shape Fracture Plate, 3.0-3.5mm, 6 Hole, Right	1
13	• •	21201	Cloverleaf Plate, 3.0-3.5mm, 3 Hole	1
14	• •	20875	Cloverleaf Plate, 3.0-3.5mm, 4 Hole	1
15	• •	20876	Cloverleaf Plate, 3.0-3.5mm, 6 Hole	1
16	• •	20879	X-Plate, 3.0-4.0mm, Small	1
17	• •	20880	X-Plate, 3.0-4.0mm, Medium	1
18	• •	20881	X-Plate, 3.0-4.0mm, Large	1
19	• •	20885	Rectangular Plate, 3.0-3.5mm, Small	1
20	• •	20886	Rectangular Plate, 3.0-3.5mm, Medium	1
21	• •	20887	Rectangular Plate, 3.0-3.5mm, Large	1

MTP Plate Module [ref# 22929/23179]

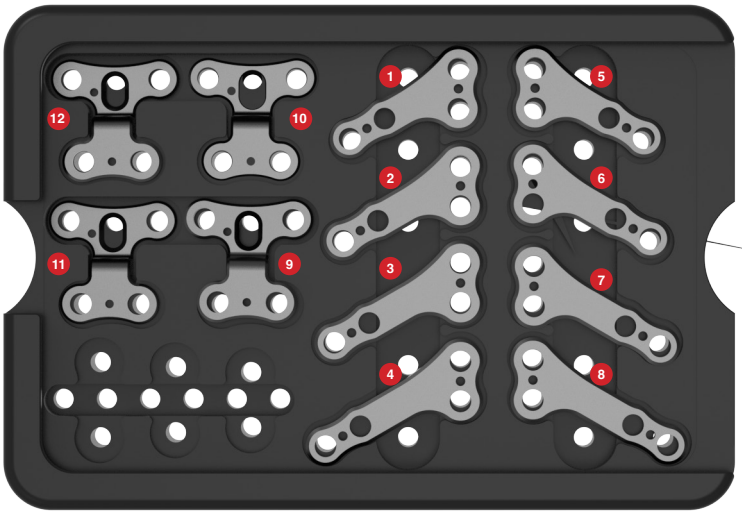
MTP Plate Module - 22929

Location	Screw Color	Item #	Description	Qty
1	• • •	20611	MTP Fusion Plate, 2.5-3.5mm, Right	1
2	• • •	20610	MTP Fusion Plate, 2.5-3.5mm, Left	1
3	• • •	20613	MTP Fusion Rev Plate, 2.8-3.5mm, Right	1
4	• • •	20612	MTP Fusion Rev Plate, 2.8-3.5mm, Left	1
5		20671	MTP Fusion Reamer, Convex, 16mm	1
6		20672	MTP Fusion Reamer, Convex, 18mm	1
7		20673	MTP Fusion Reamer, Convex, 21mm	1
8		20674	MTP Fusion Reamer, Convex, 24mm	1
9		20677	MTP Fusion Reamer, Concave, 16mm	1
10		20678	MTP Fusion Reamer, Concave, 18mm	1
11		20679	MTP Fusion Reamer, Concave, 21mm	1
12		20680	MTP Fusion Reamer, Concave, 24mm	1
13		17232	K-Wire .062" x 4" Non-Sterile	4

MTP Plate Module Gen 2 - 23179

Location	Screw Color	Item #	Description	Qty
1	• • •	23086	MTP Fusion Plate Narrow 5, 2.5-3.5mm, Right	1
2	• • •	23085	MTP Fusion Plate Narrow 5, 2.5-3.5mm, Left	1
1A	• • •	23084	MTP Fusion Plate Narrow 10, 2.5-3.5mm, Right	1
2A	• • •	20383	MTP Fusion Plate Narrow 10, 2.5-3.5mm, Left	1
3	• • •	20613	MTP Fusion Rev Plate, 2.8-3.5mm, Right	1
4	• • •	20612	MTP Fusion Rev Plate, 2.8-3.5mm, Left	1
5		20671	MTP Fusion Reamer, Convex, 16mm	1
6		20672	MTP Fusion Reamer, Convex, 18mm	1
7		20673	MTP Fusion Reamer, Convex, 21mm	1
8		20674	MTP Fusion Reamer, Convex, 24mm	1
9		20677	MTP Fusion Reamer, Concave, 16mm	1
10		20678	MTP Fusion Reamer, Concave, 18mm	1
11		20679	MTP Fusion Reamer, Concave, 21mm	1
12		20680	MTP Fusion Reamer, Concave, 24mm	1
13		17232	K-Wire .062" x 4" Non-Sterile	4

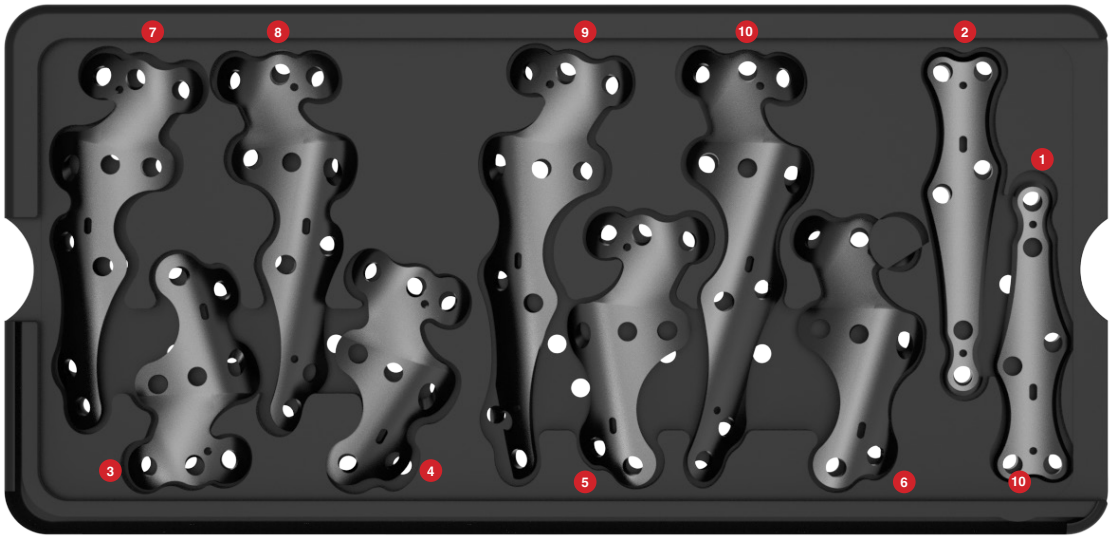
Osteotomy Plate Module [ref# 22934]



Osteotomy Module - 22934

Location	Screw Color	Item #	Description	Qty
1	• •	20888	Evans Plate, 3.0-3.5mm, 4mm Step, Left	1
2	• •	20889	Evans Plate, 3.0-3.5mm, 6mm Step, Left	1
3	• •	20890	Evans Plate, 3.0-3.5mm, 8mm Step, Left	1
4	• •	20891	Evans Plate, 3.0-3.5mm, 10mm Step, Left	1
5	• •	20892	Evans Plate, 3.0-3.5mm, 4mm Step, Right	1
6	• •	20893	Evans Plate, 3.0-3.5mm, 6mm Step, Right	1
7	• •	20894	Evans Plate, 3.0-3.5mm, 8mm Step, Right	1
8	• •	20895	Evans Plate, 3.0-3.5mm, 10mm Step, Right	1
9	• •	20896	Dwyer Plate, 3.0-3.5mm, 4mm Step	1
10	• •	20897	Dwyer Plate, 3.0-3.5mm, 6mm Step	1
11	• •	20898	Dwyer Plate, 3.0-3.5mm, 8mm Step	1
12	• •	20899	Dwyer Plate, 3.0-3.5mm, 10mm Step	1

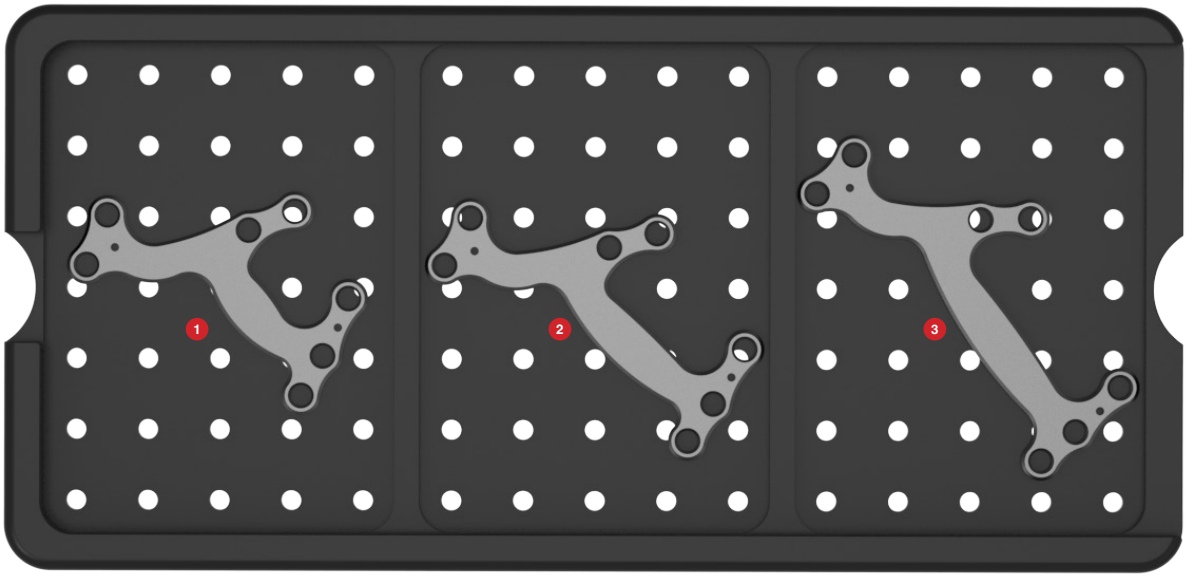
Medial Column Plate Module [ref# 22932]



Medial Column Module - 22932

Location	Screw Color	Item #	Description	Qty
1	• •	20909	Medial Distal Column Plate, 3.0-3.5mm, Short	1
2	• •	20908	Medial Distal Column Plate, 3.0-3.5mm, Long	1
3	• •	20905	Medial 3 Column Plate, 3.0-3.5mm, Short, Left	1
4	• •	20904	Medial 3 Column Plate, 3.0-3.5mm, Short, Right	1
5	• •	20907	Medial 3 Column Plate, 3.0-3.5mm, Long, Left	1
6	• •	20906	Medial 3 Column Plate, 3.0-3.5mm, Long, Right	1
7	• •	20901	Medial 4 Column Plate, 3.0-3.5mm, Short, Left	1
8	• •	20900	Medial 4 Column Plate, 3.0-3.5mm, Short, Right	1
9	• •	20903	Medial 4 Column Plate, 3.0-3.5mm, Long, Left	1
10	• •	20902	Medial 4 Column Plate, 3.0-3.5mm, Long, Right	1

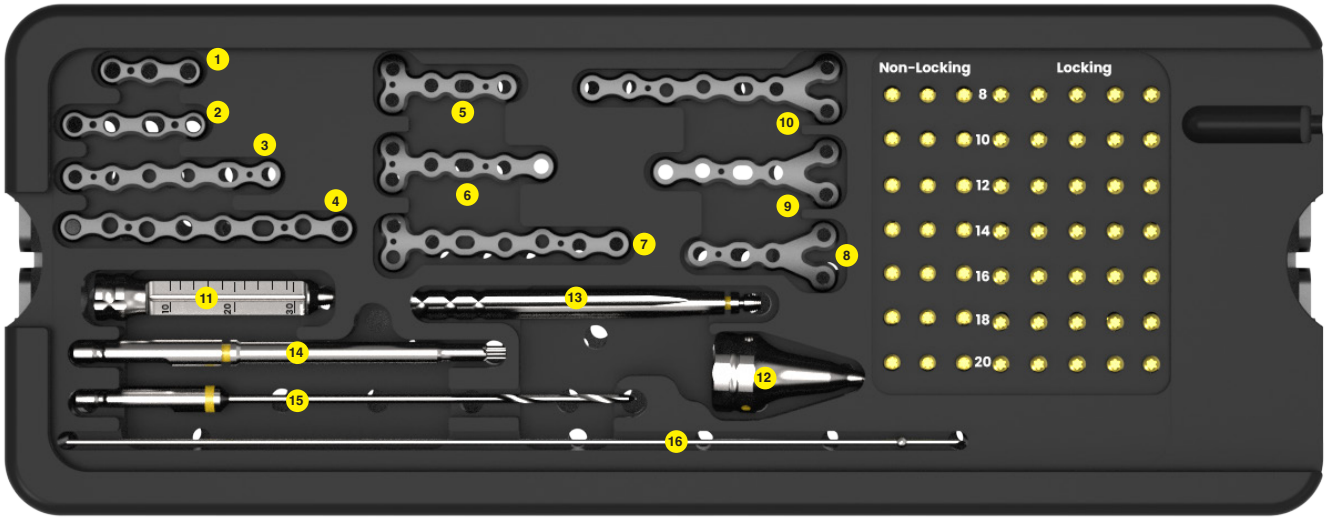
Calcaneal Plate Module [ref# 22933]



Calcaneal Plate Module - 22933

Location	Screw Color	Item #	Description	Qty
1	• •	20910	ORIF Calcaneal Plate, 3.0-3.5mm, Short	1
2	• •	20911	ORIF Calcaneal Plate, 3.0-3.5mm, Medium	1
3	• •	20912	ORIF Calcaneal Plate, 3.0-3.5mm, Long	1

2.0 Screw & Plate Module [ref# 22926]



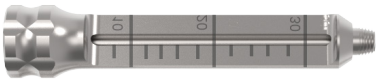
2.0 Screw-Plate Module - 22926

Location	Screw Color	Item #	Description	Qty
1	•	21207	Straight Fracture Plate, 2.0mm, 3 Hole	1
2	•	20602	Straight Fracture Plate, 2.0mm, 4 Hole	1
3	•	20604	Straight Fracture Plate, 2.0mm, 6 Hole	1
4	•	20605	Straight Fracture Plate, 2.0mm, 8 Hole	1
5	•	21205	T-Shape Fracture Plate, 2.0mm, 3 Hole	1
6	•	20608	T-Shape Fracture Plate, 2.0mm, 4 Hole	1
7	•	20609	T-Shape Fracture Plate, 2.0mm, 6 Hole	1
8	•	21203	Y-Shape Fracture Plate, 2.0mm, 3 Hole	1
9	•	20606	Y-Shape Fracture Plate, 2.0mm, 4 Hole	1
10	•	20607	Y-Shape Fracture Plate, 2.0mm, 6 Hole	1

Item #	Description	Qty
20478	Cortical Screw, 2.0mm X 8mm	3
20479	Cortical Screw, 2.0mm X 10mm	3
20480	Cortical Screw, 2.0mm X 12mm	3
20481	Cortical Screw, 2.0mm X 14mm	3
20482	Cortical Screw, 2.0mm X 16mm	3
20483	Cortical Screw, 2.0mm X 18mm	3
20484	Cortical Screw, 2.0mm X 20mm	3

Item #	Description	Qty
20471	Cortical Locking Screw, MVA, 2.0mm X 8mm	5
20472	Cortical Locking Screw, MVA, 2.0mm X 10mm	5
20473	Cortical Locking Screw, MVA, 2.0mm X 12mm	5
20474	Cortical Locking Screw, MVA, 2.0mm X 14mm	5
20475	Cortical Locking Screw, MVA, 2.0mm X 16mm	5
20476	Cortical Locking Screw, MVA, 2.0mm X 18mm	5
20477	Cortical Locking Screw, MVA, 2.0mm X 20mm	5

2.0 Screw & Plate Module [continued]



Location	Item #	Description	Qty
11	20636	Locking Drill Guide, 2.0mm	1

Location	Item #	Description	Qty
12	20640	MVA Drill Guide, 2.0mm	1

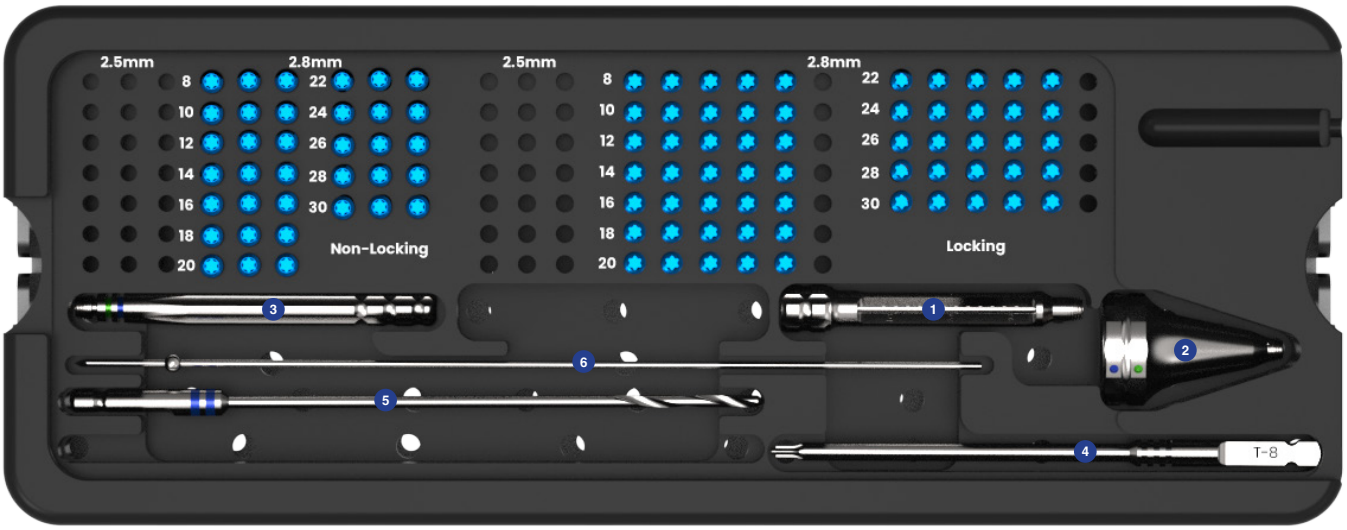
Location	Item #	Description	Qty
13	20662	Holding & Bending Pin – 2.0	2

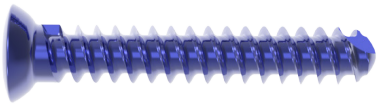
Location	Item #	Description	Qty
14	20650	Screwdriver Blade – T6	2

Location	Item #	Description	Qty
15	20647	1.5mm x 95mm Drill Bit (Yellow)	2

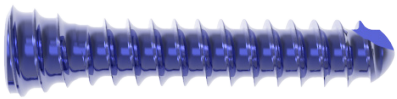
Location	Item #	Description	Qty
16	20666	K-Wire With Stop- 1.0mm	2

2.8 Screw Module [ref# 22927]





Item #	Description	Qty
20568	Cortical Screw, 2.8mm X 8mm	3
20569	Cortical Screw, 2.8mm X 10mm	3
20570	Cortical Screw, 2.8mm X 12mm	3
20571	Cortical Screw, 2.8mm X 14mm	3
20572	Cortical Screw, 2.8mm X 16mm	3
20573	Cortical Screw, 2.8mm X 18mm	3
20574	Cortical Screw, 2.8mm X 20mm	3
20575	Cortical Screw, 2.8mm X 22mm	3
20576	Cortical Screw, 2.8mm X 24mm	3
20577	Cortical Screw, 2.8mm X 26mm	3
20578	Cortical Screw, 2.8mm X 28mm	3
20579	Cortical Screw, 2.8mm X 30mm	3



Item #	Description	Qty
20556	Cortical Locking Screw, MVA, 2.8mm X 8mm	5
20557	Cortical Locking Screw, MVA, 2.8mm X 10mm	5
20558	Cortical Locking Screw, MVA, 2.8mm X 12mm	5
20559	Cortical Locking Screw, MVA, 2.8mm X 14mm	5
20560	Cortical Locking Screw, MVA, 2.8mm X 16mm	5
20561	Cortical Locking Screw, MVA, 2.8mm X 18mm	5
20562	Cortical Locking Screw, MVA, 2.8mm X 20mm	5
20563	Cortical Locking Screw, MVA, 2.8mm X 22mm	5
20564	Cortical Locking Screw, MVA, 2.8mm X 24mm	5
20565	Cortical Locking Screw, MVA, 2.8mm X 26mm	5
20566	Cortical Locking Screw, MVA, 2.8mm X 28mm	5
20567	Cortical Locking Screw, MVA, 2.8mm X 30mm	5

2.8 Screw Module [continued]

Location	Item #	Description	Qty
1	20638	Locking Drill Guide, 2.8mm	1

Location	Item #	Description	Qty
2	20641	MVA Drill Guide, 2.8mm	1

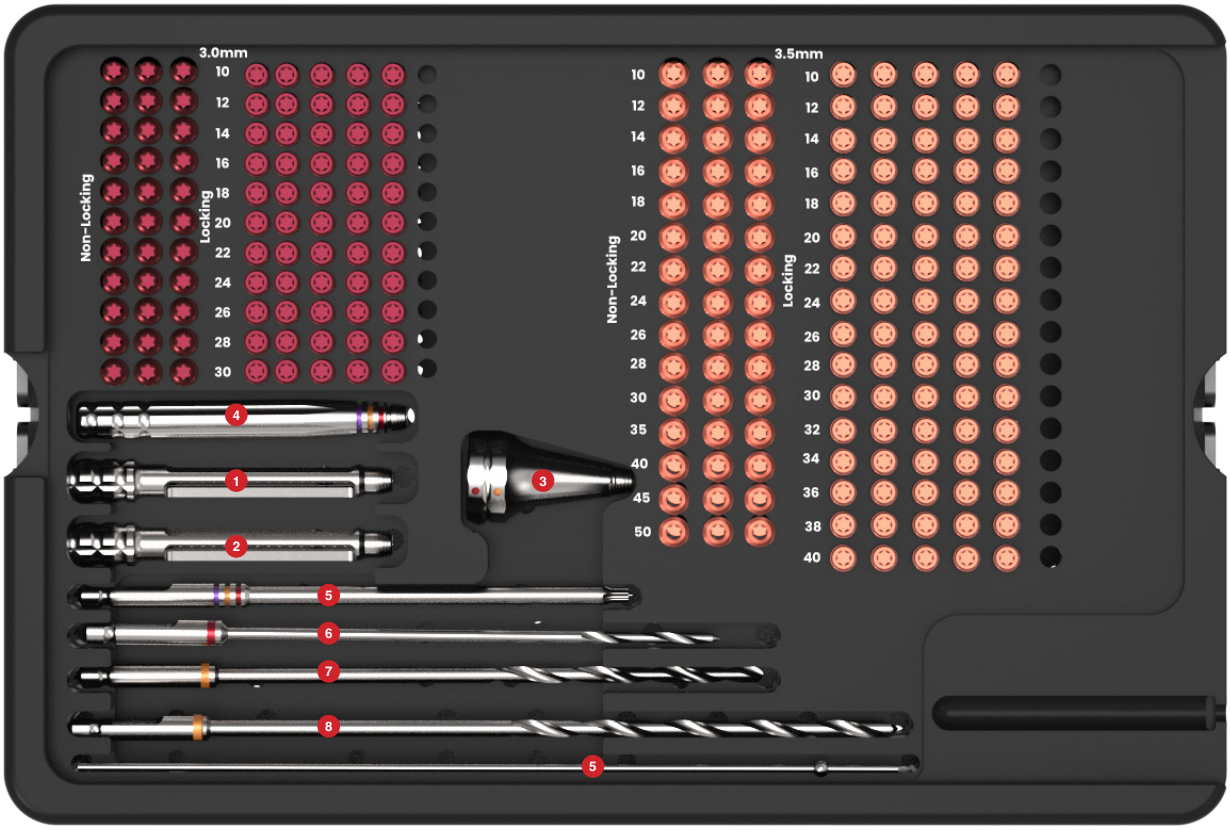
Location	Item #	Description	Qty
3	20663	Holding & Bending Pin – 2.8mm	2

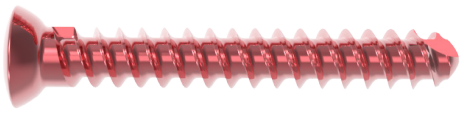
Location	Item #	Description	Qty
4	20651	Screwdriver Blade – T8	2

Location	Item #	Description	Qty
5	22680	2.0mm x 115mm Drill Bit (Blue)	2

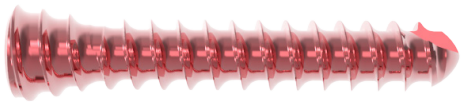
Location	Item #	Description	Qty
6	20940	K-Wire With Stop – 1.2mm	2

3.0/3.5 Screw Module [ref# 22928]



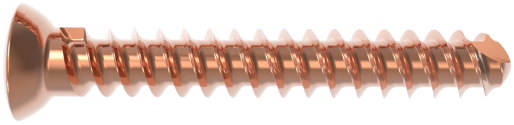


Item #	Description	Qty
20804	Cortical Screw, 3.0mm X 10mm	3
20805	Cortical Screw, 3.0mm X 12mm	3
20806	Cortical Screw, 3.0mm X 14mm	3
20807	Cortical Screw, 3.0mm X 16mm	3
20808	Cortical Screw, 3.0mm X 18mm	3
20809	Cortical Screw, 3.0mm X 20mm	3
20810	Cortical Screw, 3.0mm X 22mm	3
20811	Cortical Screw, 3.0mm X 24mm	3
20812	Cortical Screw, 3.0mm X 26mm	3
20813	Cortical Screw, 3.0mm X 28mm	3
20814	Cortical Screw, 3.0mm X 30mm	3

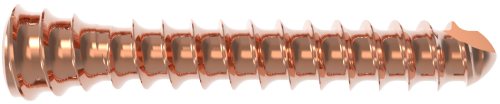


Item #	Description	Qty
20793	Cortical Locking Screw, MVA, 3.0mm X 10mm	5
20794	Cortical Locking Screw, MVA, 3.0mm X 12mm	5
20795	Cortical Locking Screw, MVA, 3.0mm X 14mm	5
20796	Cortical Locking Screw, MVA, 3.0mm X 16mm	5
20797	Cortical Locking Screw, MVA, 3.0mm X 18mm	5
20798	Cortical Locking Screw, MVA, 3.0mm X 20mm	5
20799	Cortical Locking Screw, MVA, 3.0mm X 22mm	5
20800	Cortical Locking Screw, MVA, 3.0mm X 24mm	5
20801	Cortical Locking Screw, MVA, 3.0mm X 26mm	5
20802	Cortical Locking Screw, MVA, 3.0mm X 28mm	5
20803	Cortical Locking Screw, MVA, 3.0mm X 30mm	5

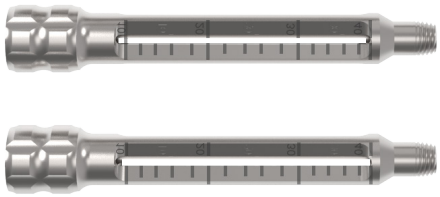
3.0/3.5 Screw Module [continued]



Item #	Description	Qty
21269	Cortical Screw, Low Head, 3.5mm X 10mm	3
21270	Cortical Screw, Low Head, 3.5mm X 12mm	3
21271	Cortical Screw, Low Head, 3.5mm X 14mm	3
21272	Cortical Screw, Low Head, 3.5mm X 16mm	3
21273	Cortical Screw, Low Head, 3.5mm X 18mm	3
21274	Cortical Screw, Low Head, 3.5mm X 20mm	3
21275	Cortical Screw, Low Head, 3.5mm X 22mm	3
21276	Cortical Screw, Low Head, 3.5mm X 24mm	3
21277	Cortical Screw, Low Head, 3.5mm X 26mm	3
21278	Cortical Screw, Low Head, 3.5mm X 28mm	3
21279	Cortical Screw, Low Head, 3.5mm X 30mm	3
21280	Cortical Screw, Low Head, 3.5mm X 35mm	3
21281	Cortical Screw, Low Head, 3.5mm X 40mm	3
21282	Cortical Screw, Low Head, 3.5mm X 45mm	3
21283	Cortical Screw, Low Head, 3.5mm X 50mm	3
21284	Cortical Screw, Low Head, 3.5mm X 55mm	3



Item #	Description	Qty
20815	Cortical Locking Screw, MVA, 3.5mm X 10mm	5
20816	Cortical Locking Screw, MVA, 3.5mm X 12mm	5
20817	Cortical Locking Screw, MVA, 3.5mm X 14mm	5
20818	Cortical Locking Screw, MVA, 3.5mm X 16mm	5
20819	Cortical Locking Screw, MVA, 3.5mm X 18mm	5
20820	Cortical Locking Screw, MVA, 3.5mm X 20mm	5
20821	Cortical Locking Screw, MVA, 3.5mm X 22mm	5
20822	Cortical Locking Screw, MVA, 3.5mm X 24mm	5
20823	Cortical Locking Screw, MVA, 3.5mm X 26mm	5
20824	Cortical Locking Screw, MVA, 3.5mm X 28mm	5
20825	Cortical Locking Screw, MVA, 3.5mm X 30mm	5
21686	Cortical Locking Screw, MVA, 3.5mm X 32mm	5
21687	Cortical Locking Screw, MVA, 3.5mm X 34mm	5
21688	Cortical Locking Screw, MVA, 3.5mm X 36mm	5
21689	Cortical Locking Screw, MVA, 3.5mm X 38mm	5
20827	Cortical Locking Screw, MVA, 3.5mm X 40mm	5



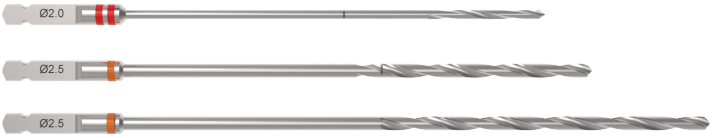
Location	Item #	Description	Qty
1	20917	Locking Drill Guide, 3.0mm	1
2	20918	Locking Drill Guide, 3.5mm	1

Location	Item #	Description	Qty
3	20921	MVA Drill Guide, 3.0-3.5mm	1

3.0/3.5 Screw Module [continued]

Location	Item #	Description	Qty
4	20739	Holding & Bending Pin – 3.0/3.5	2

Location	Item #	Description	Qty
5	20929	Screwdriver Blade – T10	2

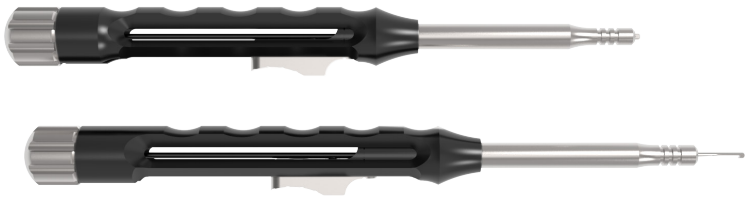


Location	Item #	Description	Qty
6	20924	2.0mm x 115mm Drill Bit (Red)	2
7	20925	2.5mm x 125mm Drill Bit (Orange)	2
8	20926	2.5mm x 150mm Drill Bit (Orange)	2

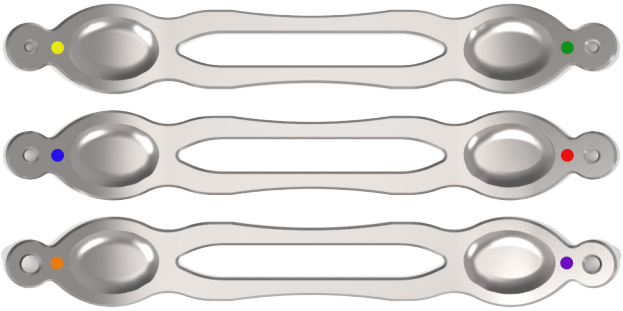
Location	Item #	Description	Qty
9	20941	K-Wire With Stop – 1.4mm	2

General Instruments

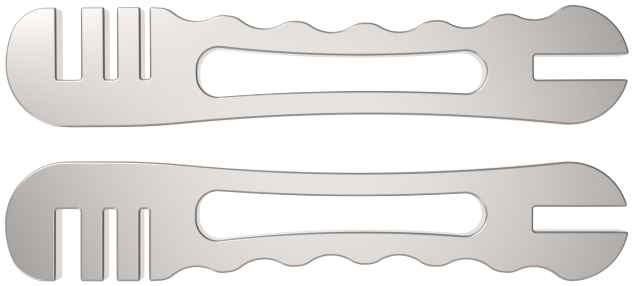
Item #	Description	Qty
20653	Screwdriver Handle – Small	1
20930	Screwdriver Handle – Medium	1



Item #	Description	Qty
20635	Depth Gauge 2.0/2.5/2.8 – 40mm	1
21337	Depth Gauge 3.0/3.5/4.0mm – 50mm	1



Item #	Description	Qty
20643	Double Drill Guide 2.0-2.5mm Screws	1
20922	Double Drill Guide 2.8-3.0mm Screws	1
20923	Double Drill Guide 3.5-4.0mm Screws	1



Item #	Description	Qty
20664	Bending Iron – Left	1
20665	Bending Iron – Right	1

Item #	Description	Qty
20934	Hohman Retractor, 8mm	1
20935	Hohman Retractor, 6mm	1

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