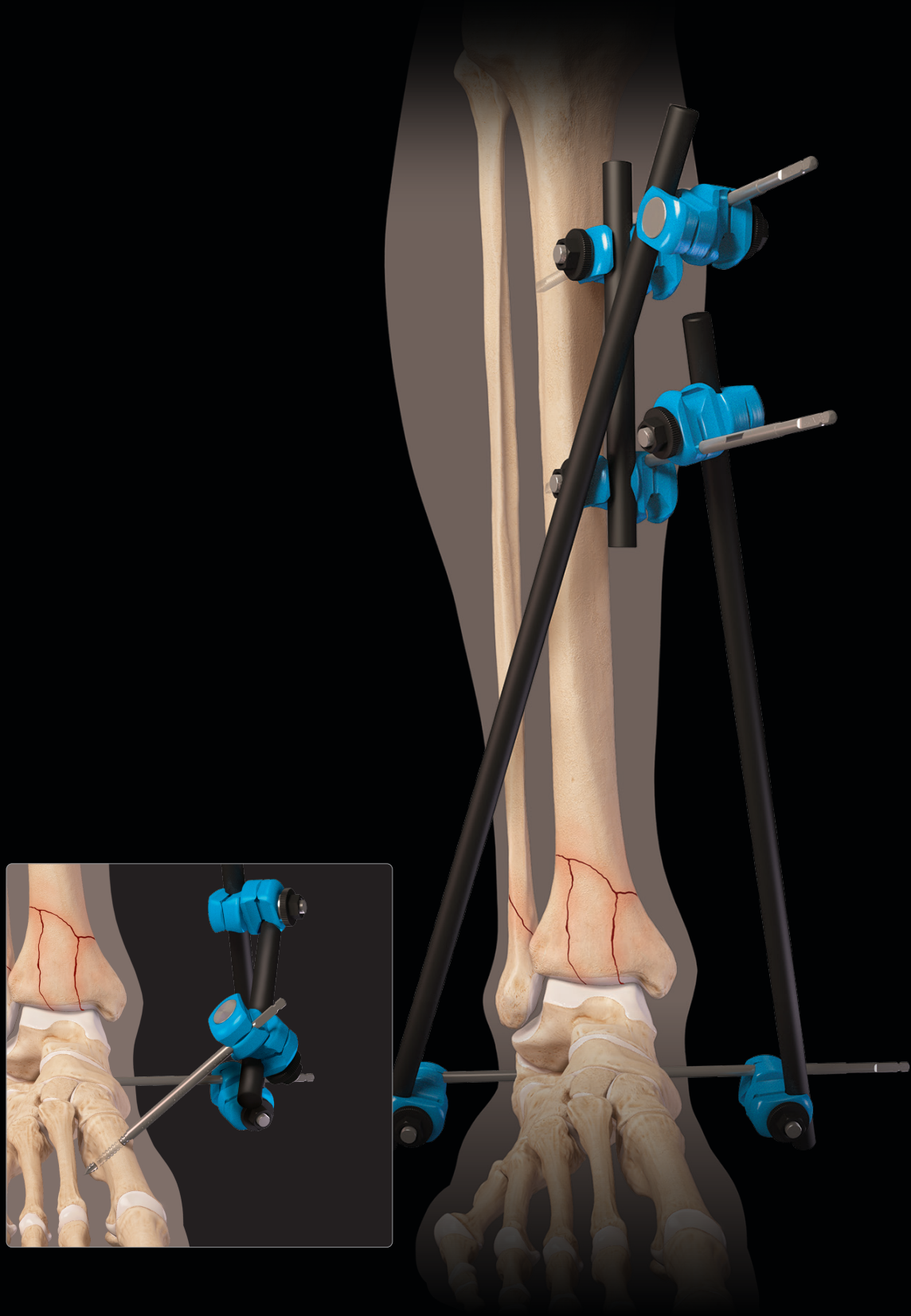


ArthroFX[®] External Fixation System

Brochure



Introduction

The ArthroFX™ external fixation system is designed to provide surgeons with a simple, efficient, and versatile solution for temporary or definitive fixation.

For staged distal tibia fracture repairs, Arthrex offers a comprehensive approach, including external fixation using the ArthroFX system, internal fixation with ankle and distal tibia fracture management systems, and biologics such as JumpStart™ antimicrobial wound dressing, all helping to streamline operating room efficiency.

With 11 mm carbon fiber rods, the system is suitable for a wide range of indications beyond the distal tibia, including applications in the femur, pelvis, and humerus.

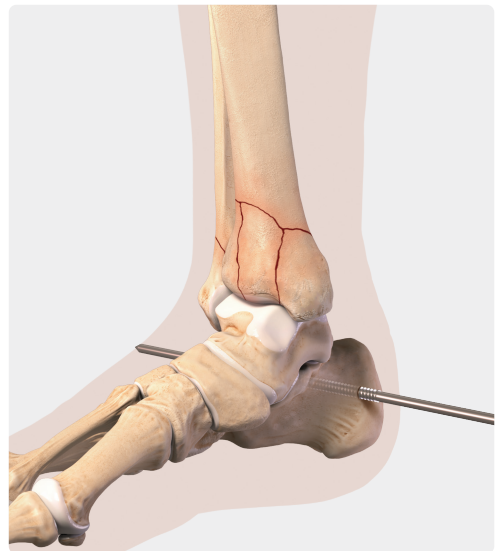
Delta Frame Technique

Surgical Technique



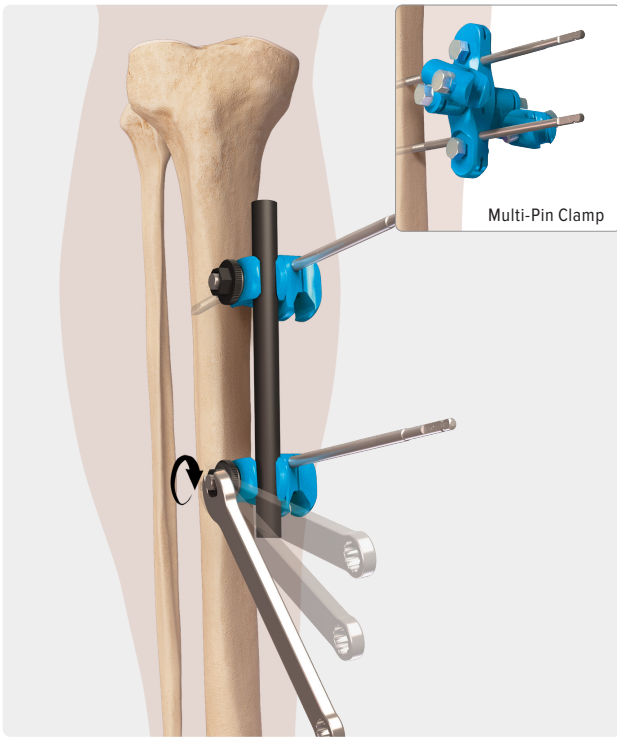
1

Insert the first 5.0 mm Schanz pin into the anteromedial tibial shaft. Pins should be placed outside the zone of injury or planned hardware placement.



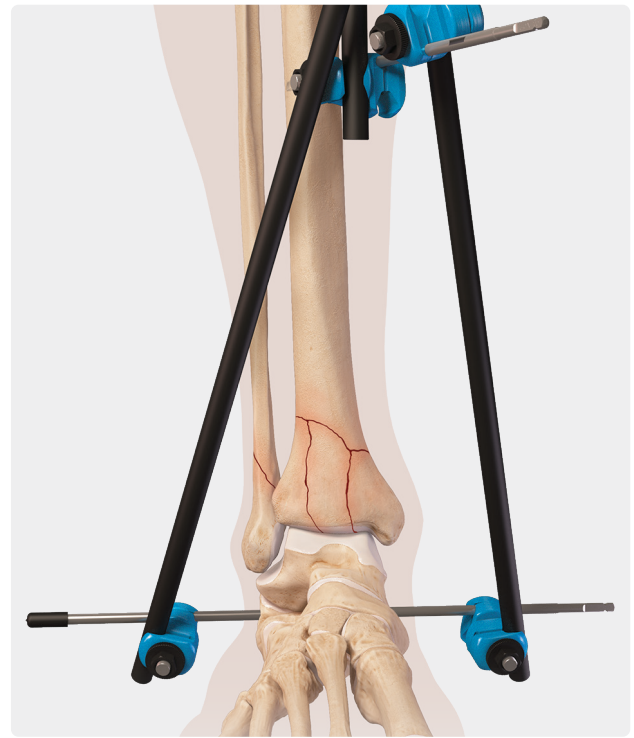
2

Insert the 6.0 mm transfixation pin through the calcaneus, perpendicular to the long axis of the calcaneus and parallel to the ankle joint.



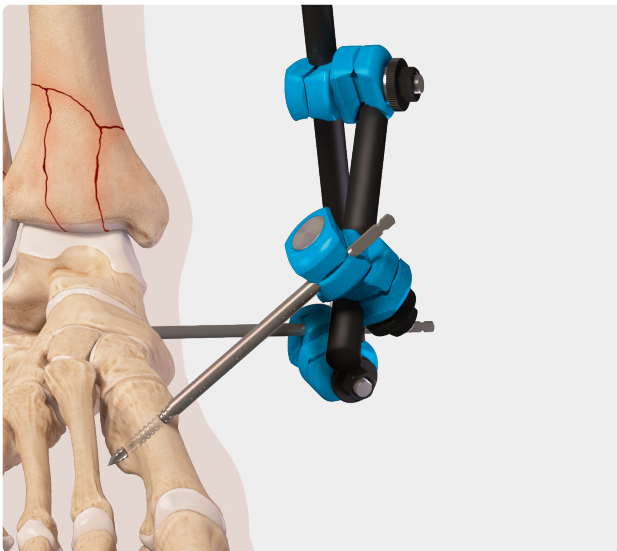
3

Attach a small rod between two Schanz pins (multi-pin clamp can also be used) before affixing the rods in the form of a triangle between the first screws and the transfixation pin.



4

Reduce the fracture by pulling lengthwise with balanced ligamentotaxis before securing the clamps.



5

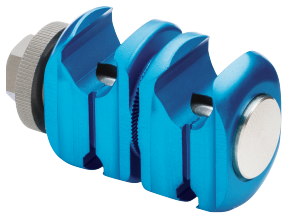
An additional 4 mm Schanz pin can be added into the bar of the 1st metatarsal at a slight angle to incorporate the foot.

ArthroFX[®] External Fixation System

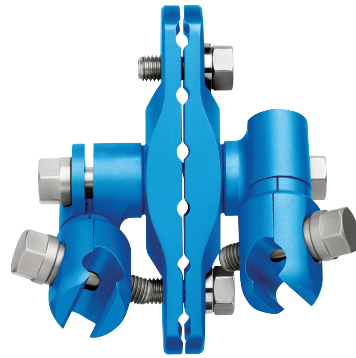
Product Information

Large Combination Clamp and Multi-Pin Clamp

The large clamp was designed for ease of use and rapid locking. A single-step lock allows for quick application and secure purchase on rods; 4 mm, 5 mm, and 6 mm bone screws; and 6 mm transfixation pins. The clamp is locked with an 11 mm adapter or 11 mm wrench. A key feature of the large clamp is the ability to snap on to both the rod and the shank of the 6 mm transfixation pins. The clamp can also lock onto the shank of 4 mm, 5 mm, and 6 mm diameter screws.



Large Combination Clamp



Multi-Pin Clamp with Rod Attachments

Schanz Pins

The 4 mm and 5 mm Schanz pins were designed primarily for temporizing fixation techniques, which typically span the joint and zone of the injury. The Schanz pins are secured to the frame with the large clamp. All sizes of Schanz pins are equipped with a drilling tip.



4 mm × 125, 150 mm



5 mm × 175, 200, 250 mm

Transfixation Pins

The transfixation pins have a centrally threaded body with trocar tip.



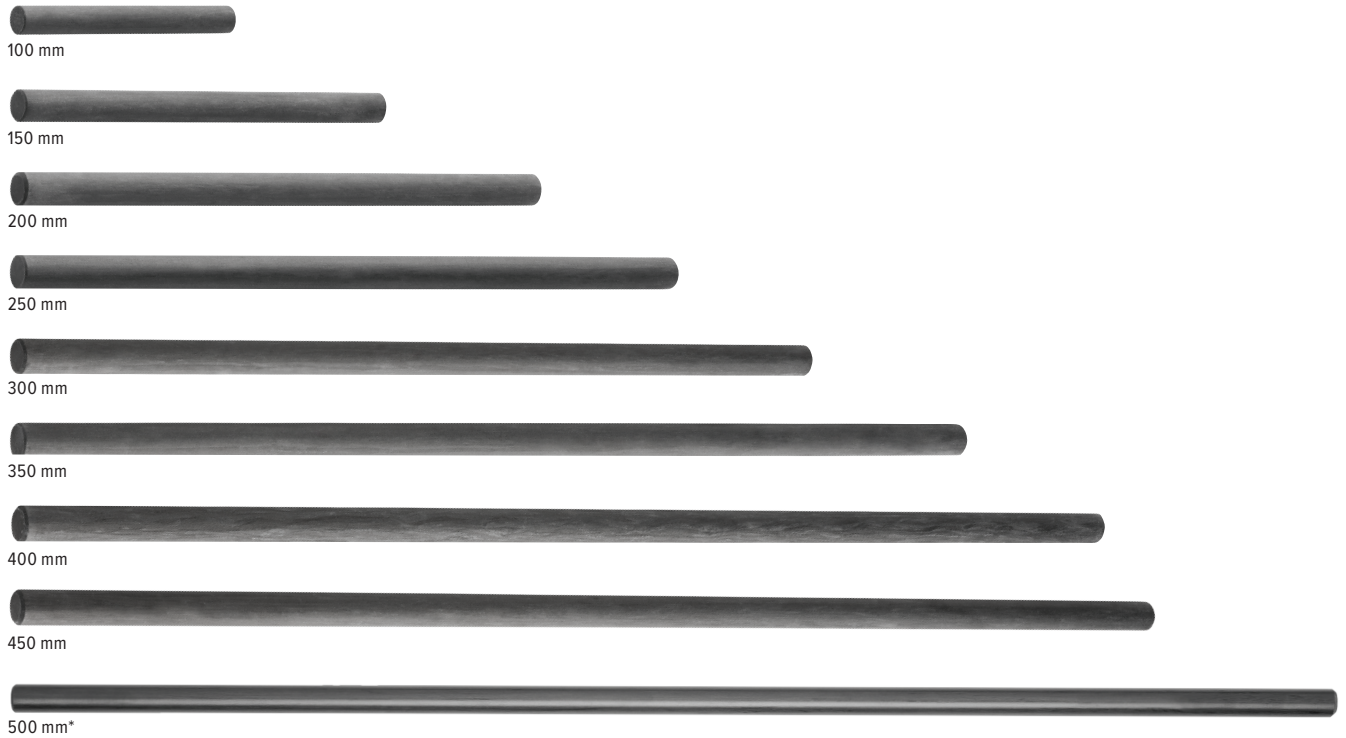
6 mm × 225 mm



6 mm × 300 mm

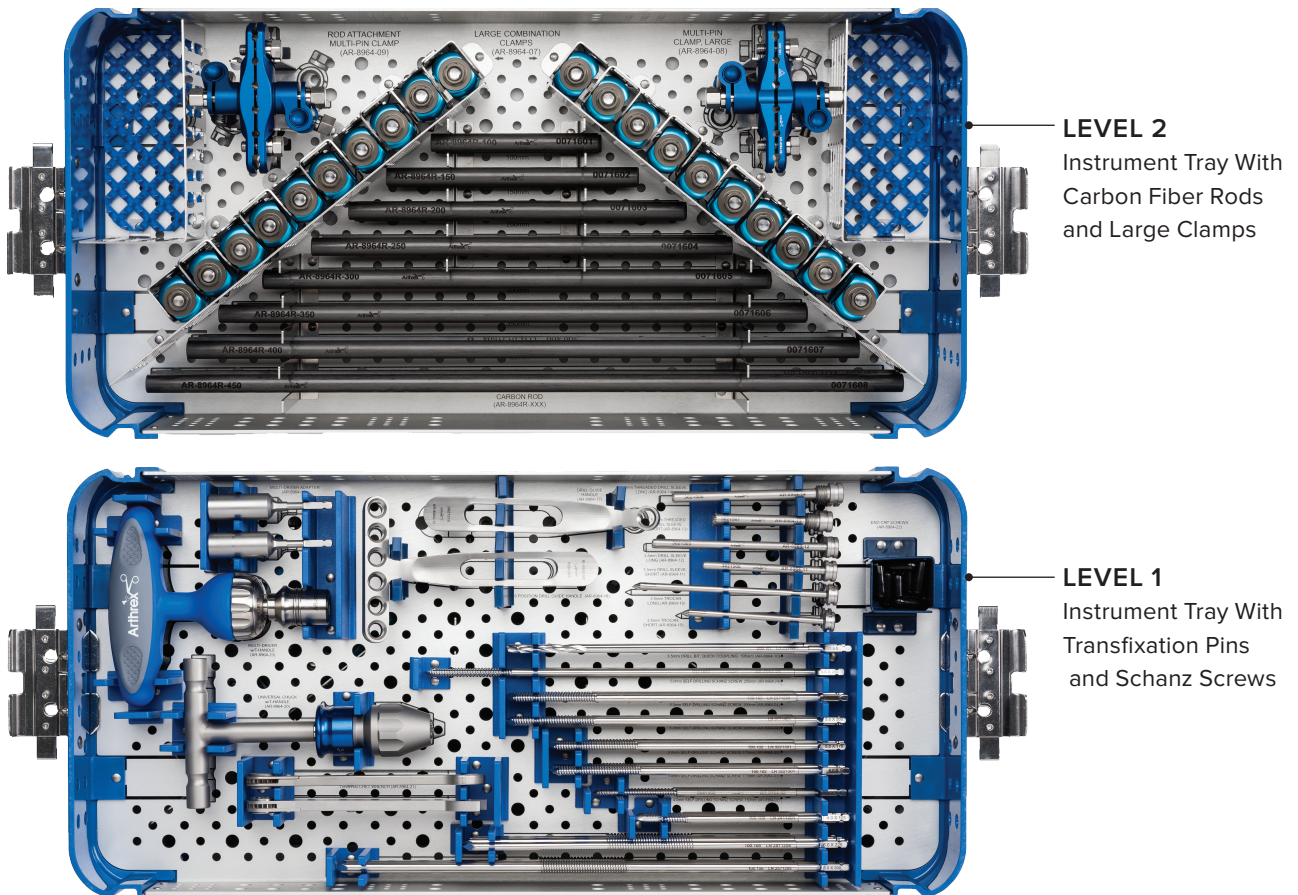
Carbon Fiber Rods

The carbon fiber rods are offered in 11 mm diameter and are available in a variety of lengths. Carbon fiber rods have the added benefit of being radiolucent and extremely lightweight.



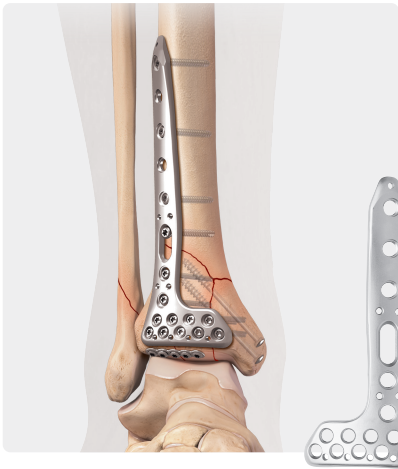
*Only available by special order. Not included in tray.

Note: Both levels pictured below are included in AR-8964S

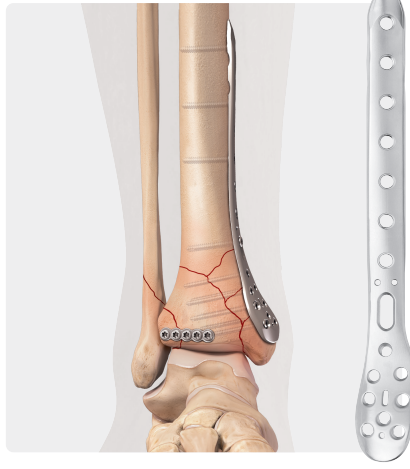


Supporting Products

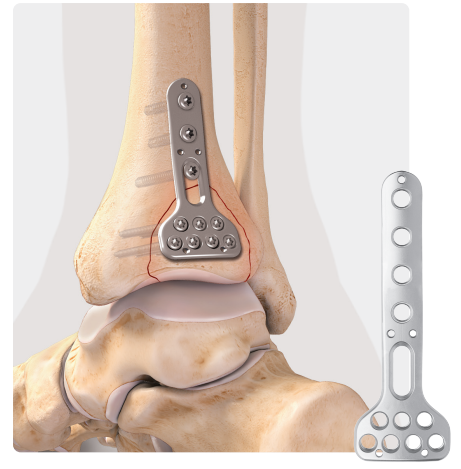
Distal Tibia Plate and Screw System



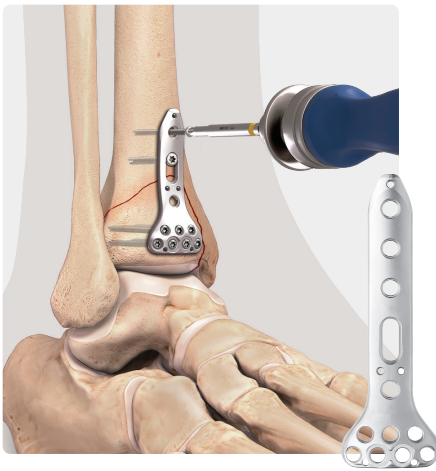
Anterolateral Plate



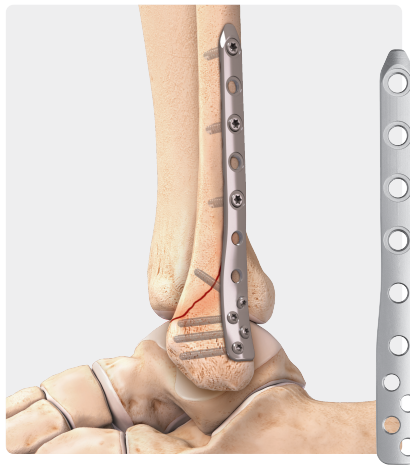
Medial Plate



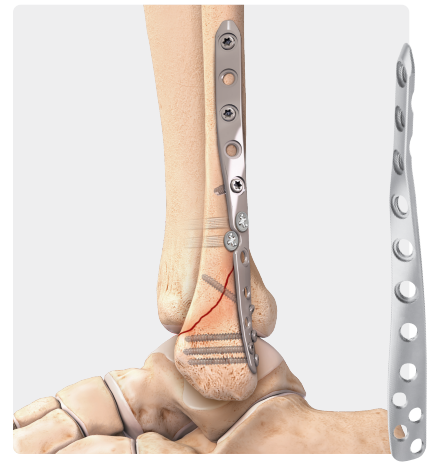
Posterior Plate



Anterior Plate



Anatomic Distal Fibula Plate



Distal Fibula Plate

2.7 mm Low-Profile Screw, Locking



10 mm-60 mm

2.7 mm Low-Profile Screw, Nonlocking, Cortical



10 mm-60 mm

3 mm Low-Profile Screw, Cancellous



10 mm-30 mm

3.5 mm Low-Profile Screw, Nonlocking, Cortical



10 mm-80 mm

3.5 mm Low-Profile Screw, Locking



10 mm-50 mm

4 mm Low-Profile Screw, Nonlocking, Cancellous



10 mm-60 mm

4 mm Low-Profile Screw, Short Thread, Cannulated



30 mm-60 mm

4 mm Low-Profile Screw, Long Thread, Cannulated



30 mm-60 mm

4 mm Low-Profile Screw, Short Thread

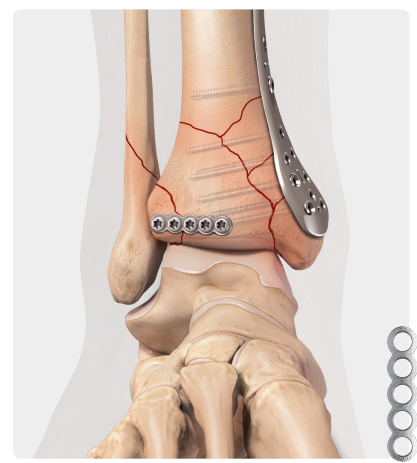


30 mm-60 mm

4 mm Low-Profile Screw, Long Thread



30 mm-60 mm



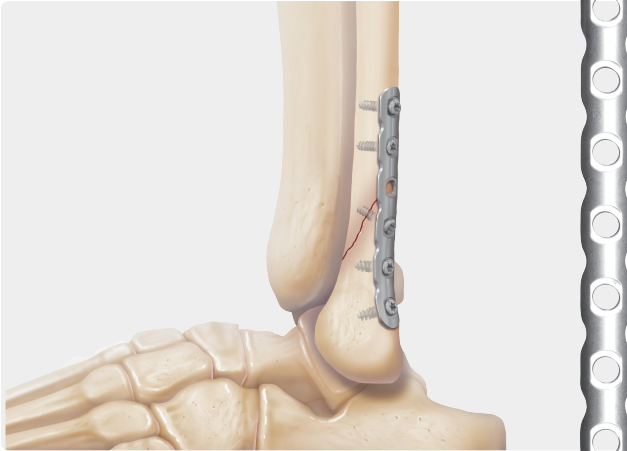
Straight/Rim Plate

Supporting Products

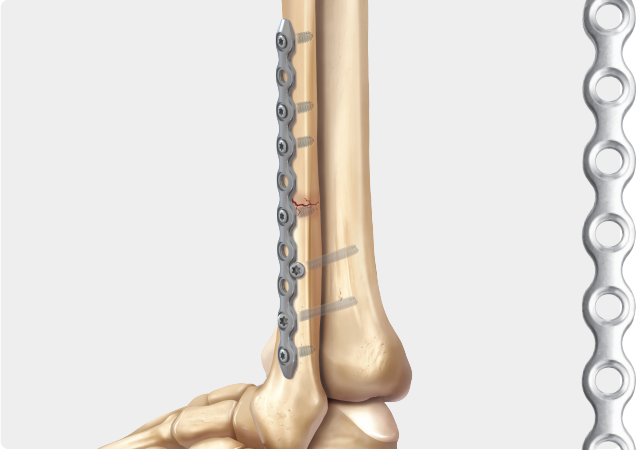
Ankle Fracture Management System



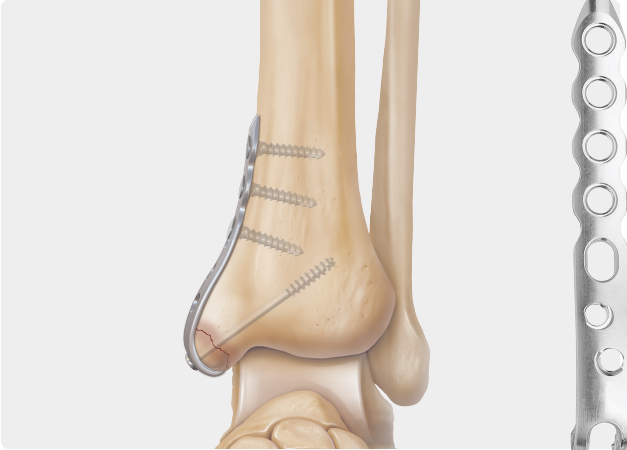
Complex Fibular Fracture Plate



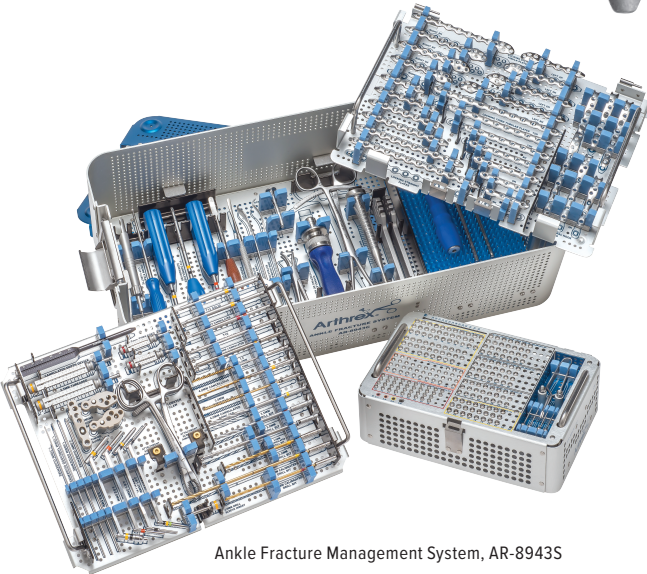
Locking Third Tibial Plate



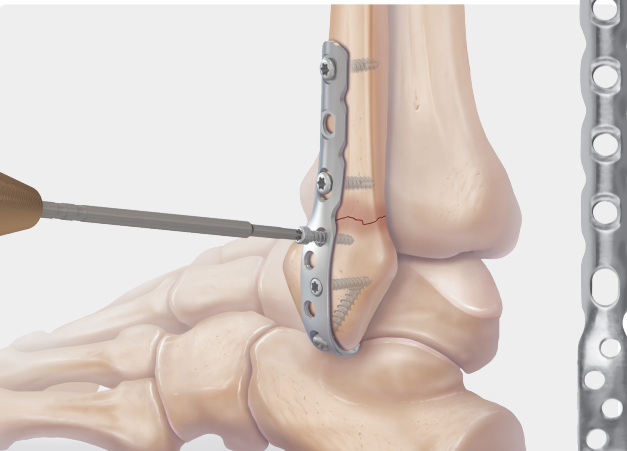
Reconstruction Plate



Locking Medial Hook Plate



Ankle Fracture Management System, AR-8943S



Lateral Hook Plate

Supporting Products

ArthroFX™ External Fixation System, Including JumpStart™ Surgical Dressings

JumpStart surgical dressings are an easy-to-use and protective wound dressing solution for postoperative management of surgical incisions and puncture sites. Featuring Advanced Microcurrent Technology, JumpStart dressings provide sustained, broad-spectrum antimicrobial efficacy, including protection against multi-drug-resistant organisms¹ and biofilm-forming bacteria.²⁻⁴

Embedded in the JumpStart dressing are a matrix of elemental silver and zinc islands, which form microcell batteries. These batteries generate microcurrents designed to mimic physiologic electric currents,⁵ creating an optimal environment for wound healing.

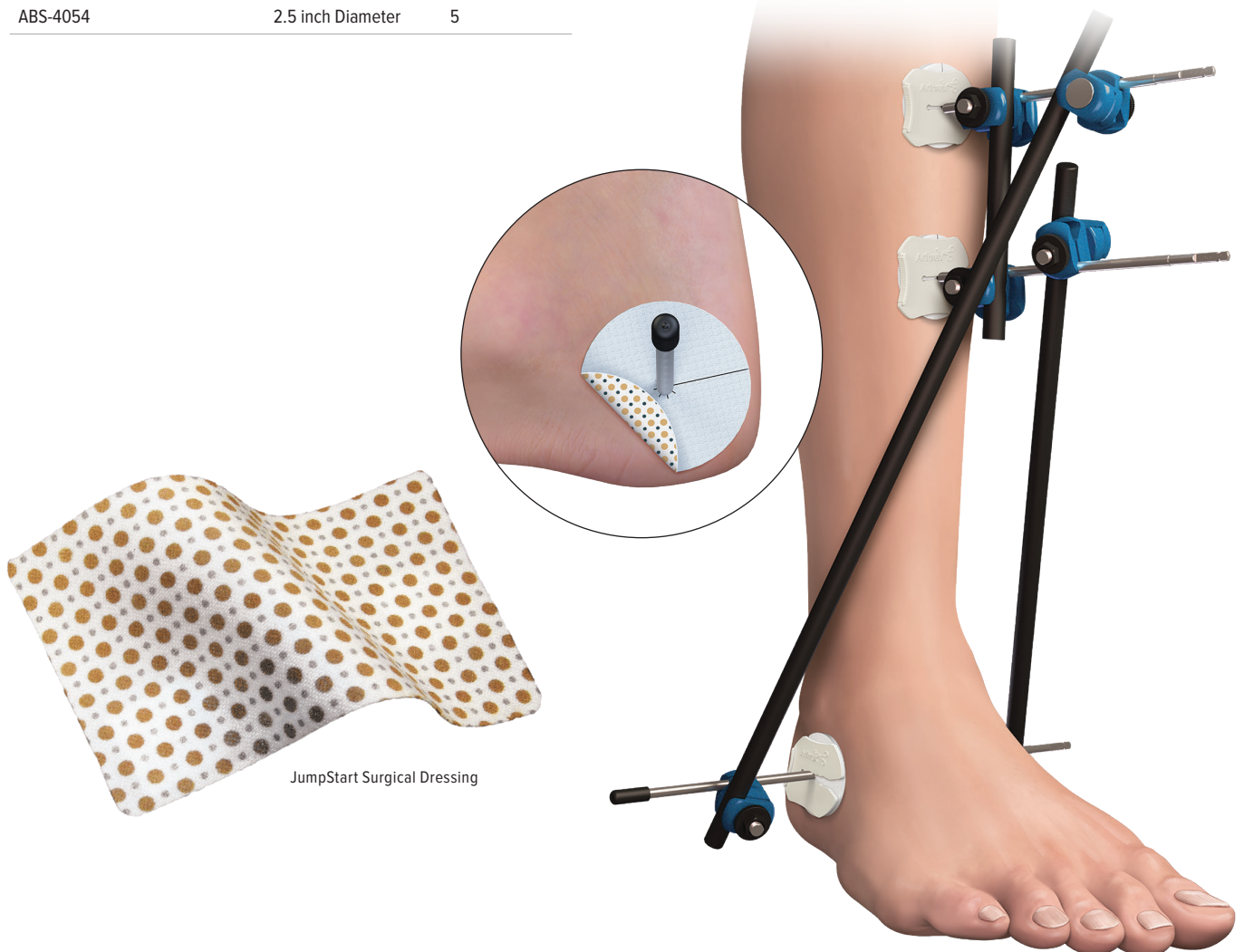
Using JumpStart Dressing With the ArthroFX External Fixation System

1. Remove dressing from sterile package. For best adhesion, ensure that skin is thoroughly dry before dressing application.
2. Using sterile scissors, create a single cut that reaches the center point of the dressing.
3. Remove liner opposite the cut and moisten with sterile saline, taking care not to wet the adhesive. If a highly exuding wound is expected, saline application may not be necessary.
4. Apply dressing to the pin site, adhering the side opposite of the cut first. Remove the final liner and carefully wrap dressing around the pin, one side at a time. It is recommended the top of the dressing overlap the bottom to seal the dressing edges. Gently rub the dressing to ensure full skin contact.

*For activation instructions, warnings, and contraindications, please refer to the Instructions for Use.

Included in this kit:

Product Code	Size	Qty./Kit
ABS-4054	2.5 inch Diameter	5



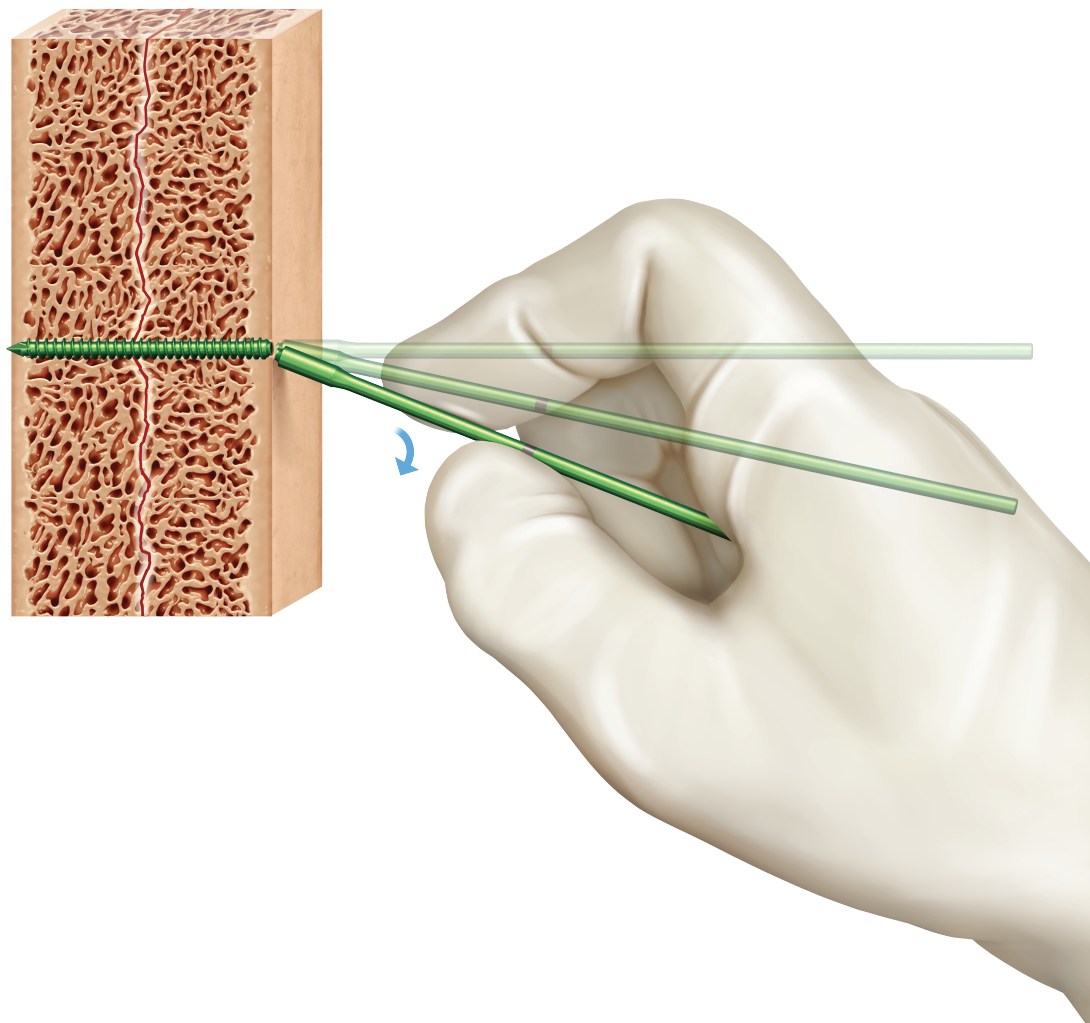
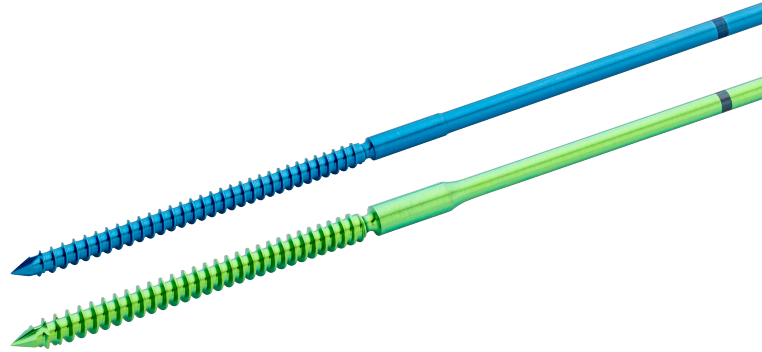
Supporting Products

Snap-Off Compression FT Pins

Snap-Off Compression FT pins provide compression of bone fragments for a wide range of indications and can be used in conjunction with other Arthrex products, such as the ArthroFX external fixation system. Their ease of use, variable-stepped thread pitch, and wide range of screw lengths in diameters of 1.9 mm and 2.4 mm represent an innovative new technology for the repair and reconstruction of intra- and extra-articular fractures.

Advantages

- › Variable-stepped thread pitch: the screw tip's wider thread pitch enters the bone faster than trailing threads, gradually compressing the fragments as the screw is advanced
- › Multiple size options available in both 1.9 mm and 2.4 mm diameters
- › Self-drilling and self-tapping to facilitate easy insertion
- › Solid, trimmable versions available
- › Quick and convenient surgical technique
- › Available in titanium



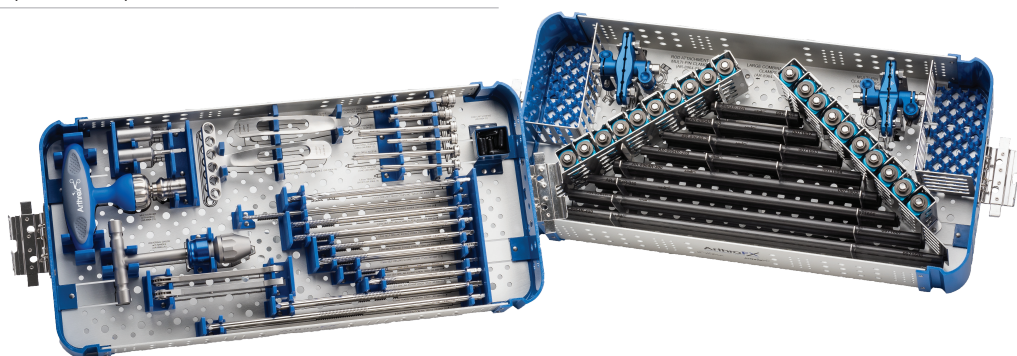
Ordering Information

ArthroFX® External Fixation System (AR-8964S)

Instruments	
Drill guide handle	AR-8964-17
Universal chuck w/ T-handle	AR-8964-20
Ratchet wrench, 11 mm, qty. 2	AR-8964-21
Multi-driver adapter, qty. 2	AR-8964-19
6-Position drill guide handle	AR-8964-18
Trocar, long, 3.5 mm, qty. 2	AR-8964-16
Trocar, short, 3.5 mm, qty. 2	AR-8964-15
Drill sleeve, long, 3.5 mm, qty. 2	AR-8964-12
Drill sleeve, short, 3.5 mm, qty. 2	AR-8964-11
Drill sleeve, threaded, long, 5 mm, qty. 2	AR-8964-14
Drill sleeve, threaded, short, 5 mm, qty. 2	AR-8964-13
Multi-driver w/ T-handle	AR-8964-23
ArthroFX case	AR-8964C
Disposables	
Drill bit, 3.5 mm	AR-8964-10
Implants/Instruments (to be ordered separately)	
Large combination clamp, qty. 24	AR-8964-07
Multi-pin clamp, large, qty. 2	AR-8964-08
Rod attachment, large multi-pin clamp, qty. 4	AR-8964-09
Attachment arm, straight, qty. 4	AR-8964-27
Distraction-compression clamp	AR-8964-25

Implants/Instruments (to be ordered separately)	
Rod-to-rod coupler	AR-8964-26
Coupler wrench	AR-8964-28
Carbon fiber rod, 11 mm × 100 mm, qty. 4	AR-8964R-100
Carbon fiber rod, 11 mm × 150 mm, qty. 4	AR-8964R-150
Carbon fiber rod, 11 mm × 200 mm, qty. 4	AR-8964R-200
Carbon fiber rod, 11 mm × 250 mm, qty. 4	AR-8964R-250
Carbon fiber rod, 11 mm × 300 mm, qty. 4	AR-8964R-300
Carbon fiber rod, 11 mm × 350 mm, qty. 4	AR-8964R-350
Carbon fiber rod, 11 mm × 400 mm, qty. 4	AR-8964R-400
Carbon fiber rod, 11 mm × 450 mm, qty. 4	AR-8964R-450
Carbon fiber rod, 11 mm × 500 mm*, qty. 4	AR-8964R-500
Schanz screw, 4 mm × 125 mm, qty. 4	AR-8964-01
Schanz screw, 4 mm × 150 mm, qty. 4	AR-8964-02
Schanz screw, 5 mm × 175 mm, qty. 4	AR-8964-03
Schanz screw, 5 mm × 200 mm, qty. 4	AR-8964-04
Schanz screw, 5 mm × 250 mm, qty. 4	AR-8964-24
Transfixation pin, 6 mm × 225 mm, qty. 3	AR-8964-05
Transfixation pin, 6 mm × 300 mm, qty. 3	AR-8964-06
End cap screws, qty. 20	AR-8964-22

*Special order



References

- Kim H, Makin I, Skiba J, Ho A, Housler G, Stojadinovic A, Izadjoo M. Antibacterial efficacy testing of a bioelectric wound dressing against clinical wound pathogens. *Open Microbiol J.* 2014;8:15-21. doi:10.2174/1874285801408010015
- Kim H, Izadjoo MJ. Antibiofilm efficacy evaluation of a bioelectric dressing in mono- and multi-species biofilms. *J Wound Care.* 2015;24(Suppl 2):S10-S14. doi:10.12968/jowc.2015.24.Sup2.S10
- Banerjee J, Das Ghatak P, Roy S, et al. Silver-zinc redox-coupled electroceutical wound dressing disrupts bacterial biofilm. *PLoS One.* 2015;10(3):e0119531. doi:10.1371/journal.pone.0119531
- Barki KG, Das A, Dixit S, et al. Electric field-based dressing disrupts mixed-species bacterial biofilm infection and restores functional wound healing. *Ann Surg.* Published online November 2, 2017. doi:10.1097/SLA.0000000000002504
- Kim H, Park S, Housler G, Marcel V, Cross S, Izadjoo M. An overview of the efficacy of a next-generation electroceutical wound care device. *Mil Med.* 2016;181(5 Suppl):184-190. doi:10.7205/MILMED-D-15-00157 show less

This description of technique is provided as an educational tool and clinical aid to assist properly licensed medical professionals in the usage of specific Arthrex products. As part of this professional usage, the medical professional must use their professional judgment in making any final determinations in product usage and technique. In doing so, the medical professional should rely on their own training and experience and should conduct a thorough review of pertinent medical literature and the product's directions for use. Postoperative management is patient-specific and dependent on the treating professional's assessment. Individual results will vary and not all patients will experience the same postoperative activity level or outcomes.



Arthrex manufacturer, authorized representative, and importer information (Arthrex eIFUs)



US patent information