



# Bio-Compression Screw System



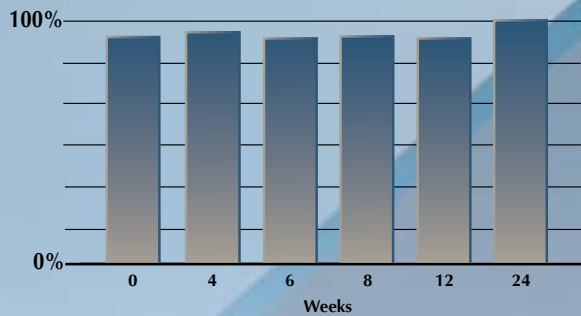
# Bio-Compression Screw

- Headless
- Absorbable
- Self-Compressing
- Straightforward Technique
- 20 mm Length
- 2.7 mm Distal, 3.7 mm Proximal Diameters
- Solid Enhanced PLLA Amorphous Copolymer

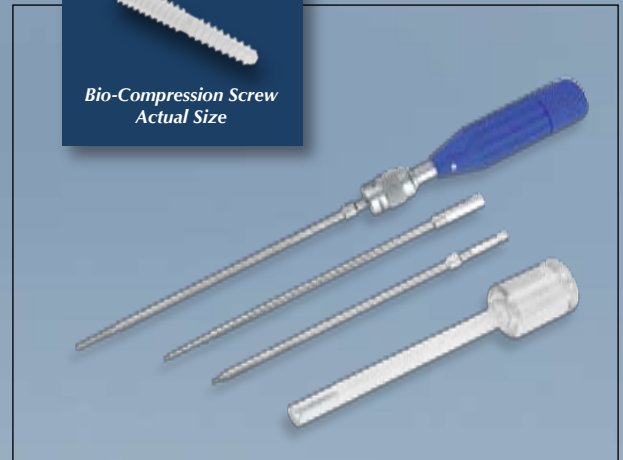


*No Metal, No Head, No Image*

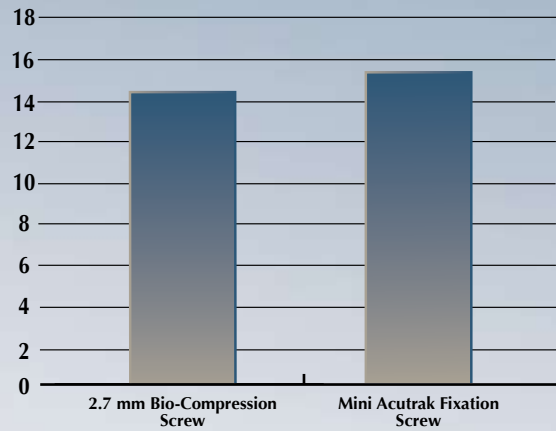
Enhanced PLLA Strength Retention  
Normalized Shear Force



Test showed no statistically significant difference in shear force over time

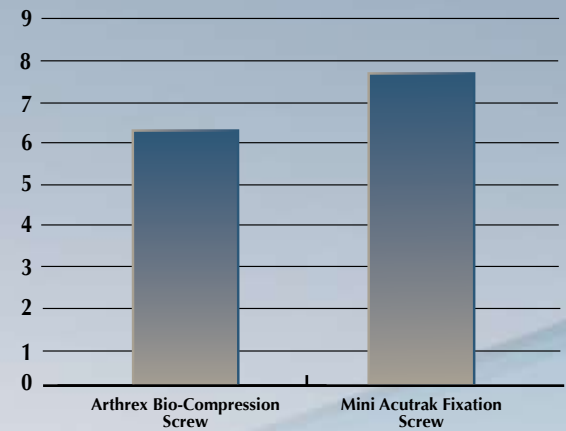


Push-Out Strength (kgf)



Not statistically significant

Compressive Load (lbf)



Not statistically significant



## Knee OCD

Osteochondral fragments, flaps or grafts with sufficient bone stock are ideal candidates for fixation with the Bio-Compression Screw.

Preoperatively, radiographs and MRIs should be examined to determine location and size of the osteochondral defect and its suitability for fixation. For the more common medial condyle defect the lateral portal is used for visualization and the medial portal is used for hardware placement. The fracture site should be debrided and brought down to bleeding bone using burrs, osteotomes, Chondro Picks, curettes, or 2 mm drill bit per preference. Postoperatively, the patient should be limited to non weightbearing or TTWB for 6 - 8 weeks with full range of motion. Begin weightbearing at 6 - 8 weeks and a full return to activity at 12 weeks or upon radiographic healing.



## Hand, Wrist & Elbow

Upper extremity intraarticular fractures, where hardware prominence, removal and image are considerations, are excellent indications for the Bio-Compression Screw. Arthrodesis of small bones in the wrist or fingers are also situations where the compression and zero-prominence benefits of the screw come into play.

For upper extremity surgery, the Bio-Compression Screw may be inserted either percutaneously or in an open procedure.

If using a cannula, drilling/tapping/inserting to the stop will set the screw 3 mm below the surface of the bone. In nonarticular applications, where the 3 mm countersink is not necessary, drilling and tapping 3 mm "short" of the shoulder on the instrument may be preferable for best cortical purchase proximally.



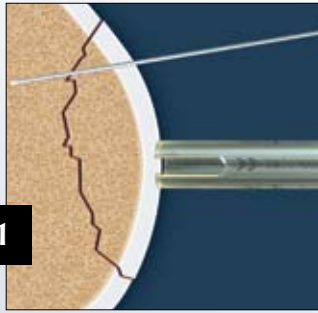
## Foot and Ankle

Applications in the foot and ankle include OCDs, fractures, osteotomies and arthrodesis of the tarsals, metatarsals and phalanges. From union correction to trauma management, the Bio-Compression Screw provides excellent compression and holding power maintained throughout the normal healing period.

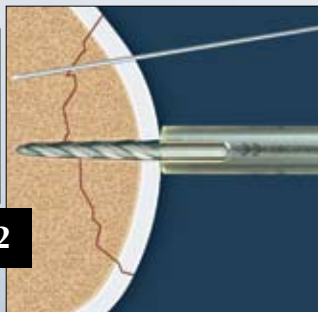
For lower extremity surgery, the Bio-Compression Screw may be inserted either percutaneously or in an open procedure.

If using a cannula, drilling/tapping/inserting to the stop will set the screw 3 mm below the surface of the bone. In nonarticular applications, where the 3 mm countersink is not necessary, drilling and tapping 3 mm "short" of the shoulder on the instrument may be preferable for best cortical purchase proximally.

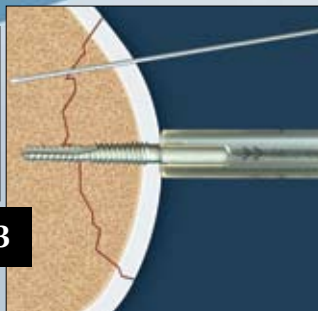
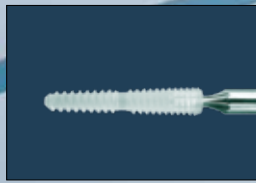
# Insertion Technique



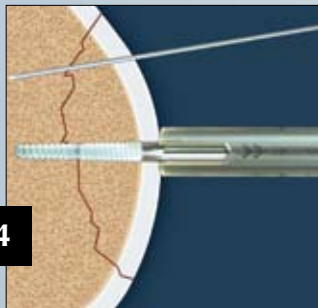
Provisional Fixation – If the fragment will not stabilize with the cannula, secure the osteochondral defect/flap with one or two K-wires such that they will provisionally stabilize fragment during screw insertion and not interfere with the desired screw locations.



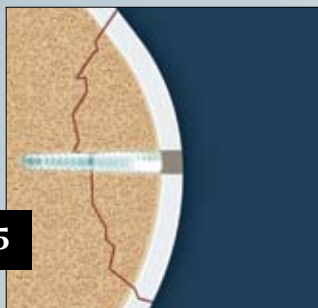
Drill through a clear cannula with the tapered drill until the shoulder of drill contacts the cannula. Orientation of the first screw should be perpendicular to the fracture for optimal compression. Any subsequent screws should be from slightly divergent angles to provide multi-planar stability.



Tap the drill hole through the clear cannula with a tapered tap until the shoulder of tap contacts the cannula. This will correspond to the end of the drill hole. Load the Bio-Compression Screw onto the tip of the hex driver. The screw will remain 3 mm from the smooth shaft of the driver when seated.



Insert Bio-Compression Screw on the driver through the clear cannula until the shoulder of the driver contacts the cannula. Typically the tapered screw will easily insert 60% of the length of the drill hole before it engages bone. At full seating, the screw should be 3 mm below the articulating surface. Disengage the driver by pulling straight out.



Insert additional Bio-Compression Screws using the same technique. Should a smaller size rotational fixation be desired, Arthrex Chondral Darts™ or a TRIM-IT Drill Pin™ (if performed open) can be placed adjacent to the Bio-Compression Screw.

Compression Screw Set (AR-5025S) includes:

Compression Screw Driver	AR-5025DB
Small Handle w/AO Connection	AR-2001AOT
Dilator Tap, 2.7 mm	AR-5025TB
Compression Screw Guide	AR-5025G
Compression Screw Drill Bit, 2.7 mm	AR-5025TD
Compression Screw Instrumentation Case	AR-5025C

Optional:

Bio-Compression Cannulated Dilator Tap	AR-5025TBC
Bio-Compression Cannulated Drill Bit	AR-5025TDC
.045 inch Guide Wire with Trocar Tip	AR-5025K

Implant:

Bio-Compression Screw, 2.7 - 3.7 mm x 20 mm	AR-5025B-20
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PATENT PENDING

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