

Item Catalogue

NUPCO CODE: 4229660305200 | SN: 740

NUPCO ITEM DESCRIPTION

SET, COMPLETE INSTRUMENTATION FOR STAINLESS STEEL 1.5 MM TO 2 MM HEADLESS SCREW, WITH NECESSARY CASE AND RELATED DRILL BITS AND TAPS

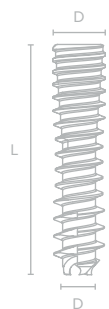
VENDOR PRODUCT DESCRIPTION

Acutrak 3 Nano instrumentation

SKU CODES INCLUDED FOR THIS NUPCO CODE

- 47-0022-S
- 80-4157
- 80-4153
- 80-4149
- 35-0025
- 35-0026
- 80-4136
- 80-4134
- 80-4122
- 80-4164
- 80-4169

System Features [continued]



Screw	2.0 Nano	2.5 Micro	3.5 Mini	4.0 Standard
Diameter	Tip: 2.0 mm Tail: 2.4 mm	Tip: 2.5 mm Tail: 3.0 mm	Tip: 3.5 mm Tail: 3.6 mm	Tip: 4.0 mm Tail: 4.1 mm
Length	1 mm increments 8–14 mm 2 mm increments 14–40 mm	1 mm increments 8–14 mm 2 mm increments 14–50 mm	2 mm increments 12–60 mm	2 mm increments 16–60 mm
Guide Wire	Ø0.7 x 150 mm Guide Wire, Single Trocar (35-0025) Ø0.7 x 150 mm Guide Wire, Double Trocar (35-0026)	Ø0.9 x 150 mm Guide Wire, Single Trocar (35-0027) Ø0.9 x 150 mm Guide Wire, Double Trocar (35-0028)	Ø1.1 x 150 mm Guide Wire, Single Trocar (35-0029) Ø1.1 x 150 mm Guide Wire, Double Trocar (35-0030)	Ø1.1 x 150 mm Guide Wire, Single Trocar (35-0029) Ø1.1 x 150 mm Guide Wire, Double Trocar (35-0030)
Profile Drill	Acutrak 3 Nano Profile Drill (80-4134)	Acutrak 3 Micro Profile Drill (80-4137)	Acutrak 3 Mini Profile Drill (80-4140)	Acutrak 3 Standard Profile Drill (80-4145)
Drill	Acutrak 3 Nano Drill (80-4136) Diameter: .064", 1.625 mm	Acutrak 3 Micro Drill (80-4139) Diameter: .070", 1.78 mm	Acutrak 3 Mini Drill (80-4142) Diameter: .099", 2.52 mm	Acutrak 3 Standard Drill (80-4147) Diameter: .119", 3.02 mm
Dense Bone Drill	N/A	N/A	Acutrak 3 Mini Dense Bone Drill (80-4143)	Acutrak 3 Standard Dense Bone Drill (80-4148)
Drill Guide	Acutrak 3 Nano/Micro Wire/Drill Guide (80-4122)	Acutrak 3 Nano/Micro Wire/Drill Guide (80-4122)	Acutrak 3 Mini/Standard Wire/Drill Guide (80-4118)	Acutrak 3 Mini/Standard Wire/Drill Guide (80-4118)

Note: Optional Single-Use Instrument Kit

Acutrak 3 screws may be implanted using either Acumed reusable instruments or a sterile, single-use instrument kit (47-0022-S, 47-0023-S, 47-0024-S).

These single-use sterile kits are provided ready-to-use and include all instruments required for implantation. Use of these kits follows the same surgical steps outlined in this guide.



Dorsal Scaphoid Technique: Acutrak 3 Nano, Micro, Mini, and Standard

Figure 1

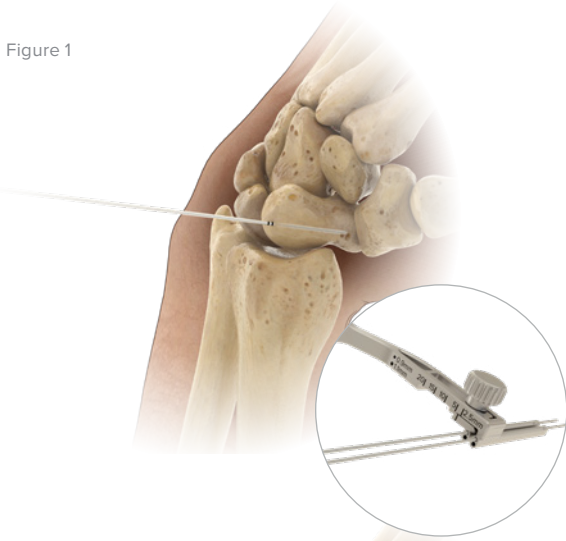


Figure 3

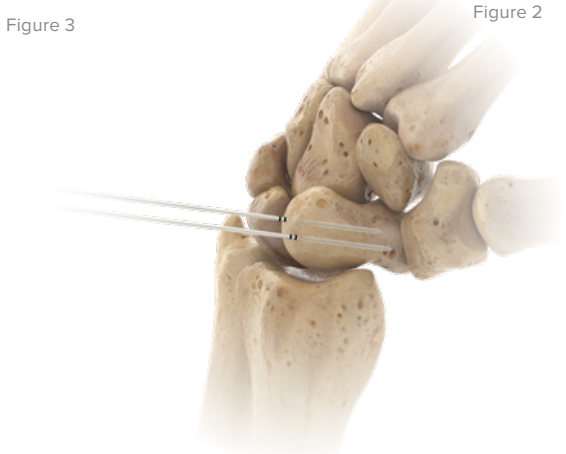


Figure 2

Figure 4

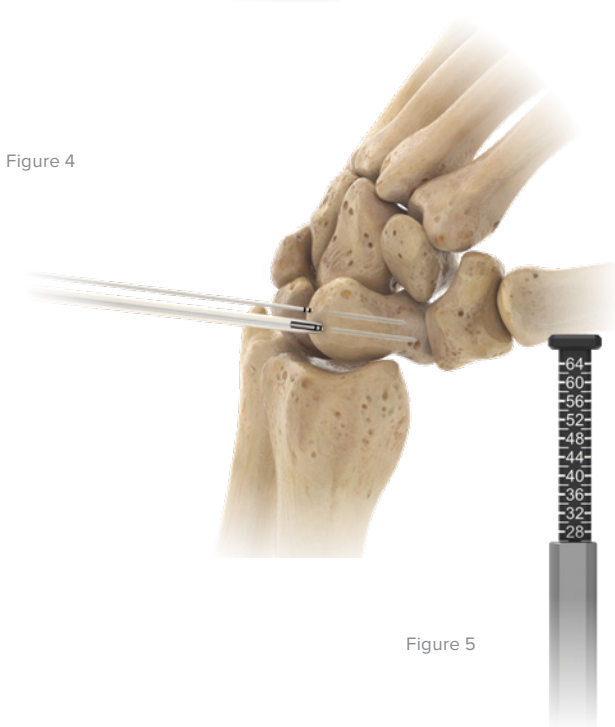


Figure 5

1 Approach and Needle Insertion

The entry point in the proximal pole is at the tip of the scaphoid immediately adjacent to the scapholunate ligament. This can be located either using an arthroscopic or mini open dorsal approach between the third and fourth extensor compartments. Introduce the appropriate guide wire (35-0025, 35-0027, 35-0029) at the entry point and aim for the base of the thumb so that the leading end of the guide wire is placed in the subchondral surface of the distal pole of the scaphoid. Confirm placement and depth under fluoroscopy.

Optional: Acutrak 3 Wire/Drill Guide (80-4122 or 80-4118) may be used to determine the entry point and may act as both a guide and soft tissue protector.

OR Tip: For unstable fractures, it may be helpful to place a second parallel guide wire using the Acutrak 3 Parallel Wire Guide (80-4126).

Note: For distal scaphoid fractures, a volar approach may be more appropriate.

Note: Guide wires marked with bands to aid in identifying diameter: 1 for Ø0.7 mm, 2 for Ø0.9 mm and 3 for Ø1.1 mm.

2 Determine Screw Length

Determine screw length using the Acutrak 3 Screw Sizer 4–64 mm (80-4164). Slide the sizer over the guide wire and down to the bone surface, reading the length off deployed piston or by placing a second wire at the entry point and subtracting the difference in length. It may be appropriate to subtract 2–4 mm from the measurement to ensure that the proximal end of the screw is fully buried below the cartilage and the cortical surface.

Dorsal Scaphoid Technique: Acutrak 3 Nano, Micro, Mini, and Standard [continued]

Figure 6

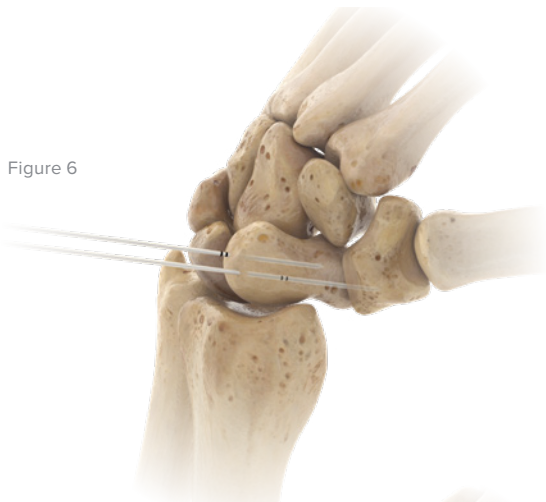


Figure 7



Figure 8

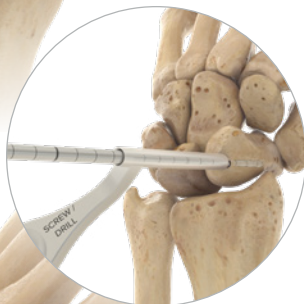
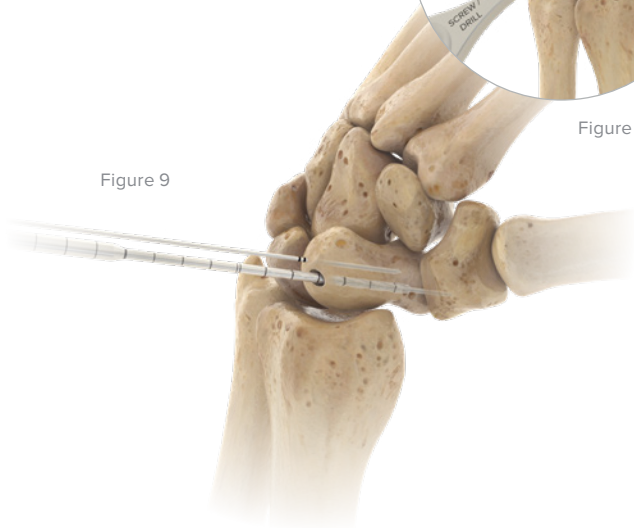


Figure 9



3 Advance Guide Wire

Advance the guide wire (35-0025, 35-0027, or 35-0029) through the far cortex so that it lies in the subcutaneous tissues. This minimizes the risk of accidental withdrawal of the guide wire while drilling and facilitates wire removal if it should break.

4 Drill

Drill into the proximal cortex with the appropriate profile drill (80-4134, 80-4137, 80-4140, 81-4145) over the wire using either a power drill or by hand.

Next, drill into the distal fragment with the appropriate drill (80-4136, 80-4139, 80-4142, 80-4147) and ensure that the drill is past the fracture site. Dense Bone Drills (80-4143 or 80-4148) can be utilized if dense bone is encountered. Dense bone drills can be utilized only for Standard and Mini screw families.

Optional: Acutrak 3 Wire/Drill Guide (80-4122 or 80-4118) may be used to act as both a guide and soft tissue protector.

OR Tip: The Acutrak 3 profile drill is recommended to mitigate the effects of varying bone density.

Note: Dense Bone Drills identifiable by golden color.

DIP Fusion Technique: Acutrak 3 Nano or Micro [continued]

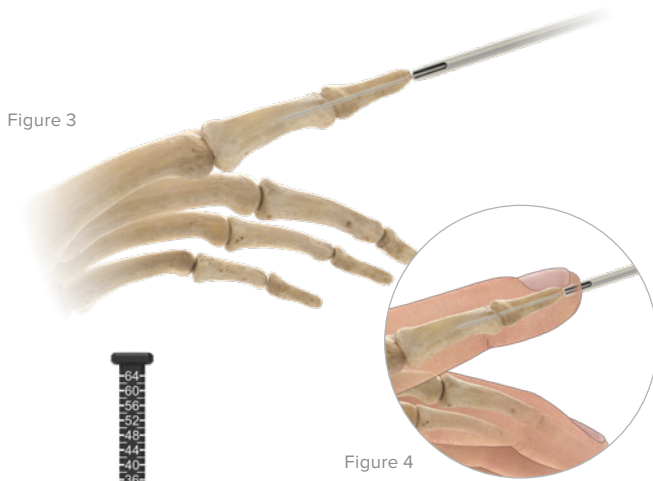


Figure 3

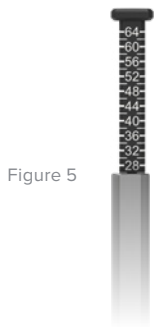


Figure 5

Figure 4

3 Determine Screw Length

Make a short transverse (fish-mouth) incision in the tip of the distal phalanx and spread using a small (snap) clip. Measure length using either the percutaneous Acutrak 3 Screw Sizer, 4–64 mm (80-4164), or by placing a second wire at the bone surface and subtracting the difference. If the surgeon intends to drive the screw below the surface of the distal phalanx, this must be accounted for in sizing the screw.



Figure 6

Figure 7

4 Drill

Advance the guide wire (35-0025, 35-0027) through the far cortex so that it lies in the subcutaneous tissues. This minimizes the risk of accidental withdrawal of the guide wire while drilling and facilitates wire removal if it should break. Select the Nano or Micro Acutrak 3 Drill (80-4136 or 80-4139) and place over the wire. Drill using either a power drill or by hand across the joint into the middle phalanx to the desired depth. If the surgeon intends to drive the screw below the surface of the distal phalanx, this must be accounted for in the depth of the prepared hole.

DIP Fusion Technique: Acutrak 3 Nano or Micro [continued]



Figure 8

5 Screw Insertion

Insert the correctly sized Nano or Micro Acutrak 3 Bone Screw (3050-200XX or 3051-250XX) with the T6 or T7 Cannulated Hexalobe Driver Tip (80-4149/80-4153 or 80-4150/80-4154). Confirm placement under fluoroscopy. Finally, remove the guide wire.

OR Tip: If resistance or distraction occurs upon screw insertion: Stop, remove the screw, redrill with the appropriate drill, and reinsert the screw.

Note: Driver tips have two colored marking bands.



Figure 10



Figure 11

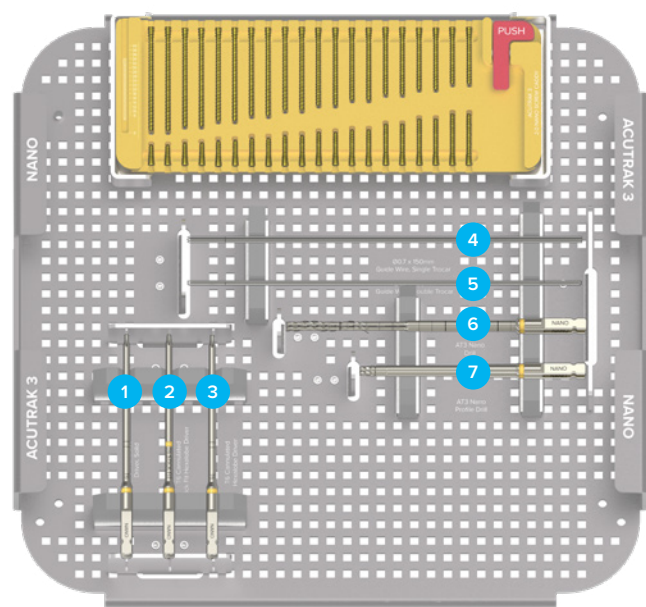
6 Screw Removal

In the event screw removal is necessary, identify the entry point angle as accurately as possible under fluoroscopy. Upon identification, make a small stab incision to clear any tissue and bone overlying the implant. Introduce the appropriate guide wire (35-0025, 35-0027, 35-0029) at the entry point and aim for the cannulated portion of the screw.

OR Tip: Easyout tools (80-0598, 80-0599) are available for removal in the event of a stripped hexalobe drive interface.

Figure 12

Ordering Information



Acutrak 3 Nano Tray Components

Nano Acutrak 3 Instrumentation*

1	T6 Hexalobe Driver, Solid	80-4157
2	T6 Cannulated Stick Fit Hexalobe Driver	80-4153
3	T6 Cannulated Hexalobe Driver	80-4149
4	Ø0.7 x 150 mm Guide Wire, Single Trocar	35-0025
5	Ø0.7 x 150 mm Guide Wire, Double Trocar	35-0026
6	Acutrak 3 Nano Drill	80-4136
7	Acutrak 3 Nano Profile Drill	80-4134

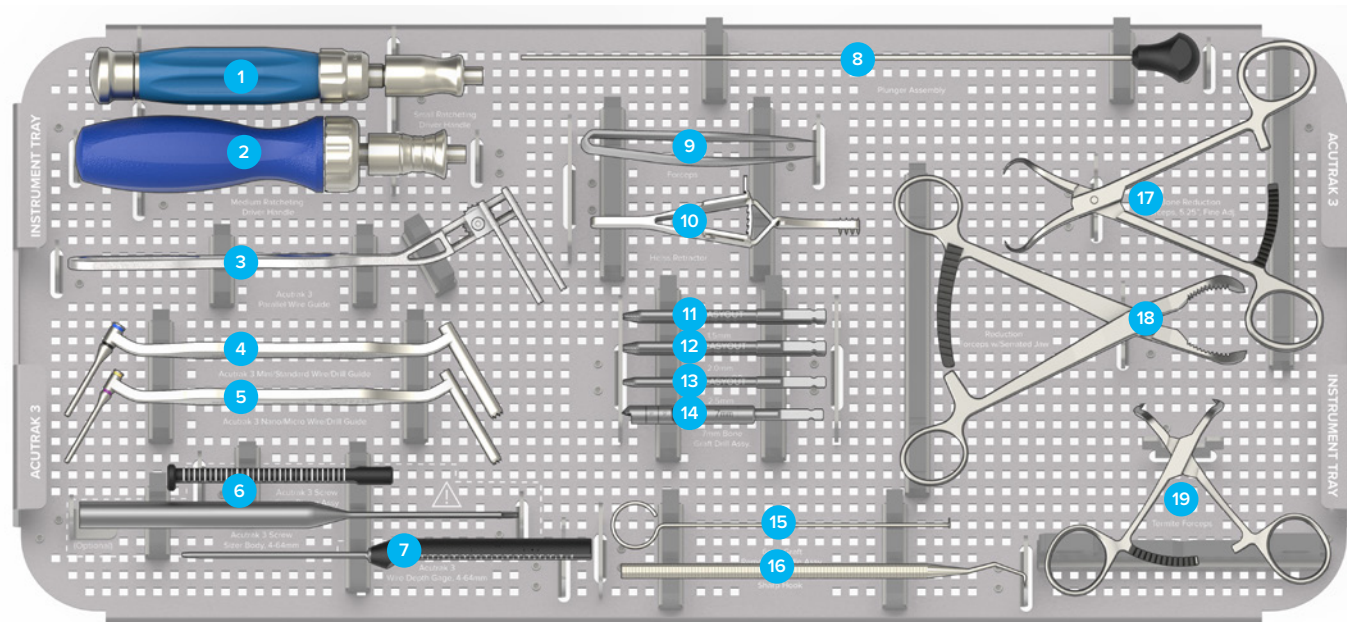
Acutrak 3 Nano Tray Components

Nano Acutrak 3 Implants*

8 mm, 2.0 Nano Acutrak 3 Bone Screw	3050-20008	22 mm, 2.0 Nano Acutrak 3 Bone Screw	3050-20022
9 mm, 2.0 Nano Acutrak 3 Bone Screw	3050-20009	24 mm, 2.0 Nano Acutrak 3 Bone Screw	3050-20024
10 mm, 2.0 Nano Acutrak 3 Bone Screw	3050-20010	26 mm, 2.0 Nano Acutrak 3 Bone Screw	3050-20026
11 mm, 2.0 Nano Acutrak 3 Bone Screw	3050-20011	28 mm, 2.0 Nano Acutrak 3 Bone Screw	3050-20028
12 mm, 2.0 Nano Acutrak 3 Bone Screw	3050-20012	30 mm, 2.0 Nano Acutrak 3 Bone Screw	3050-20030
13 mm, 2.0 Nano Acutrak 3 Bone Screw	3050-20013	32 mm, 2.0 Nano Acutrak 3 Bone Screw	3050-20032
14 mm, 2.0 Nano Acutrak 3 Bone Screw	3050-20014	34 mm, 2.0 Nano Acutrak 3 Bone Screw	3050-20034
16 mm, 2.0 Nano Acutrak 3 Bone Screw	3050-20016	36 mm, 2.0 Nano Acutrak 3 Bone Screw	3050-20036
18 mm, 2.0 Nano Acutrak 3 Bone Screw	3050-20018	38 mm, 2.0 Nano Acutrak 3 Bone Screw	3050-20038
20 mm, 2.0 Nano Acutrak 3 Bone Screw	3050-20020	40 mm, 2.0 Nano Acutrak 3 Bone Screw	3050-20040

*Implants and instruments are also available sterile-packed. Add an "-S" at end of product number for sterile product. For more details on sterile products, including pricing, contact our Business Services Department toll free at 888.627.9957.

Ordering Information [continued]



Tray Components

Universal Acutrak 3 Instrumentation

1	Small Ratcheting Driver Handle	80-4071	11	1.5 mm Easyout, QR	80-0598*
2	Medium Ratcheting Driver Handle	80-0663	12	2.0 mm Easyout, QR	80-0599*
3	Acutrak 3 Parallel Wire Guide	80-4126	13	2.5 mm Easyout, QR	80-0600*
4	Acutrak 3 Mini/Standard Wire/Drill Guide	80-4118	14	7 mm Bone Graft Drill Assy.	PL-BG07
5	Acutrak 3 Nano/Micro Wire/Drill Guide	80-4122	15	6 mm Graft Removal Paddle Assy.	BG-8064
6	Acutrak 3 Screw Sizer, 4–64 mm	80-4164	16	Sharp Hook	PL-CL06
7	Acutrak 3 Wire Depth Gage, 4–64 mm	80-4169	17	Bone Reduction Forceps, 5.25", Fine Adj.	80-1810
8	Plunger Assembly	80-4161	18	Reduction Forceps w/Serrated Jaw	PL-CL04
9	Forceps	AT-7005	19	Termite Forceps	80-4172
10	Heiss Retractor	80-0756			

*Implants are also available sterile-packed. Add an “-S” at end of product number for sterile product. For more details on sterile products, including pricing, contact our Business Services Department toll free at 888.627.9957.



OsteoMed® ExtremiFix™ Cannulated Screw System
Mini & Small

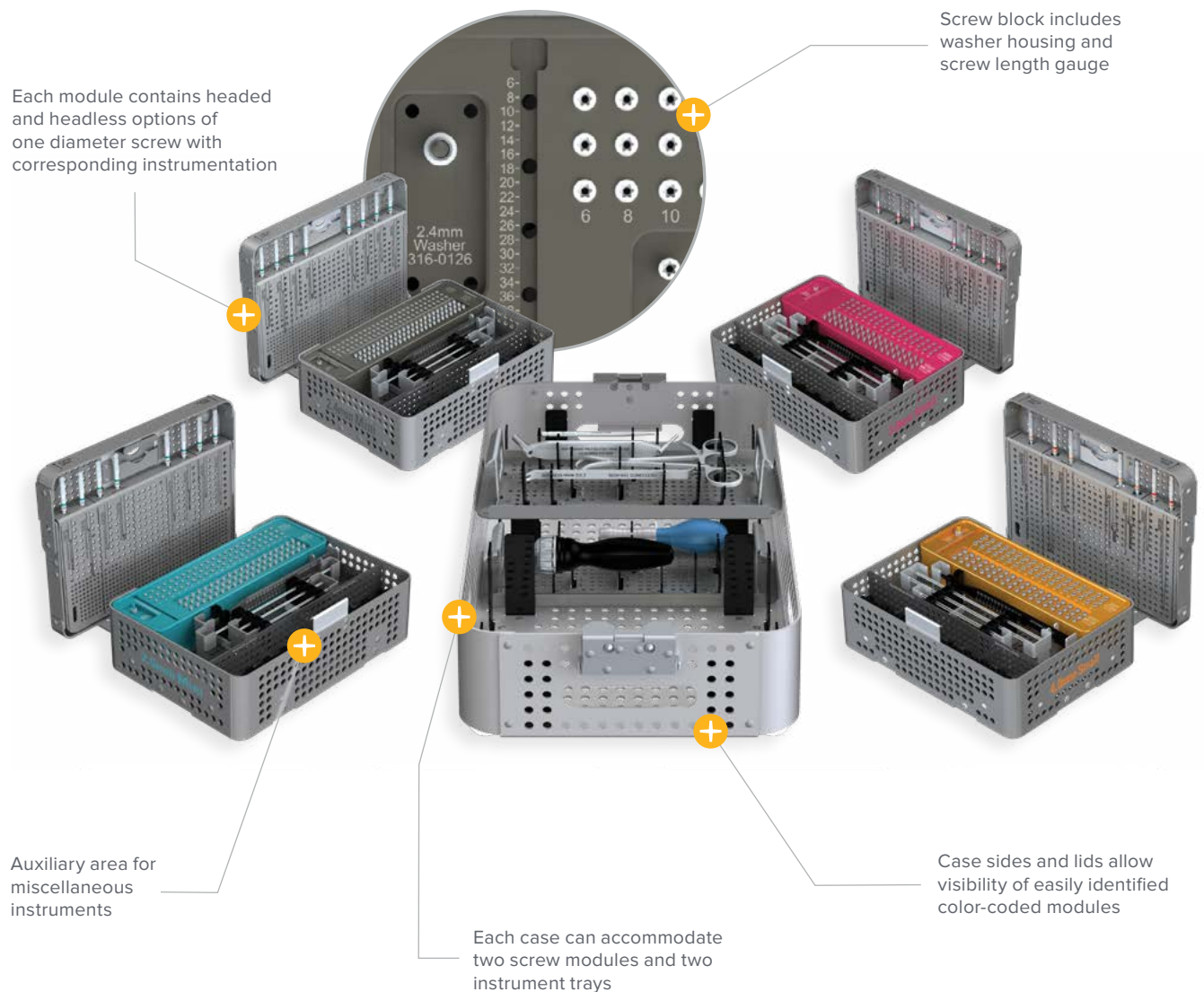
Surgical Technique



System Features [continued]

Modular Tray Configurations

The ExtremiFix Cannulated Screw System | Mini & Small is designed as a modular storage system. Each module includes a complete set of instrumentation specific to that screw diameter. Outer cases contain general instrumentation and can store up to two screw modules. Additionally, independent ExtremiFix Cannulated Screw System | Mini & Small modules can supplement OsteoMed's Hand Plating System, ExtremiLock™ Foot Plating System, and ExtremiLock™ Ankle Plating System to treat a wider variety of upper and lower extremity applications.



System Features [continued]

Instrument Features



Double Sided Cannulated Depth Gauge
Dual-sided depth gauge provides screw length measurement for both 4" and 6" guide wires

Ratchet Handle

Quick release ratcheting handle with rubberized grip



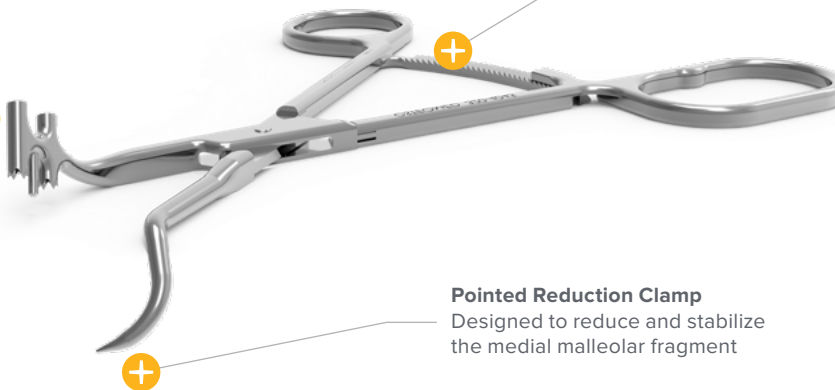
Swivel Handle

Jewelers handle is designed for fine control and tactile feedback



Parallel Guide Wire

Allows surgeon to place two .045" guide wires perpendicular to the fracture



Ergonomic Design

Left and right-specific ratcheting medial malleolus clamp



Pointed Reduction Clamp

Designed to reduce and stabilize the medial malleolar fragment



Instrument Overview

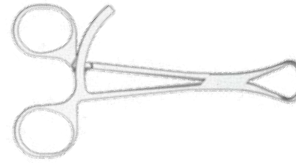
General Instruments



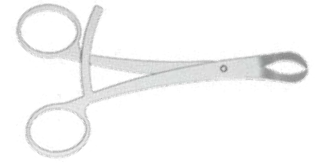
Swivel Handle Driver, Quick Release
(323-1701)



Ratchet Handle, Quick Release
(323-1702)



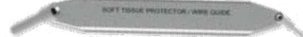
Bone Clamp
(320-0102)



Bone Clamp, Curved Lobster Claw 5 1/2" Small
(316-0046)



Ø2.0/2.4/3.0/4.0 mm Screw Remover
(316-0039)



Ø2.0/2.4/3.0/4.0 mm Soft Tissue Protector/Wire Guide
(316-0008)



Ø2.0/2.4/3.0/4.0 mm Screw Extractor
(316-0009)



Cannulated Depth Gauge, Double Sided
(316-0036)

Optional Instruments*



Medial Malleolar Clamp, Left
(320-4045)



Medial Malleolar Clamp, Right
(320-4046)

*The Medial Malleolar Clamp (320-404x) is an optional instrument, and may not be required to complete installation of the ExtremiFix Cannulated Screw System | Mini & Small. For more information please see: 030-2231.

Instrument Overview [continued]

2.0/2.4 mm Mini Instruments



**Ø1.7 mm Cannulated Drill,
Short, Quick Release**
(316-0513)



**Ø1.7 mm Cannulated Drill,
Long, Quick Release**
(316-0514)



**Ø2.0/2.4 mm Cannulated
Countersink, Quick Release**
(316-0511)



**Ø2.0/2.4 mm Proximal Cortex
Drill, Quick Release**
(316-0516)



**Ø1.7 mm Drill/Countersink
Combo, Short, Quick Release**
(316-0527)



**Ø1.7 mm Drill/Countersink
Combo, Long, Quick Release**
(316-0528)



**Ø2.0/2.4 mm T7 Driver,
Cannulated, Short,
Quick Release**
(316-0544)

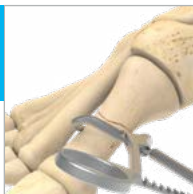


**Ø2.0/2.4 mm T7 Driver,
Cannulated, Long,
Quick Release**
(316-0545)

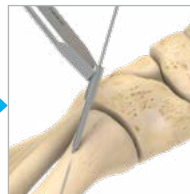
Surgical Technique Overview

Cannulated Screw Surgical Technique

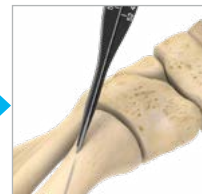
Reduction and
Provisional Fixation



Insert K-wire



Measure
Screw Length



Instrument Overview [continued]

3.0/4.0 mm Small Instruments



Ø3.0/4.0 mm Cannulated Countersink, Quick Release
(316-0501)



Ø3.0/4.0 mm T10 Driver, Cannulated, Short, Quick Release
(316-0554)



Ø3.0/4.0 mm T10 Driver, Cannulated, Long, Quick Release
(316-0555)

3.0 mm Small Instruments



Ø2.3 mm Cannulated Drill, Quick Release
(316-0532)



Ø3.2 mm Proximal Cortex Drill, Quick Release
(316-0533)



Ø2.3 mm Drill/Countersink Combo, Short, Quick Release
(316-0537)



Ø2.3 mm Drill/Countersink Combo, Long, Quick Release
(316-0538)

4.0 mm Small Instruments



Ø2.7 mm Cannulated Drill, Quick Release
(316-0534)



Ø3.7 mm Proximal Cortex Drill, Quick Release
(316-0543)

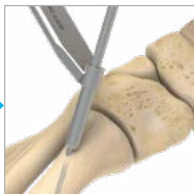


Ø2.7 mm Drill/Countersink Combo, Short, Quick Release
(316-0547)



Ø2.7 mm Drill/Countersink Combo, Long, Quick Release
(316-0548)

Predrill (Recommended)



Countersink or Cortex Drill (Recommended)



Insert Screw



Screw Removal (Optional)



Instrument and Screw Sizing

Instrumentation and screw modules are color-coded based on screw diameter to aid in identification.



Diameter	2.0 mm Mini		2.4 mm Mini		3.0 mm Small		4.0 mm Small	
Material			Titanium Alloy					
Head Type	Headed	Headless	Headed	Headless	Headed	Headless	Headed	Headless
Length	6–42 mm	10–42 mm	6–50 mm	10–50 mm	10–40 mm	10–40 mm	12–52 mm	12–52 mm
K-wire	Ø.035" x 4" and Ø.035" x 6"				Ø.045" x 4" and Ø.045" x 6"			
Pilot Drill*	Ø1.7 mm				Ø2.3 mm		Ø2.7 mm	
Drive Type*	T7				T10			

*Association for Osteosynthesis (AO) standard quick release connection.

2.0 mm Mini Cannulated Screws



2.0 mm x 6–42 mm Cannulated Headed Screws
(318-20XX)

2 mm increments



2.0 mm x 10–42 mm Cannulated Headless Screws
(315-20XX)

2 mm increments



2.0 mm Washer
(316-0125)

2.4 mm Mini Cannulated Screws



2.4 mm x 6–50 mm Cannulated Headed Screws
(318-24XX)

2 mm increments



2.4 mm x 10–50 mm Cannulated Headless Screws
(315-24XX)

2 mm increments



2.4 mm Washer
(316-0126)

3.0 mm Small Cannulated Screws



3.0 mm x 10–40 mm Cannulated Headed Screws
(318-30XX)

2 mm increments



3.0 mm x 10–40 mm Cannulated Headless Screws
(315-30XX)

2 mm increments



3.0 mm Washer
(316-0225)

4.0 mm Small Cannulated Screws



4.0 mm x 12–52 mm Cannulated Headed Screws
(318-40XX)

2 mm increments up to 40 mm in Length
4 mm increments up to 52 mm in Length



4.0 mm x 12–52 mm Cannulated Headless Screws
(315-40XX)

2 mm increments up to 40 mm in Length
4 mm increments up to 52 mm in Length



4.0 mm Washer
(316-0226)