



skeletal dynamics[®]

UNDERSTANDING THE UPPER EXTREMITY

SURGICAL TECHNIQUE GUIDE

LOCKING HAND NAIL



LOCKING HAND NAIL

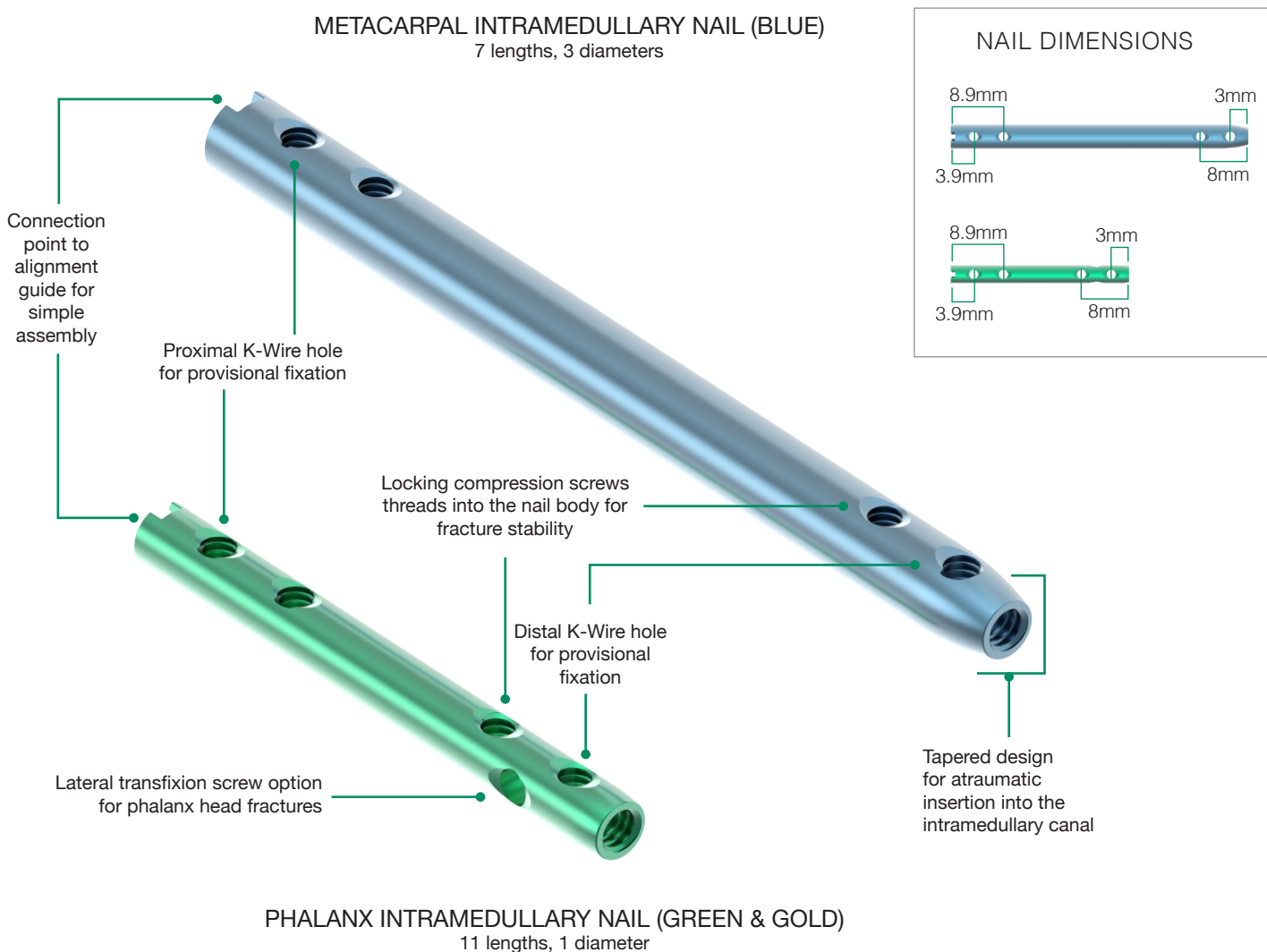
As described by: **Jorge L. Orbay, M.D.** Miami Hand & Upper Extremity Institute

Description

The Skeletal Dynamics Locking Hand Nail System includes non-threaded Metacarpal and Phalangeal Locked Hand Nails.

Indications for Use

The Locking Hand Nail System is indicated for the fixation of extra-articular fractures of the long bones of the hand including the metacarpals and the proximal phalanges.

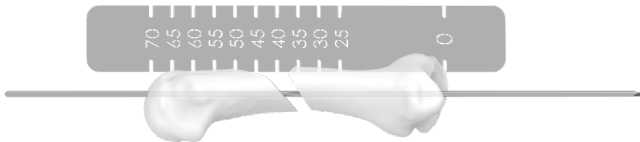


1 LOCATE INSERTION POINT & REDUCE FRACTURE



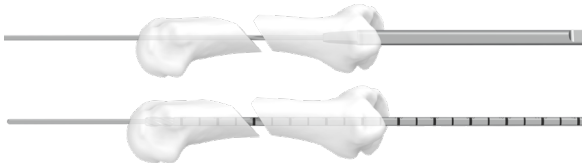
Fully flex the metacarpophalangeal (MP) joint and identify the dorsal third of the metacarpal head. Insert 1.6mm k-wire and advance into metacarpal head.

2 DETERMINE NAIL LENGTH



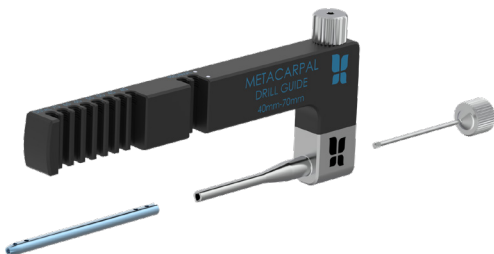
Use the measurement ruler or depth gauge to determine nail length.

3 REAMING METACARPAL



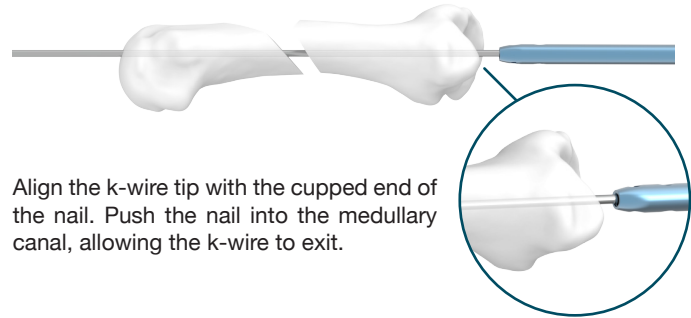
Advance k-wire through the base of the metacarpal. Begin with the cannulated awl (antegrade MC approach only), followed by the 2.7mm starter reamer, sequentially reaming up as necessary.

4 DRILL GUIDE ASSEMBLY WITH NAIL



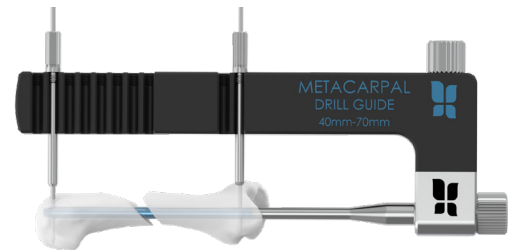
Insert metacarpal drill guide locking screw into the drill guide assembly. Align the cutout on the locking nail with the tabs on the drill guide and tighten.

5 NAIL INSERTION



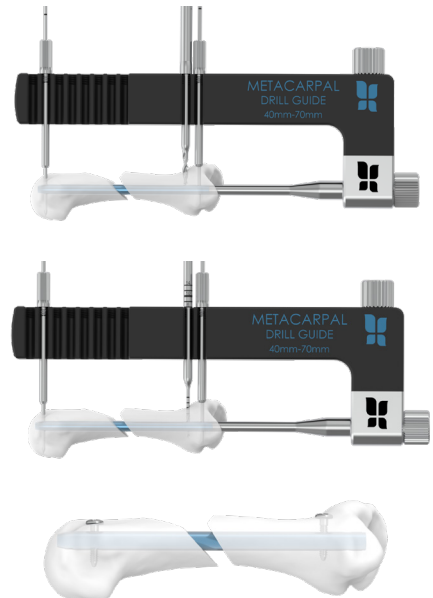
Align the k-wire tip with the cupped end of the nail. Push the nail into the medullary canal, allowing the k-wire to exit.

6 PROXIMAL AND DISTAL FIXATION



While flexing the MP joint, insert a 1.4mm k-wire through the proximal k-wire hole. For distal fixation, thread the k-wire sleeve onto the hole that is 5mm greater than the chosen nail. Make sure to tap drill when inserting the proximal and distal k-wires.

7 UNICORTICAL LOCKING SCREW INSERTION

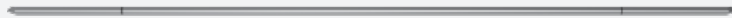


Make a small incision for screws, then advance the stop drill through proximal slot. Measure screw length using the 1.4mm drill, stopping before the far cortex and insert screw. Repeat steps for distal screw.



01 LOCATING THE INSERTION POINT

Fully flex the metacarpophalangeal (MP) joint and mark the dorsal third of the metacarpal head.

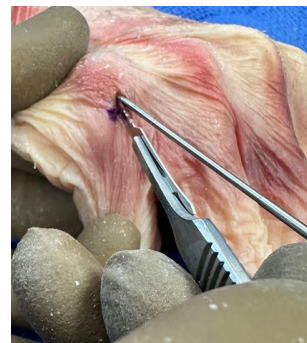


KWDT-1416-171: K-wire, 1.4mm/1.6mm x 171, Double Trocar, Stepped



02 K-WIRE INSERTION AND FRACTURE REDUCTION

Open the 3rd extensor compartment and Insert the 1.6mm k-wire and advance it into the metacarpal head. Under fluoroscopy, advance the k-wire to the fracture site, reduce the fracture, and advance into metacarpal base.



03 DETERMINE NAIL LENGTH

Locking Hand Nail length can be determined in one of two methods:

Measurement ruler: Under fluoroscopy, align ruler as close as possible to coronal plane and place the “0” mark at the base of the metacarpal. Note the length near the metacarpal head. Subtract 10mm from the length reading.

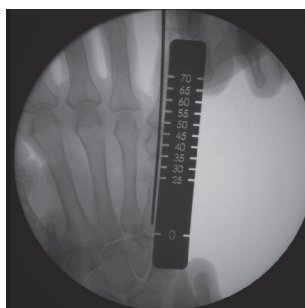
Depth gauge: Under fluoroscopy, ensure the distal end of the k-wire is placed into the metacarpal base. Place the depth gauge over the k-wire stopping on the metacarpal head. Read off the end of the k-wire and subtract 10mm from the length reading.



MSRT-RL: Measurement Ruler



DGA-IHF: Intramedullary Nail Depth Gauge



04 DIRECTION FOR INSERTING LOCKING HAND NAIL

Metacarpal nails can be introduced either in an antegrade or retrograde direction.

Note: Surgical Technique will illustrate antegrade approach

05 STARTING THE REAMING PROCESS

For the antegrade approach only: Flex the wrist while advancing the k-wire through base of the metacarpal until visible. Insert the cannulated awl over the k-wire, past the soft tissues to the bone surface with an oscillatory hand motion. The cannulated awl is to be inserted through the bone surface no further than its stop, 10mm or less from subchondral bone. Use the wire pusher to keep the k-wire in place, if necessary.

Caution: Do not use awl under power, use the provided manual handle.



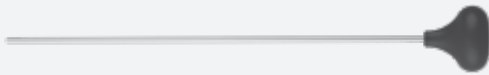
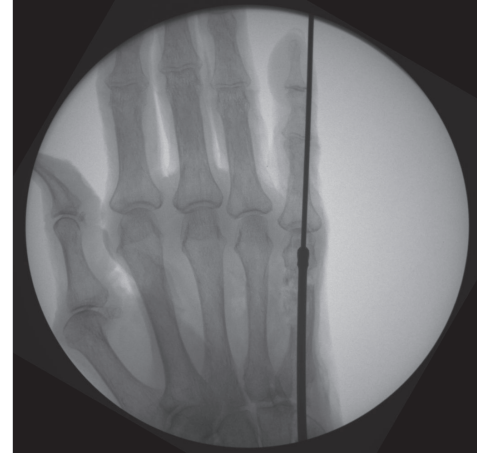
IHF-AWL: Cannulated Awl

06 REAMING/CANAL PREPARATION

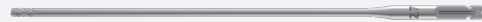
The system includes four sequential cannulated manual reamers. The laser etch on the reamers will reflect the corresponding nail diameter.

Starting with the 2.7mm reamer (starter reamer), ream the medullary canal, stopping at least 5mm from the articular surface of the bone. Continue sequential reaming until encountering cortical engagement (chatter). The reamer size used when engaging cortical bone will determine nail diameter size. Do not remove the k-wire during this process; use the wire pusher to keep the k-wire in position.

Caution: Do not ream under power. Use caution and an oscillatory hand motion to protect the nearby soft tissue and tendons.



HTS-WP: HTS Wire Pusher

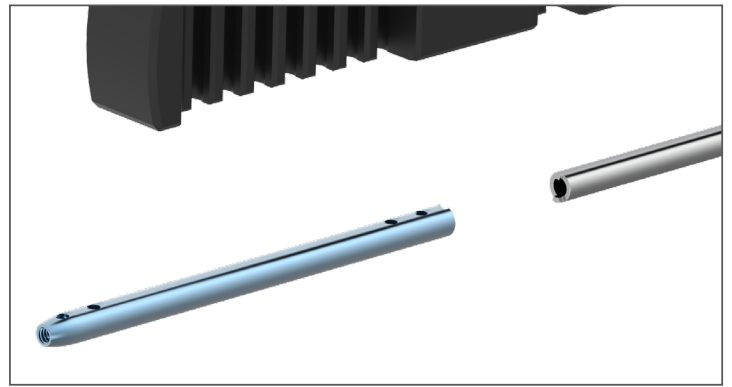
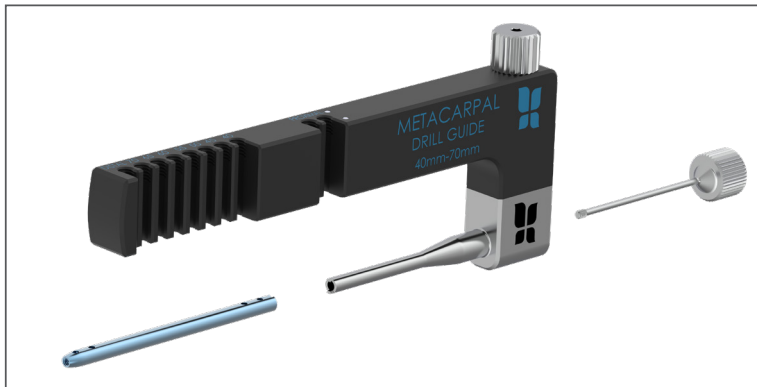


IHFR-27165: Reamer, 2.7mm x 165mm

07 DRILL GUIDE ASSEMBLY WITH HAND NAIL

Select the Locking Nail with the previously determined diameter and length.

- (1) Insert the metacarpal drill guide locking screw first into the drill guide assembly and hold in place.
- (2) Orient the locking hand nail to the drill guide by aligning the tabs on the drill guide with the cutouts on the hand nail. Thread the locking screw into the hand nail and fully tighten.



DG-MC-LS: Drill Guide, Locking Screw, Metacarpal



DG-MC: Assembled, Drill Guide, Metacarpal



IHFN-MC-350XX: Metacarpal Intramedullary Nail, 3.5mm x XXmm,

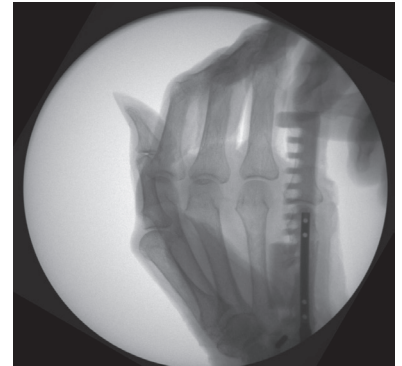
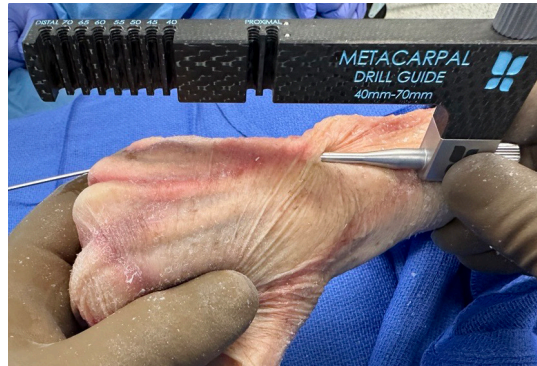


08 NAIL INSERTION

The front end of the nail is cupped to interface with the k-wire. Place k-wire tip into nail and advance into medullary canal, allowing the k-wire to exit.

Use fluoroscopy to confirm fracture reduction and evaluate final locking hand nail position ensuring locking screw holes are not placed near fracture lines.

To ensure loosening did not occur during nail insertion, retighten drill guide locking screw.



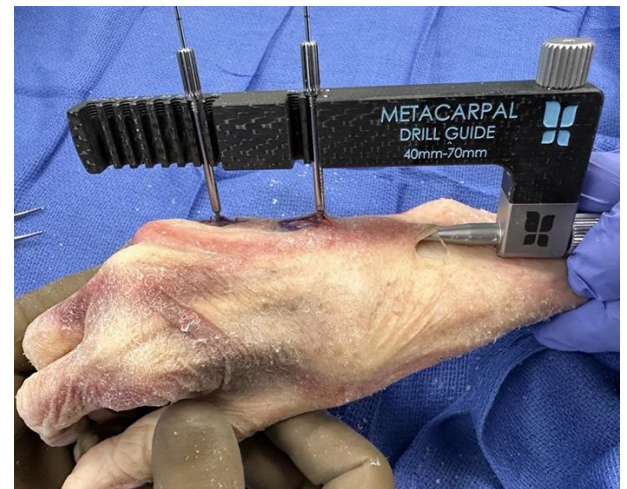
09 PROVISIONAL FIXATION - PROXIMAL & DISTAL FRAGMENTS

Locking Hand Nails feature one proximal and one distal k-wire hole to secure fragments to the nail and drill guide to prevent loss of reduction and rotation.

Flexing the MP joint and tap drilling is recommended for the following steps:

Proximal: Thread 1.4mm k-wire sleeve into the most proximal hole on the drill guide. Insert 1.4mm k-wire through the k-wire sleeve into the nail and confirm placement under fluoroscopy.

Distal: Thread 1.4 k-wire sleeve onto drill guide hole that is 5mm greater than the chosen nail length. Insert 1.4mm k-wire through k-wire sleeve into nail and confirm placement using fluoroscopy.



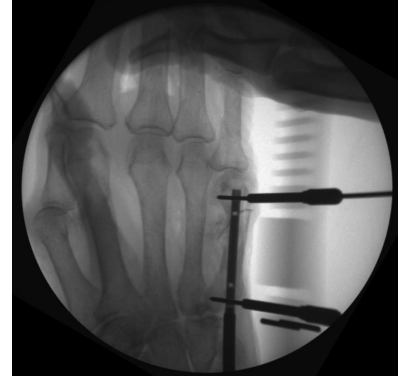
KWIR-STL-14152: K-Wire, Single Trocar, 1.4mm x 152mm

10 DRILL FOR UNICORTICAL PROXIMAL LOCKING COMPRESSION SCREWS

Make a small incision to prepare for drilling and screw insertion. Bluntly spread the underlying soft tissues with the provided skin hooks to ensure visibility of metacarpal. Carefully identify and protect the extensor tendons.

Note: Drill guide has two proximal slots for optimally placing screw based on fracture location.

Advance the 2.0mm stop drill into desired drill guide proximal slot, drilling through near cortex of metacarpal bone until the mechanical stop reaches drill guide.



SH2-BLNT: Skin Hook, 2 Blunt Prongs



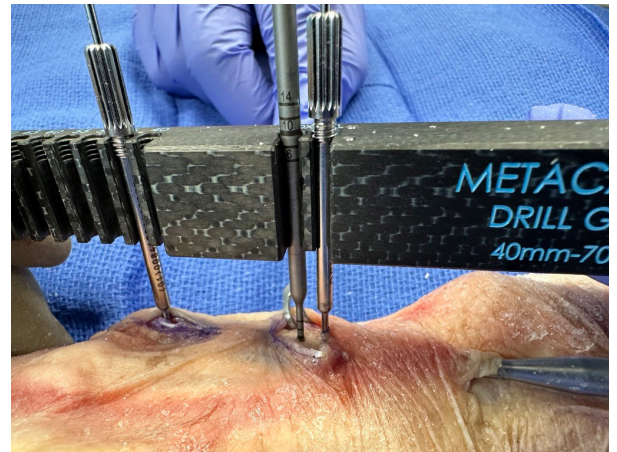
DRLL-STP-20

11 UNICORTICAL PROXIMAL LOCKING COMPRESSION SCREW SIZING

For measuring screw length, insert the 1.4mm drill through the previously drilled hole stopping before reaching the far cortex. Use the laser etched bands on the 1.4mm drill to measure the screw length. The locking compression screw is intended to be unicortical.

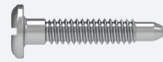
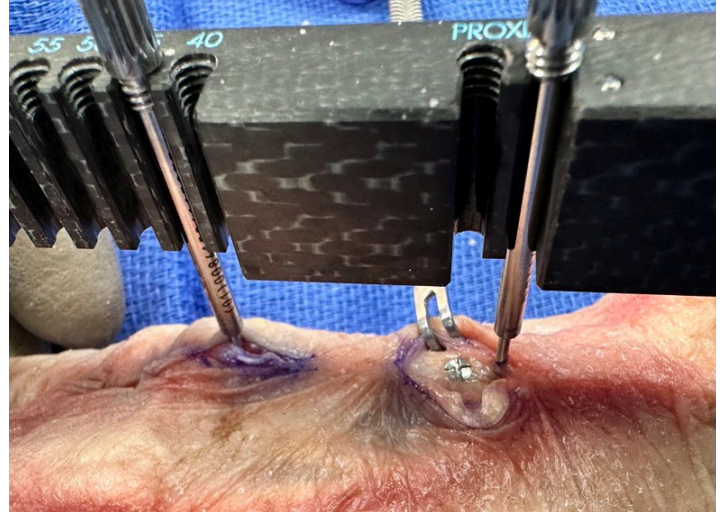
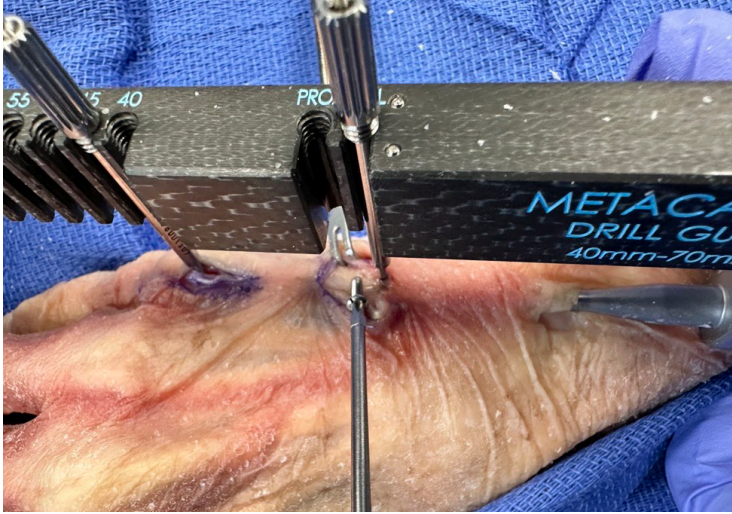


DRLL-IHF-14



12 LOCKING COMPRESSION SCREW INSERTION

Select the appropriate length 1.8mm Locking Compression Screw from the caddy. Ensure skin hooks keep proper soft tissue exposure to facilitate screw insertion. Side load the tip of the screw into the previously drilled hole. Once the screw is inserted, vertically orient driver parallel with the drill guide slot to advance screw. The locking compression screw is designed to suck the nail up to the indistial surface of the metacarpal.



CMP-180XX-CC: Locking Compression Screw, 1-64 UNC x XX.0mm, CoCr

13 FLUOROSCOPIC CONFIRMATION

Under fluoroscopy, confirm placement of locking compression screw within locking hand nail.

14 DISTAL LOCKING COMPRESSION SCREW PREPARATION

Repeat steps 10-13 for the distal unicortical screw insertion taking note of the hand nail length chosen and the drill guide etched sizes.

15 FLUOROSCOPIC CONFIRMATION AND CLOSURE

Confirm final reduction and implant position using fluoroscopy.

Using the cruciform driver, disengage the drill guide locking screw from the metacarpal nail. Remove the drill guide assembly.



01 LOCATING THE INSERTION POINT

Fully flex the metacarpophalangeal (MP) joint. Expose the base of the proximal phalanx for k-wire insertion, by sublaxing to allow percutaneous access to the proximal articular surface.

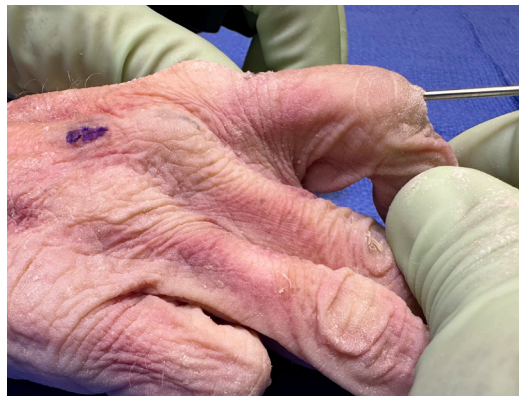
Note: Surgical technique will illustrate antegrade approach for phalangeal nail insertion which is less traumatic to the PIP joint. However, retrograde approach is still possible.



KWDT-1416-171: K-wire, 1.4mm/1.6mm x 171, Double Trocar, Stepped

02 K-WIRE INSERTION AND FRACTURE REDUCTION

Insert the 1.6mm k-wire and advance it into the sublaxed proximal phalanx base in line with the medullary canal of the proximal fragment. Under fluoroscopy, advance the k-wire to the fracture site, reduce the fracture, and advance into proximal phalanx head.

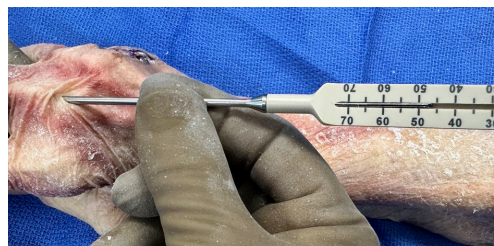
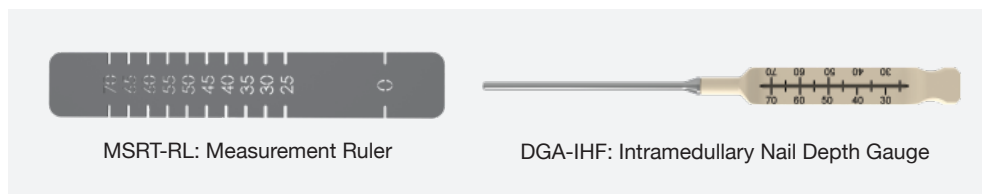
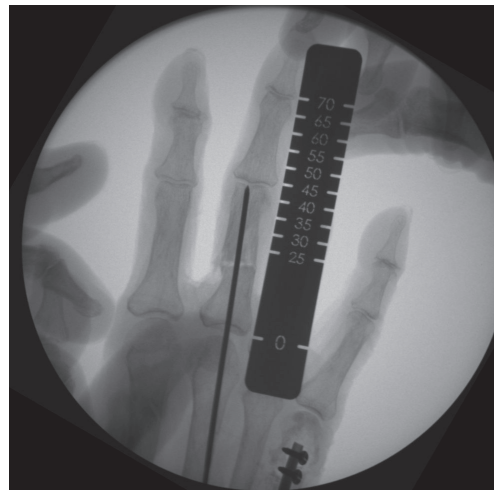


03 DETERMINE NAIL LENGTH

Locking hand nail length can be determined in one of two methods:

Measurement Ruler: Under fluoroscopy, align ruler as close as possible to coronal plane and place the “0” mark with the proximal phalanx base. Note the length near the phalanx head. Accounting for the proximal and distal hand nail ends to be 5mm each from articular surfaces, subtract 10mm from the length reading.

Depth Gauge: Under fluoroscopy, ensure the distal end of the k-wire is placed into the proximal phalanx head. Place the depth gauge over the k-wire stopping on the proximal phalanx base. Read off the end of the k-wire, subtracting 10mm from the length reading.



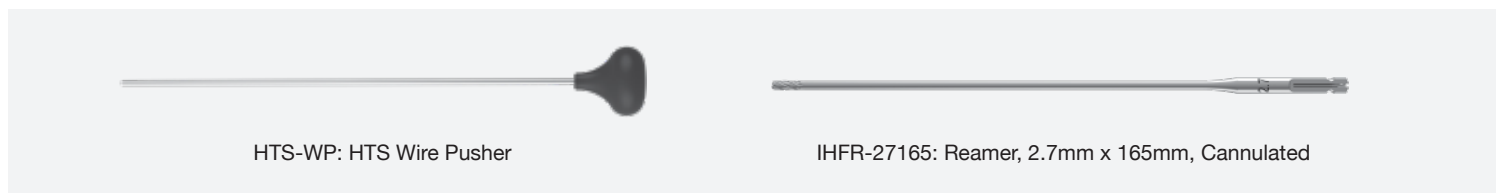
04 REAMING/CANAL PREPARATION

The laser etch on the reamers will reflect the corresponding nail diameter. The 2.7mm and 3.0mm reamers are intended to be used in the phalanx.

Starting with the 2.7mm reamer (starter reamer), ream the medullary canal, stopping at least 5mm from the articular surface of the bone. Sequentially ream with the 3.0mm reamer. The reamer size used when engaging cortical bone will determine nail diameter size. Do not remove the k-wire during this process; use the wire pusher to keep the k-wire in position.

Note: Do not ream larger than 3.0mm in the phalanx

Caution: Do not ream under power. Use caution and an oscillatory hand motion to protect the nearby soft tissue and tendons.

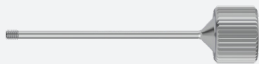
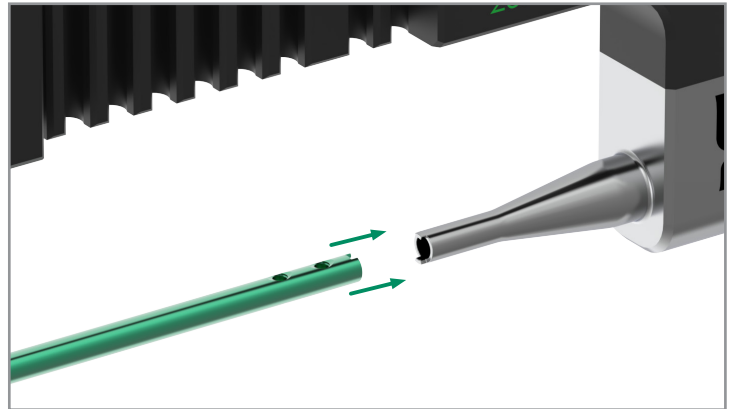
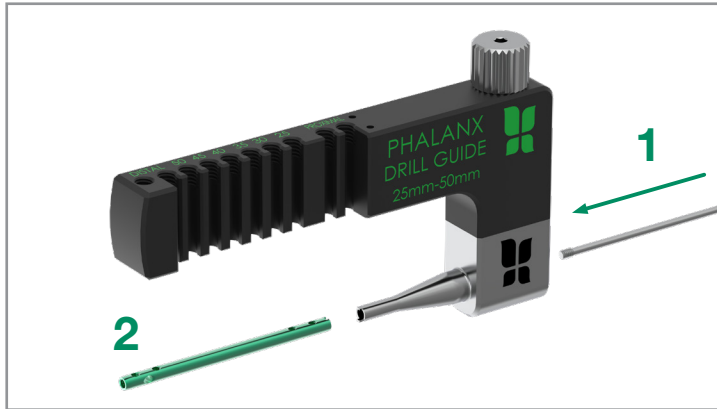


05 DRILL GUIDE ASSEMBLY WITH HAND NAIL

Select the hand nail with the previously determined diameter and length.

(1) Insert the phalanx drill guide locking screw first into the drill guide assembly and hold in place.

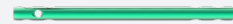
(2) Orient the locking hand nail to the drill guide by aligning the tabs on the drill guide with the cutouts on the hand nail. Then, thread the locking screw into the hand nail and fully tighten.



DG-PHX-LS: Drill Guide, Locking Screw, Phalanx



DG-PHX: Assembled, Drill Guide, Phalanx



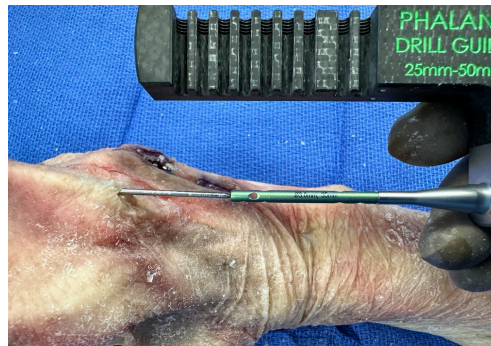
IHFN-PHX-30XXX: Phalanx Intramedullary Nail, 3.0mm x XXmm, Ti

06 NAIL INSERTION

The front end of the nail is cupped to interface with k-wire. Place k-wire tip into nail and advance into medullary canal while allowing k-wire to exit.

Use fluoroscopy to confirm fracture reduction and evaluate final locking hand nail position ensuring locking screw holes are not placed near fracture lines.

To ensure loosening did not occur during nail insertion, retighten drill guide locking screw.



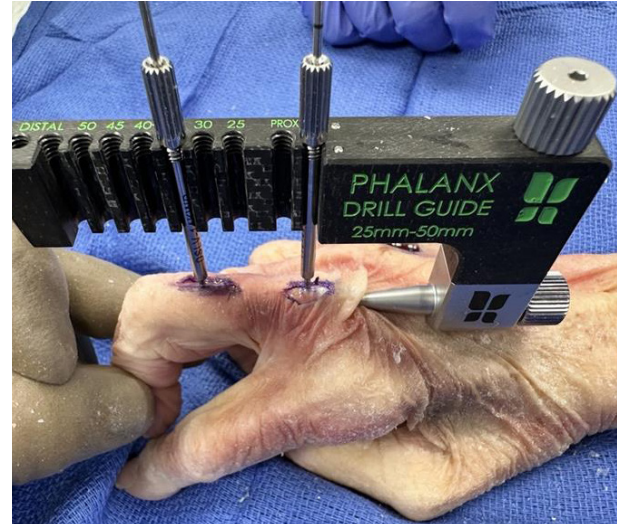
07 PROVISIONAL FIXATION – PROXIMAL & DISTAL FRAGMENTS

Locking hand nails feature one proximal and one distal k-wire hole to secure fragments to nail and drill guide to prevent loss of reduction and rotation. Flex the joints fully to align the distal phalanx fragment into the correct rotational alignment.

Flexing the MP joint and tap drilling is recommended for the following steps:

Proximal: Thread 1.4mm k-wire sleeve into the most proximal hole on the drill guide. Insert 1.4mm k-wire through the k-wire sleeve into the nail and confirm placement under fluoroscopy.

Distal: Thread 1.4 k-wire sleeve onto drill guide hole that is 5mm greater than the chosen nail length. Insert 1.4mm k-wire through k-wire sleeve into nail and confirm placement using fluoroscopy.



KWIR-STL-14152: K-Wire, Single Trocar, 1.4mm x 152mm

08 DRILL FOR UNICORTICAL PROXIMAL LOCKING COMPRESSION SCREWS

Make a small incision to prepare for drilling and screw insertion. Bluntly spread the underlying soft tissues with the provided skin hooks to ensure visibility of phalanx. Carefully identify and protect the extensor tendons.

Note: Drill guide has two proximal slots for optimally placing screw based on fracture location.

Advance the 2.0mm stop drill into desired drill guide proximal slot, drilling through near cortex of phalanx bone until the mechanical stop reaches drill guide.



DRLL-STP-20



SH2-BLNT: Skin Hook, 2 Blunt Prongs

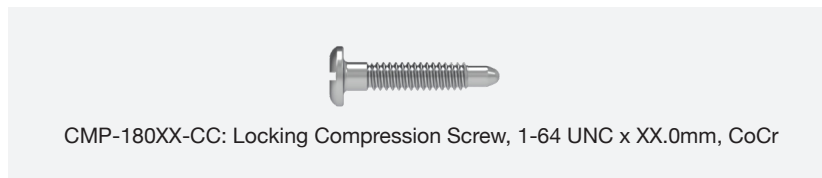
09 UNICORTICAL PROXIMAL LOCKING COMPRESSION SCREW SIZING

For measuring screw length, insert the 1.4mm drill through the previously drilled hole stopping before reaching the far cortex. Use the laser etched bands on the 1.4mm drill to measure the screw length. The locking compression screw is intended to be unicortical.



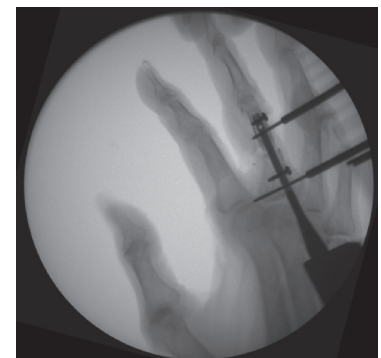
10 LOCKING COMPRESSION SCREW INSERTION

Select the appropriate length 1.8mm Locking Compression Screw from the caddy. Ensure skin hooks keep proper soft tissue exposure to facilitate screw insertion. Side load the tip of the screw into the previously drilled hole. Once the screw is inserted, vertically orient driver parallel with the drill guide slot to advance screw. The locking compression screw is designed to suck the nail to the indostial surface of the bone.



11 FLUOROSCOPIC CONFIRMATION

Under fluoroscopy, confirm placement of locking compression screw within locking hand nail.



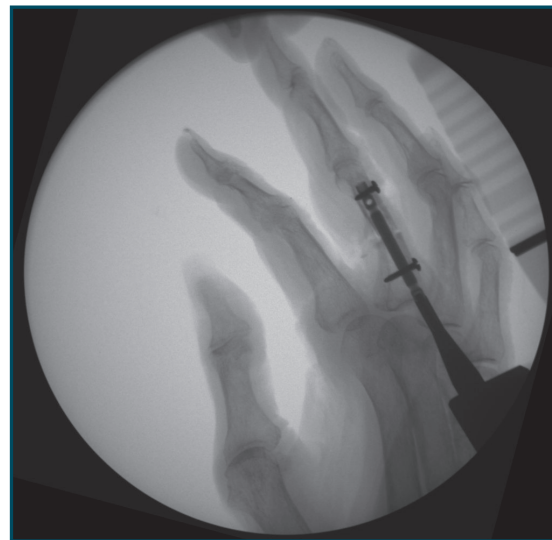
12 DISTAL SCREW PREPARATION

Repeat steps 8-11 for the distal locking compression screw insertion taking note of the hand nail length chosen and the drill guide etched sizes.

13 FLUOROSCOPIC CONFIRMATION AND CLOSURE

Confirm final reduction and implant position using fluoroscopy.

Using the cruciform driver, disengage the drill guide locking screw from the phalanx nail. Remove the drill guide assembly.



01 CROSS FIXATION GUIDE ASSEMBLY

Transfixion screw may be needed to treat localized proximal phalanx head fractures.

Attach the phalanx coronal transfixion screw guide to phalanx drill guide assembly with provided screws.



02 K-WIRE INSERTION

Ensure correct rotational alignment of the finger by fully flexing all digits simultaneously.

Using fluoroscopy, advance a 1.1mm k-wire into the k-wire hole of phalanx transfixion screw guide corresponding to the locking hand nail's length.

1.1mm k-wire should pass from the near cortex, through the hand nail's horizontal transfixion hole and exit the far cortex.



KWIR-STL-11127: K-Wire, Single Trocar, 1.1mm x 127mm

03 K-WIRE ADVANCEMENT

Under fluoroscopy, advance 1.1mm k-wire through the guide until the k-wire is past the far cortex, pull from the other side of the digit leaving the tip of k-wire where the tip of the transfixion screw is to be placed in the bone.

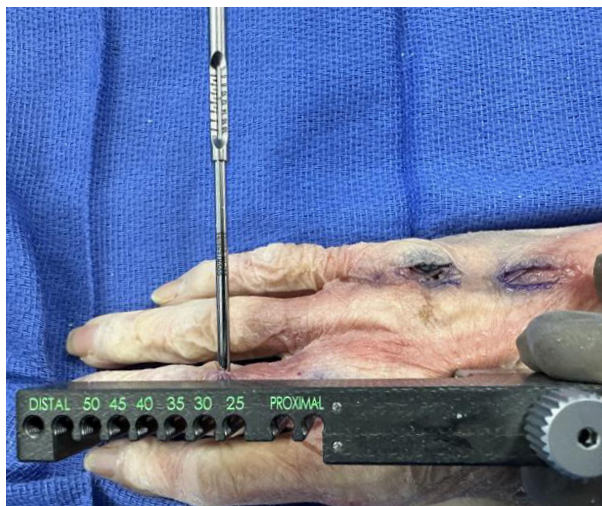
Make a small incision around the k-wire for transfixion screw insertion. Utilize both skin hooks to manage soft tissue so that the bone surface that surrounds the k-wire is clearly visible for screw insertion.

Note: The supplied 1.1mm k-wires provide exact depth readings with the system's depth gauge.



04 MEASURE SCREW LENGTH

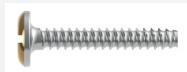
Use the depth gauge to determine transfixion screw length off the laser etched band on the k-wire. Remove depth gauge leaving the k-wire in place. Select the appropriate length gold transfixion screw.



CSNK-DGA-CMP: Depth Gauge

05 INSERT TRANSFIXION SCREW

Engage the screw end cup onto the tip of the k-wire and insert the screw while simultaneously pushing or pulling out the k-wire through the other side of the digit. Tighten the transfixion screw until the head seats fully.



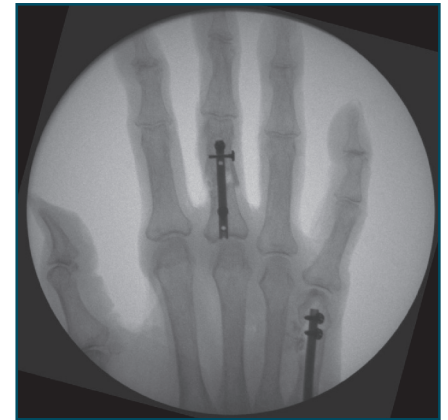
TFX-150XX-CC: Transfixion Screw, 1.5mm x XX.0mm, CoCr

06 FLUOROSCOPIC CONFIRMATION AND CLOSURE

Remove transfixion screw guide.

Using the cruciform driver, disengage the drill guide locking screw from the phalanx nail. Remove the drill guide assembly.

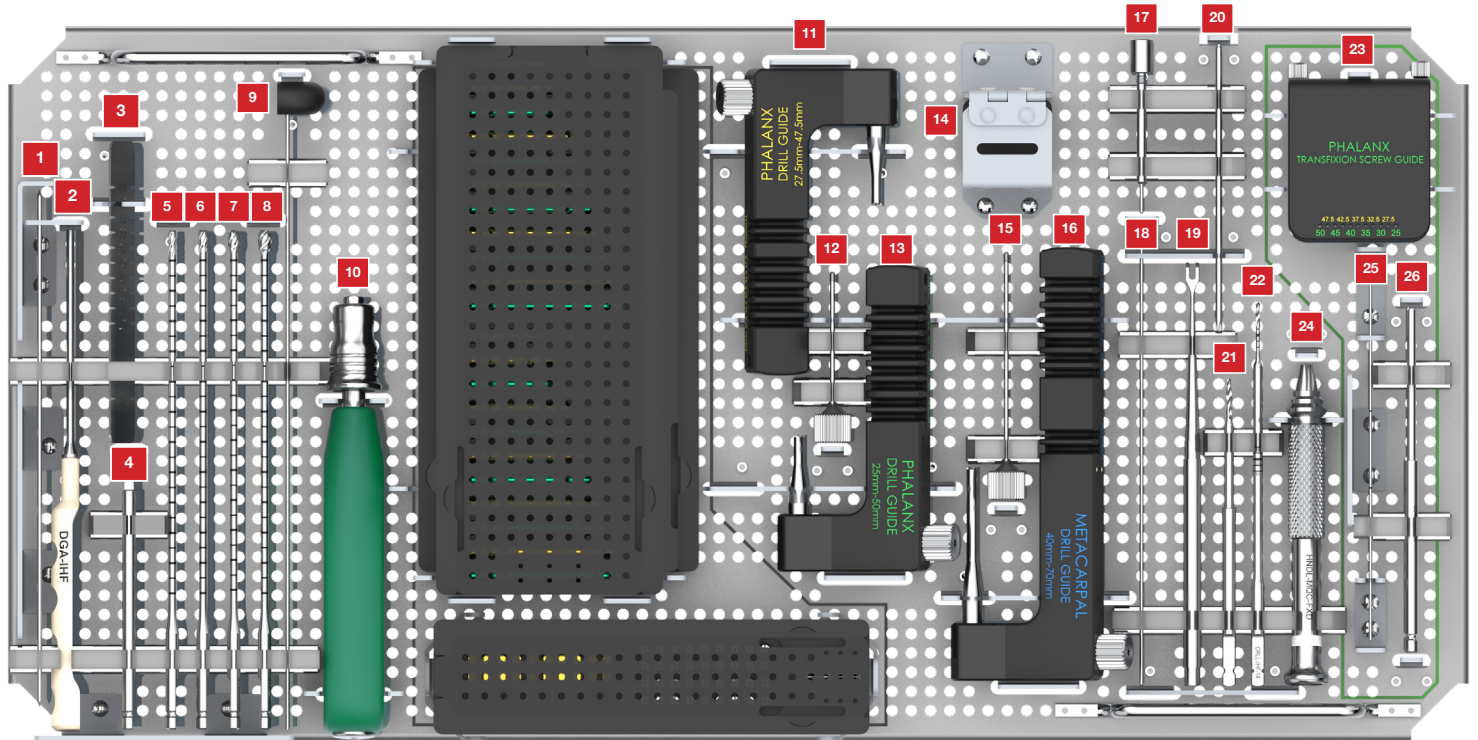
Repair soft tissues and close.



REMOVAL (OPTIONAL)

Flex hand and create incision to remove locking compression screws. Use k-wire to find pocket of locking nail. Ream over the k-wire to create a canal for nail removal. Sequential reaming can be used as necessary to create canal. Engage drill guide locking screw and remove.

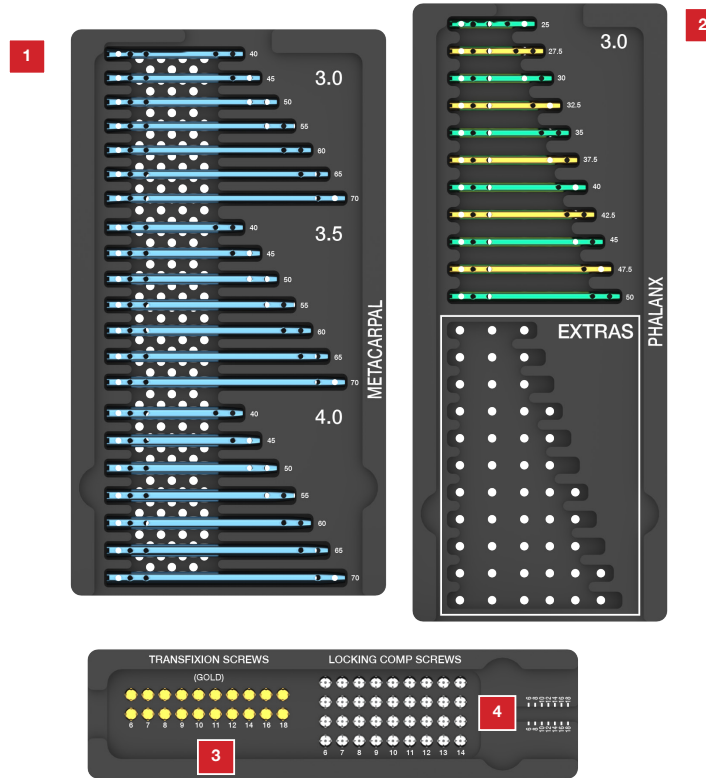
INSTRUMENT TRAY (Standard Configuration)



Loc #	Catalog #	Description
1	KWDT-1416-171	K-wire, 1.4mm/1.6mm x 171, Double Trocar, Stepped
2	DGA-IHF	Intramedullary Nail Depth Gauge
3	MSRT-RL	Measurement Ruler
4	IHF-AWL	Cannulated Awl
5	IHFR-27165	Reamer, 2.7mm x 165mm, Cannulated
6	IHFR-33165	Reamer, 3.0mm x 165mm, Cannulated
7	IHFR-38165	Reamer, 3.5mm x 165mm, Cannulated
8	IHFR-43165	Reamer, 4.0mm x 165mm, Cannulated
9	HTS-WP	HTS Wire Pusher
10	HNDL-UQC-FXD	Handle, Unviersal QC, Fixed
11	DG-PHX-2	Assembled, Drill Guide, Phalanx, Half Sizes
12	DG-PHX-LS	Drill Guide, Locking Screw, Phalanx
13	DG-PHX	Assembled, Drill Guide, Phalanx
14	DSLVL-14KWR	Drill Sleeve, 1.4mm K-Wire
15	DG-MC-LS	Drill Guide, Locking Screw, Metacarpal
16	DG-MC	Assembled, Drill Guide, Metacarpal
17	GDE-PN	Guide Pin
18	KWIR-STL-14152	K-Wire, Single Trocar, Laser, 1.4mm x 152mm
19	SH2-BLNT	Skin Hook, 2 Blunt Prongs
20	DRVR-MQC-CFRM	Driver, Mini QC, Cruciform
21	DRLL-STP-20	Drill, Stop, 2.0mm
22	DRLL-IHF-14	Drill, 1.4mm
23	PHX-CX-GDS	Phalanx Transfixion Screw Guide
24	HNDL-MQC-FXD	Handle, Mini QC, Fixed
25	KWIR-STL11127	K-Wire, Single Trocar, Laser, 1.1mm x 127mm
26	CSNK-DGA-CMP	Countersink Depth Gauge



INSTRUMENT TRAY (Standard Configuration)



Loc #	Catalog #	Description	Loc #	Catalog #	Description
1	IHFN-MC-30040	Metacarpal Intramedullary Nail, 3.0mm x 40mm, Ti	3	PTS-15006-CC	Phalanx Coronal Transfixion Screw, 1.5mm x 6.0mm, CoCr
	IHFN-MC-30045	Metacarpal Intramedullary Nail, 3.0mm x 45mm, Ti		PTS-15007-CC	Phalanx Coronal Transfixion Screw, 1.5mm x 7.0mm, CoCr
	IHFN-MC-30050	Metacarpal Intramedullary Nail, 3.0mm x 50mm, Ti		PTS-15008-CC	Phalanx Coronal Transfixion Screw, 1.5mm x 8.0mm, CoCr
	IHFN-MC-30055	Metacarpal Intramedullary Nail, 3.0mm x 55mm, Ti		PTS-15009-CC	Phalanx Coronal Transfixion Screw, 1.5mm x 9.0mm, CoCr
	IHFN-MC-30060	Metacarpal Intramedullary Nail, 3.0mm x 60mm, Ti		PTS-15010-CC	Phalanx Coronal Transfixion Screw, 1.5mm x 10.0mm, CoCr
	IHFN-MC-30065	Metacarpal Intramedullary Nail, 3.0mm x 65mm, Ti		PTS-15011-CC	Phalanx Coronal Transfixion Screw, 1.5mm x 11.0mm, CoCr
	IHFN-MC-30070	Metacarpal Intramedullary Nail, 3.0mm x 70mm, Ti		PTS-15012-CC	Phalanx Coronal Transfixion Screw, 1.5mm x 12.0mm, CoCr
	IHFN-MC-35040	Metacarpal Intramedullary Nail, 3.5mm x 40mm, Ti		PTS-15014-CC	Phalanx Coronal Transfixion Screw, 1.5mm x 14.0mm, CoCr
	IHFN-MC-35045	Metacarpal Intramedullary Nail, 3.5mm x 45mm, Ti		PTS-15016-CC	Phalanx Coronal Transfixion Screw, 1.5mm x 16.0mm, CoCr
	IHFN-MC-35050	Metacarpal Intramedullary Nail, 3.5mm x 50mm, Ti		PTS-15018-CC	Phalanx Coronal Transfixion Screw, 1.5mm x 18.0mm, CoCr
	IHFN-MC-35055	Metacarpal Intramedullary Nail, 3.5mm x 55mm, Ti	4	CMP-18004-CC	Locking Compression Screw, 1.8mm x 4.0mm CoCr
	IHFN-MC-35060	Metacarpal Intramedullary Nail, 3.5mm x 60mm, Ti		CMP-18005-CC	Locking Compression Screw, 1.8mm x 5.0mm, CoCr
	IHFN-MC-35065	Metacarpal Intramedullary Nail, 3.5mm x 65mm, Ti		CMP-18006-CC	Locking Compression Screw, 1.8mm x 6.0mm, CoCr
	IHFN-MC-35070	Metacarpal Intramedullary Nail, 3.5mm x 70mm, Ti		CMP-18007-CC	Locking Compression Screw, 1.8mm x 7.0mm, CoCr
	IHFN-MC-40040	Metacarpal Intramedullary Nail, 4.0mm x 40mm, Ti		CMP-18008-CC	Locking Compression Screw, 1.8mm x 8.0mm, CoCr
	IHFN-MC-40045	Metacarpal Intramedullary Nail, 4.0mm x 45mm, Ti		CMP-18009-CC	Locking Compression Screw, 1.8mm x 9.0mm, CoCr
	IHFN-MC-40050	Metacarpal Intramedullary Nail, 4.0mm x 50mm, Ti		CMP-18010-CC	Locking Compression Screw, 1.8mm x 10.0mm, CoCr
	IHFN-MC-40055	Metacarpal Intramedullary Nail, 4.0mm x 55mm, Ti		CMP-18011-CC	Locking Compression Screw, 1.8mm x 11.0mm, CoCr
	IHFN-MC-40060	Metacarpal Intramedullary Nail, 4.0mm x 60mm, Ti		CMP-18012-CC	Locking Compression Screw, 1.8mm x 12.0mm, CoCr
	IHFN-MC-40065	Metacarpal Intramedullary Nail, 4.0mm x 65mm, Ti			
	IHFN-MC-40070	Metacarpal Intramedullary Nail, 4.0mm x 70mm, Ti			
2	IHFN-PHX-30022	Phalanx Intramedullary Nail, 3.0mm x 22.5mm, Ti			
	IHFN-PHX-30025	Phalanx Intramedullary Nail, 3.0mm x 25mm, Ti			
	IHFN-PHX-30027	Phalanx Intramedullary Nail, 3.0mm x 27.5mm, Ti			
	IHFN-PHX-30030	Phalanx Intramedullary Nail, 3.0mm x 30mm, Ti			
	IHFN-PHX-30032	Phalanx Intramedullary Nail, 3.0mm x 32.5mm, Ti			
	IHFN-PHX-30035	Phalanx Intramedullary Nail, 3.0mm x 35mm, Ti			
	IHFN-PHX-30037	Phalanx Intramedullary Nail, 3.0mm x 37.5mm, Ti			
	IHFN-PHX-30040	Phalanx Intramedullary Nail, 3.0mm x 40mm, Ti			
	IHFN-PHX-30042	Phalanx Intramedullary Nail, 3.0mm x 42.5mm, Ti			
	IHFN-PHX-30045	Phalanx Intramedullary Nail, 3.0mm x 45mm, Ti			
	IHFN-PHX-30047	Phalanx Intramedullary Nail, 3.0mm x 47.5mm, Ti			
	IHFN-PHX-30050	Phalanx Intramedullary Nail, 3.0mm x 50mm, Ti			





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