CHANGE THE WORLD

CoLink® PCR

Carbon-Fiber Reinforced Plating

Low-Profile Carbon-Fiber Reinforced PEEK
MTP Fusion Plates in Neutral and 4° Dorsiflexion Options
Reduced Cold Weld Concerns
Invisible on X-Ray

In2Bones
a CONMED company

The first plate implants were made from steel; then came stainless steel; next came titanium alloy.

Carbon fiber reinforced PEEK is the new revolution.

The orientation of the fibers is customized to enhance the performance of the CoLink® PCR plating system

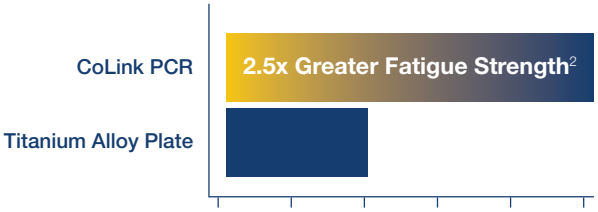
OPTIMIZED MATERIAL PROPERTIES

The CoLink® PCR[1] Plates are engineered from carbon fiber reinforced PEEK, layered in alternating directions for enhanced properties resulting in high fatigue strength.

1. Manufactured by Invibio (PEEK-OPTIMA ULTRA REINFORCED).

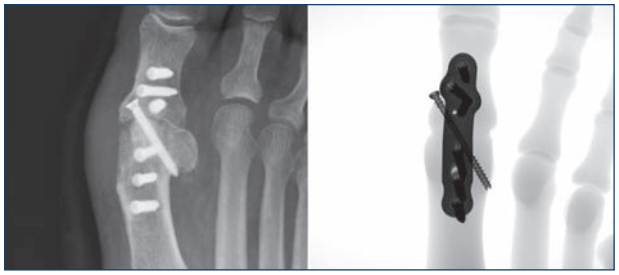
The CoLink® PCR Plating System utilizes a unique carbon fiber reinforced PEEK polymer — a next generation metal-free technology with long carbon fibers for strength.

An implant material that is engineered to last



The CoLink PCR plate has an increased fatigue strength which means that the implant can withstand a higher repetitive load, **more than 2.5x higher** than its Titanium Alloy counterpart, at the same number of loading cycles (steps).[2]

See more of the bone, less of the implant



▶ CoLink PCR ▶ Metal plate

Radiolucent artifact-free imaging, with plates invisible on X-ray. Barium sulfate is added for slight visibility.

DESIGNED FOR BETTER, SAFER, OPTIMIZED PROCEDURES

Earlier callus formation and return to function

A less stiff material produces greater callus formation [3]

Enhanced visualization of the healing site

Radiolucency and artifact-free imaging provides more accurate assessment during healing [4]

Easier revisions, when necessary

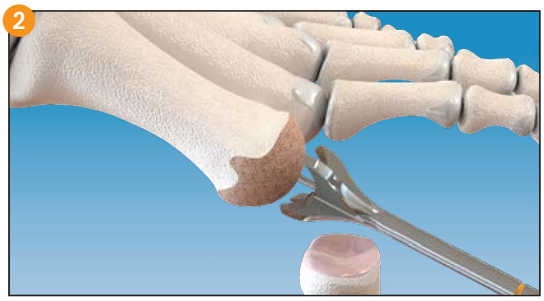
Reduced tissue adhesion and bone ongrowth with no cold welding of screws enables easier hardware removal [3]

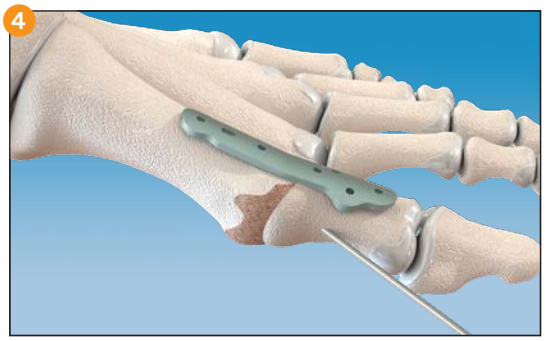
2. Data on file at In2Bones. Testing data is specific to the CoLink PCR MTP Plate. Mechanical Benchmark of Carbon Fiber PEEK-OPTIMA™ Ultra-Reinforced vs Ti 6Al-4V Plates undergoing Static and Dynamic Testing per ASTM F382-99 (2008).
3. Tarallo L, Mugnai R, Adani R, Zambianchi F, Catani F, A New Volar Plate made of Carbon-Fiber-Reinforced Polyetheretherketone for Distal Radius Fracture: Analysis of 40 Cases, *J Orthop Traumatol*, 2014 Dec; 15(4): 277-83
4. Jo Wilson, PhD, Matthew Cantwell; Polyether Ether Ketone (PEEK) Carbone Fiber Composites May Improve Healing of Fractures Stabilized with Intramedullary Nails. (Basic Science Focus Forum, paper #4, 2014) 155.

SURGICAL TECHNIQUE

CoLink® PCR

CARBON-FIBER REINFORCED PLATING





Incision/Exposure

1 Following a dorsal longitudinal incision, displace the phalanx plantarly to expose the metatarsal head. Using a powered drill, place a Guide Wire proximally through the center of the metatarsal head and into the diaphysis.

Joint Preparation

2 Place the largest diameter Reamer over the Guide Wire and gently ream the metatarsal head until bleeding subchondral bone becomes visible on the joint surface. Downsize and repeat with the reamers until the appropriate size is found. Remove the Guide Wire.

3 Place the Guide Wire in the center of the articular cartilage of the proximal phalanx. Directed through the diaphysis, care should be taken not to penetrate the interphalangeal joint.

Begin reaming with the smallest diameter Cup Reamer and end with the same diameter as the last Cone Reamer used on the metatarsal head. Remove the Guide Wire.

Note: *The metatarsal and phalangeal reaming should end with the same size.*

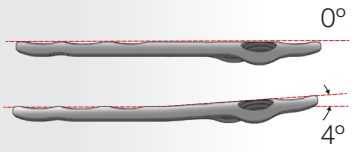
Provisional Fixation / Trial Plate Evaluation

4 Place a provisional Guide Wire across the joint through the plantar aspect while aligning the joint in the desired final arthrodesis position.

With provisional fixation in place, use the Trial Plates to determine the appropriate sizing, configuration, and placement.

Note: *Plate contouring/bending is not possible with this implant material. Plate benders are not included in the instrumentation.*

CoLink® PCR MTP Plate
Available in 0° and 4° dorsiflexion configurations. All plates feature a 5° valgus angle.



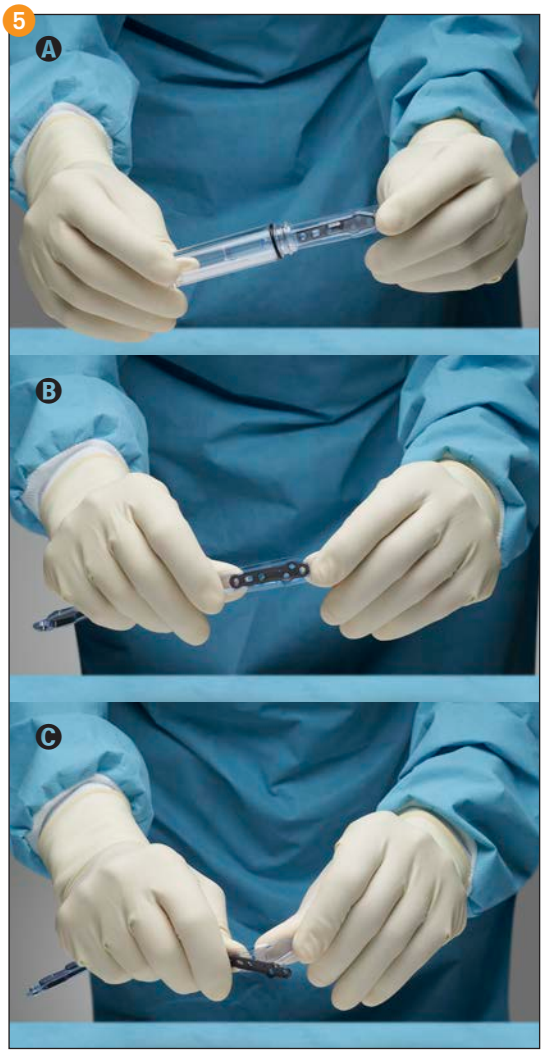


Plate Unpackaging

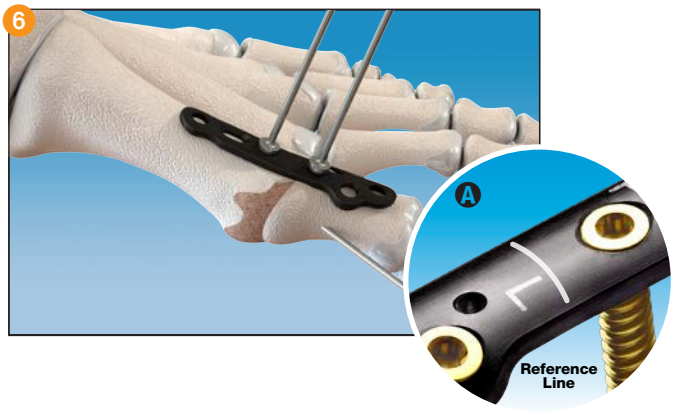
5 Upon receipt of the inner tube into the sterile field, remove the cap and carefully extract the clamshell and plate assembly. A

Open the clamshell to reveal the plate and grasp the clamshell tab with one hand while securing the plate in place with the other. B

Simultaneously pull back on the tab while securing the plate and applying counter-pressure to expose the plate and enable ease of removal from the packaging. C

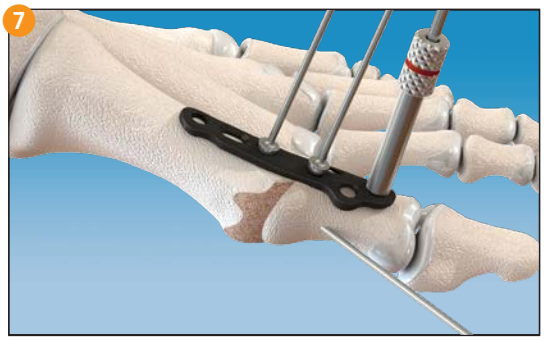
Plate Position

6 Position the plate over the joint and confirm placement with the use of fluoroscopy. The plate has a reference line to use as a guide. A Secure the plate with two Olive Wires.



CoLink® PCR

CARBON-FIBER REINFORCED PLATING



Note: *Excessive force from the screw head may damage the plate. A torque limiting handle is provided in the instrumentation to prevent any excessive torque application. Take care to stop advancing all screws when they are in contact and flush with the plate.*

Distal Screws

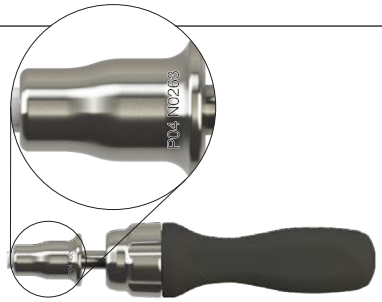
7 Following the suggested screw sequence A, prepare the distal screws using the corresponding Drill and Drill Guide. B

8 Seat the appropriate screws to the plate using the torque limiting handle (P04 N0263).

Positional Slot Screw

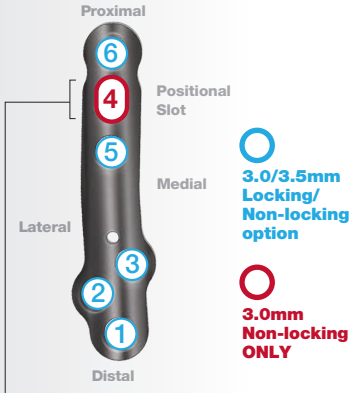
9 Using the Non-Locking Drill Guide for 3.0mm screws, prepare a pilot hole in the proximal side of the positional slot. Measure the depth and insert the appropriate length **3.0mm Non-Locking Screw** into the slot.

10 Once the slot screw is seated prepare the remaining proximal holes with the appropriate Drill and Drill Guide combination and fully seat the corresponding screws to the plate.



Torque-Limiting Driver Handle (P04 N0263)

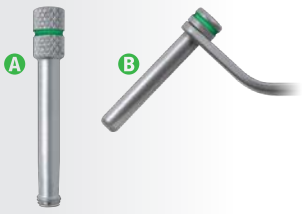
A SCREW SIZE & SEQUENCE



Important Note: The Positional Slot 4 will only accept a size 3.0mm non-locking screw. Deviations from a 3.0mm non-locking screw is not advised.

B Color-coded Drill Guides:

= For 3.0mm Screws
= For 3.5mm Screws



A Locking Drill Guides
B Non-Locking Drill Guide

Optional External Compression Screw

11 Per surgeon preference, an optional external compression screw may be placed across the fusion site after the positional slot screw, but before placing the proximal screws in holes five and six, to add additional stability.

Closure

Close by preferred methods.

Removal Technique

For removal, use the supplied CoLink® PCR Plating System instrument set to first remove the plate screws and finally remove the plate from the bone.

CoLink® PCR

CARBON-FIBER REINFORCED PLATING

ORDERING INFO

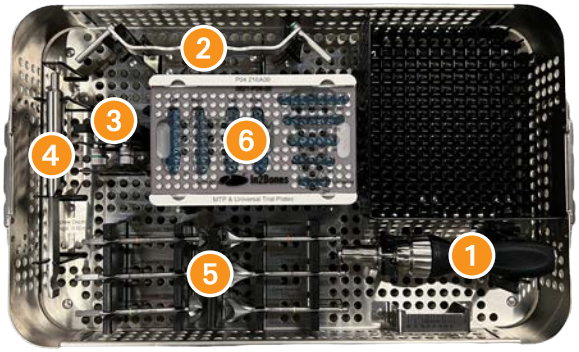
CoLink® PCR NX Narrow MTP Plates

CATALOG NO .....DESCRIPTION

P40 SP138.. MTP Plate NX, Narrow, 0° DF, 6-Hole, **R**ight
P40 SP238.. MTP Plate NX, Narrow, 0° DF, 6-Hole, **L**eft
P40 SP139.. MTP Plate NX, Narrow, 4° DF, 6-Hole, **R**ight
P40 SP239.. MTP Plate NX, Narrow, 4° DF, 6-Hole, **L**eft

CoLink® PCR Universal Plates

P40 SP012.. Universal Plate, 2-Hole
P40 SP013.. Universal Plate, 3-Hole
P40 SP014.. Universal Plate, 4-Hole
P40 SP015.. Universal Plate, 5-Hole
P40 SP016.. Universal Plate, 6-Hole

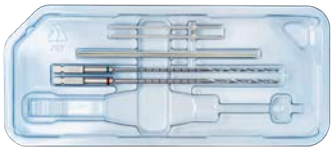


INSTRUMENT TRAY

1. Torque-Limiting Driver Handle
2. Non-Locking Drill Guide
3. Locking Drill Guides
4. Depth Gauge
5. Cup & Cone Reamers
6. Plate Trials

CoLink® Dense Bone Sterile Disposable Instruments

for 3.0 and 3.5mm Screws - P04 S0003



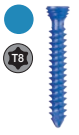
2 - Guide Wire, Single Trocar, .062x4"
1 - 2.8x40mm Drill
1 - 2.3x40mm Drill
2 - Olive Wires 0.045x2.5"

T8 DRIVER, AO, Sterile - P04 S0051

CoLink® Plate Screw Non-Locking

CATALOG NO	DIA x LENGTH, STYLE
V30 ST208 ...	3.0 x 8mm, Non-Locking
V30 ST210 ...	3.0 x 10mm, Non-Locking
V30 ST212 ...	3.0 x 12mm, Non-Locking
V30 ST214 ...	3.0 x 14mm, Non-Locking
V30 ST216 ...	3.0 x 16mm, Non-Locking
V30 ST218 ...	3.0 x 18mm, Non-Locking
V30 ST220 ...	3.0 x 20mm, Non-Locking
V30 ST222 ...	3.0 x 22mm, Non-Locking
V30 ST224 ...	3.0 x 24mm, Non-Locking
V30 ST226 ...	3.0 x 26mm, Non-Locking
V30 ST228 ...	3.0 x 28mm, Non-Locking
V30 ST230 ...	3.0 x 30mm, Non-Locking
V35 ST208 ...	3.5 x 8mm, Non-Locking
V35 ST210 ...	3.5 x 10mm, Non-Locking
V35 ST212 ...	3.5 x 12mm, Non-Locking
V35 ST214 ...	3.5 x 14mm, Non-Locking
V35 ST216 ...	3.5 x 16mm, Non-Locking
V35 ST218 ...	3.5 x 18mm, Non-Locking
V35 ST220 ...	3.5 x 20mm, Non-Locking
V35 ST222 ...	3.5 x 22mm, Non-Locking
V35 ST224 ...	3.5 x 24mm, Non-Locking
V35 ST226 ...	3.5 x 26mm, Non-Locking
V35 ST228 ...	3.5 x 28mm, Non-Locking
V35 ST230 ...	3.5 x 30mm, Non-Locking
V35 ST232 ...	3.5 x 32mm, Non-Locking
V35 ST234 ...	3.5 x 34mm, Non-Locking
V35 ST236 ...	3.5 x 36mm, Non-Locking
V35 ST238 ...	3.5 x 38mm, Non-Locking
V35 ST240 ...	3.5 x 40mm, Non-Locking

CoLink® Plate Screw Locking



CATALOG NO	DIA x LENGTH, STYLE
V30 ST308 ...	3.0 x 8mm, Locking
V30 ST310 ...	3.0 x 10mm, Locking
V30 ST312 ...	3.0 x 12mm, Locking
V30 ST314 ...	3.0 x 14mm, Locking
V30 ST316 ...	3.0 x 16mm, Locking
V30 ST318 ...	3.0 x 18mm, Locking
V30 ST320 ...	3.0 x 20mm, Locking
V30 ST322 ...	3.0 x 22mm, Locking
V30 ST324 ...	3.0 x 24mm, Locking
V30 ST326 ...	3.0 x 26mm, Locking
V30 ST328 ...	3.0 x 28mm, Locking
V30 ST330 ...	3.0 x 30mm, Locking
V35 ST308 ...	3.5 x 8mm, Locking
V35 ST310 ...	3.5 x 10mm, Locking
V35 ST312 ...	3.5 x 12mm, Locking
V35 ST314 ...	3.5 x 14mm, Locking
V35 ST316 ...	3.5 x 16mm, Locking
V35 ST318 ...	3.5 x 18mm, Locking
V35 ST320 ...	3.5 x 20mm, Locking
V35 ST322 ...	3.5 x 22mm, Locking
V35 ST324 ...	3.5 x 24mm, Locking
V35 ST326 ...	3.5 x 26mm, Locking
V35 ST328 ...	3.5 x 28mm, Locking
V35 ST330 ...	3.5 x 30mm, Locking
V35 ST332 ...	3.5 x 32mm, Locking
V35 ST334 ...	3.5 x 34mm, Locking
V35 ST336 ...	3.5 x 36mm, Locking
V35 ST338 ...	3.5 x 38mm, Locking
V35 ST340 ...	3.5 x 40mm, Locking

Sterile Plate and Screw Tube ID Legend

COLOR CODE:
SCREW STYLE / DIAMETER
L = Locking / 3.0 **NL** = Non-Locking

Example Screw code designates: Locking 3.0 x 18mm

Invibio
PEEK-OPTIMA
ULTRA-REINFORCED

US Office
In2Bones Global, Inc. • Memphis, TN • USA
844. 602. 6637 • Info@i2b-USA.com

International Office
In2Bones SAS • Lyon • France
+33 (0)4 72 29 26 26

In2Bones.com

FOLLOW US....