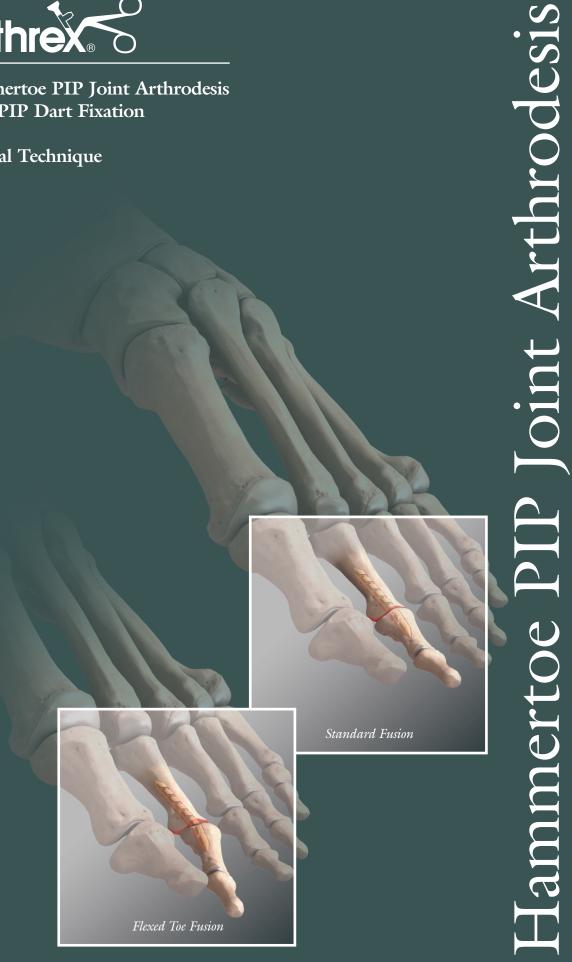


Hammertoe PIP Joint Arthrodesis using PIP Dart Fixation

Surgical Technique





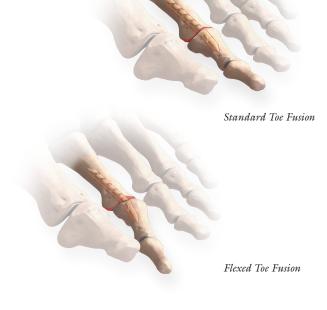
PIP Dart Fixation

PIP Dart Fixation offers the surgeon the advantage of exact sizing PIPJ implants every time, without violating or leaving material across the DIPJ

The PIP DART is made out of PEEK material and takes the guesswork out of pin placement for PIP joint fusions. The PIP Dart's all-inside technique is simple and provides an exact fit of the nonabsorbable implant. This unique system gives the surgeon the ability to fuse the PIP joint without leaving metal or bioabsorbable material across the distal phalanx.

Advantages:

- Exact sizing Drill, measure and cut the PIP Dart the exact length of the proximal and middle phalanx (PIPJ fusions)
- 10° bend or straight versions to mimic normal toe anatomy
- Distal pin migration eliminated due to mobile DIP joint
- Dart material allows bending of the toe after implantation –
 "flexed toe fusion"
- Barbed design helps to hold compression
- Ridges help prevent rotation
- PEEK material radiolucent and strong but easily cut
- Superior shear strength compared to absorbable pins
- No metal pins
- No special handling and lightweight, slightly flexible
- Easily revised can drill through and cut to length
- All-inside technique no "fiddle" factor
- Sterile kits with all instruments needed



Indications:

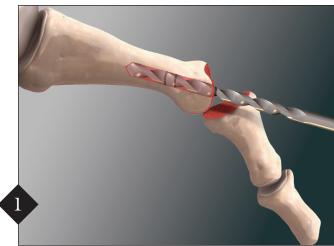
- Arthroplasty and/or fusion of the proximal, middle and distal phalanx of the toe
- Fusions or transverse fractures of the phalanges, metatarsals, and metacarpals

Formula:

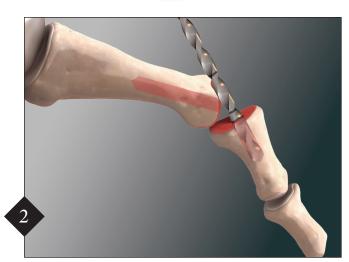
- PEEK Poly-ether-ether-ketone
- Documented material safety*
 *data on file



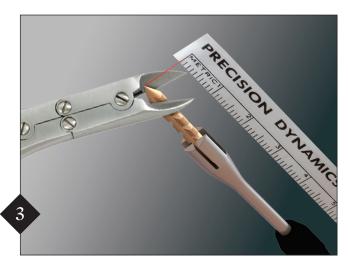
PIP Darts - 2.5 mm and 3 mm



After resecting both sides of the joint with an oscillating saw or rongeur, use the 1.1 mm Guidewire or the 1.6 mm laser-marked Guidewire in the kit to predrill the pilot hole. Advance the drill to the desired depth or a maximum depth of 20 mm equal to the last laser line on the drill. In this illustration the depth is measured at 20 mm.

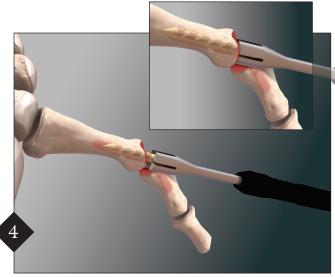


Drill through the middle phalanx, up to, but not through the DIP joint to a maximum depth of 10 mm. If less than 10 mm is drilled, take note and plan to cut a portion of the PIP Dart prior to insertion into the middle phalanx. Measure and note depth. In this illustration the length of the middle phalanx is 10 mm.

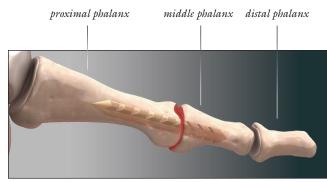


If the proximal phalanx was drilled less than 20 mm the difference should be cut using a bone cutter. The tip can also be cut to prevent excessive recession of the dart in soft bone.

Cut the PIP Dart with the double action Bone Cutting Forceps, leaving a tapered end for easy insertion in the proximal phalanx.



Place the proximal portion of the dart into the proximal phalanx by using gentle force while holding the dart steady until the driver is flush with the bone and then remove the inserter. *Note: If the dart will not insert manually due to hard bone, use the next size larger drill until the dart can be inserted with minimal force.*





Using Mosquito Forceps hold the dart firmly at the tip. Once the tip enters into the middle phalanx, firmly compress the middle phalanx onto the proximal phalanx until the joint is flush. The repair is complete.



Ordering Information

AR-4154PS-3010 PIP Dart Sterile DS kit includes:

PIP Dart w/ 10° bend, 2.5 mm x 30 mm Inserter, 2.5 mm

Drill, 1.6 mm

Drill, 2.0 mm

Drill, 2.5 mm

Guidewire w/Double Trocar Tip, $1.5 \ mm$ Guidewire w/Trocar Tip, $1.1 \ mm$

AR-4155PS-3010 PIP Dart Sterile DS kit includes:

PIP Dart with 10° bend, 3.0 mm x 30 mm Inserter, 3.0 mm

Drill, 2.0 mm

Drill, 2.5 mm

Drill, 3.0 mm

Guidewire w/Double Trocar Tip, 1.9 mm Guidewire w/Trocar Tip, 1.1 mm AR-4154PS-3000 PIP Dart Sterile DS kit includes:

PIP Dart, straight, 2.5 mm x 30 mm

Inserter, 2.5 mm

Drill, 1.6 mm Drill, 2.0 mm

Drill, 2.5 mm

Guidewire w/Double Trocar Tip, 1.9 mm Guidewire w/Trocar Tip, 1.1 mm

AR-4155PS-3000 PIP Dart Sterile DS kit includes:

PIP Dart, straight, 3.0 mm x 30 mm Inserter, 3.0 mm

Drill, 2.0 mm

Drill, 2.5 mm

Drill, 3.0 mm

Guidewire w/Double Trocar Tip, 1.9 mm Guidewire w/Trocar Tip, 1.1 mm



2.5 mm PIP Dart with 10° Bend – AR-4154PS-3010



3 mm PIP Dart with 10° Bend – AR-4155PS-3010

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.



View U.S. Patent information at www.arthrex.com/corporate/virtual-patent-marking \$\ ^{\circ}2016\$, Arthrex Inc. All rights reserved. LT1-0466-EN_B