

DigiFuse™

Cannulated Intramedullary Fusion System



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The DigiFuse™ cannulated implant system is designed for ease of use and enhanced stabilization for intramedullary fusions of the lesser digits. The 2.0mm and 2.5mm screw sizes and standard and short blade options, combined with the zero and ten degrees of plantarflexion, provide a variety of configurations to match patient anatomy and achieve the desired results. Manufactured from titanium alloy, the implants do not require specialized handling prior to surgery. The intramedullary design eliminates patient complications associated with guide wire procedures.

SURGICAL TECHNIQUE

Step 1 – Incision, Exposure and Resection

Perform an incision, of the surgeon's choice, over the proximal interphalangeal (PIP) joint. Reflect the soft tissues surrounding the PIP joint to completely expose it for resection. Determine at this point if the 0° or 10° plantar correction implant will be utilized. While standard perpendicular osteotomies will provide effective results, any resection cuts at this point can be made to reflect the eventual use of the corresponding chosen implant as it relates to plantar correction. Complete the resection of the PIP joint in preparation for PIP joint fusion.

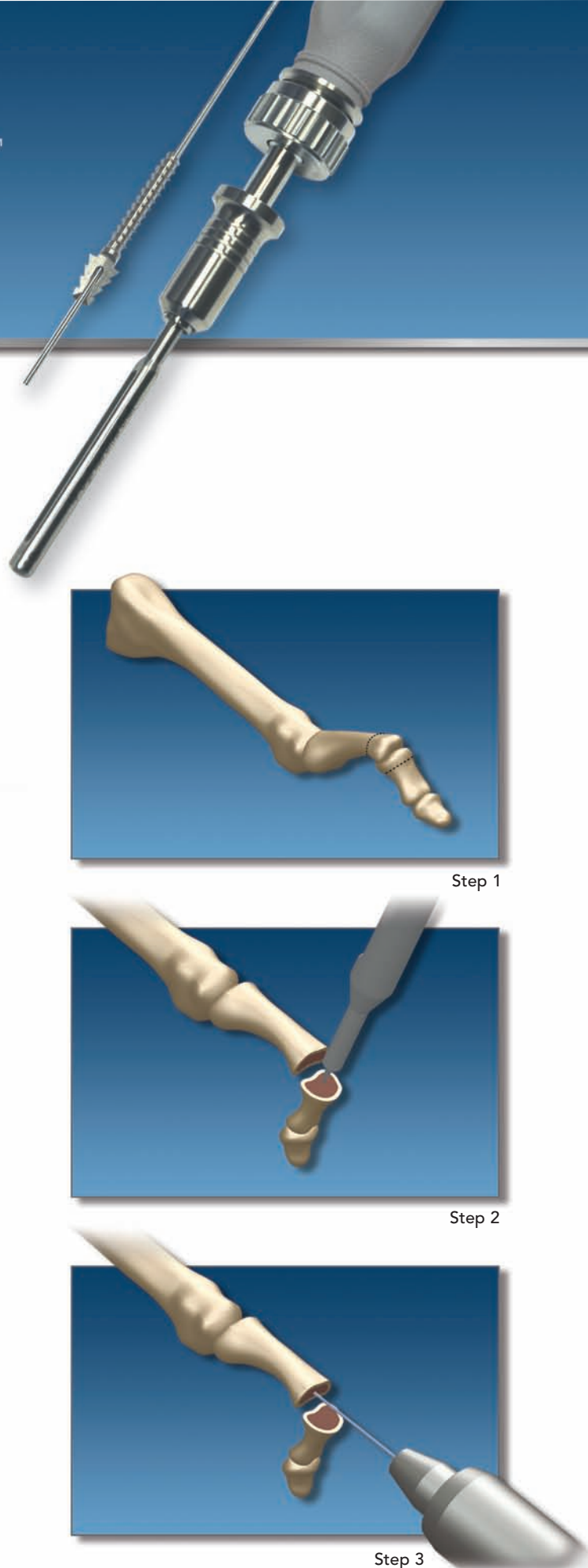
Step 2 – Broaching the Middle Phalanx

Position the tip of the broach on the middle phalanx in the correct orientation and insert the broach while holding the middle phalanx to secure it. The broach features a marked line indicating the correct dorsal positioning of the implant when situated in the phalanx and should be oriented in the 12 o'clock position during broaching. The broach should be inserted until the shoulder contacts the resected portion of the middle phalanx.

In soft bone cases, broaching can be eliminated at the surgeons discretion.

Step 3 – Placement of Guide Wire

Using the included guide wire, drive the wire into the center of the resection site parallel to the longitudinal axis of the phalanx. Advance the wire through the medullary canal into the subchondral bone, closest to the MP joint. Intra-operative radiographs should be taken at this time to verify proper positioning of the guide wire.



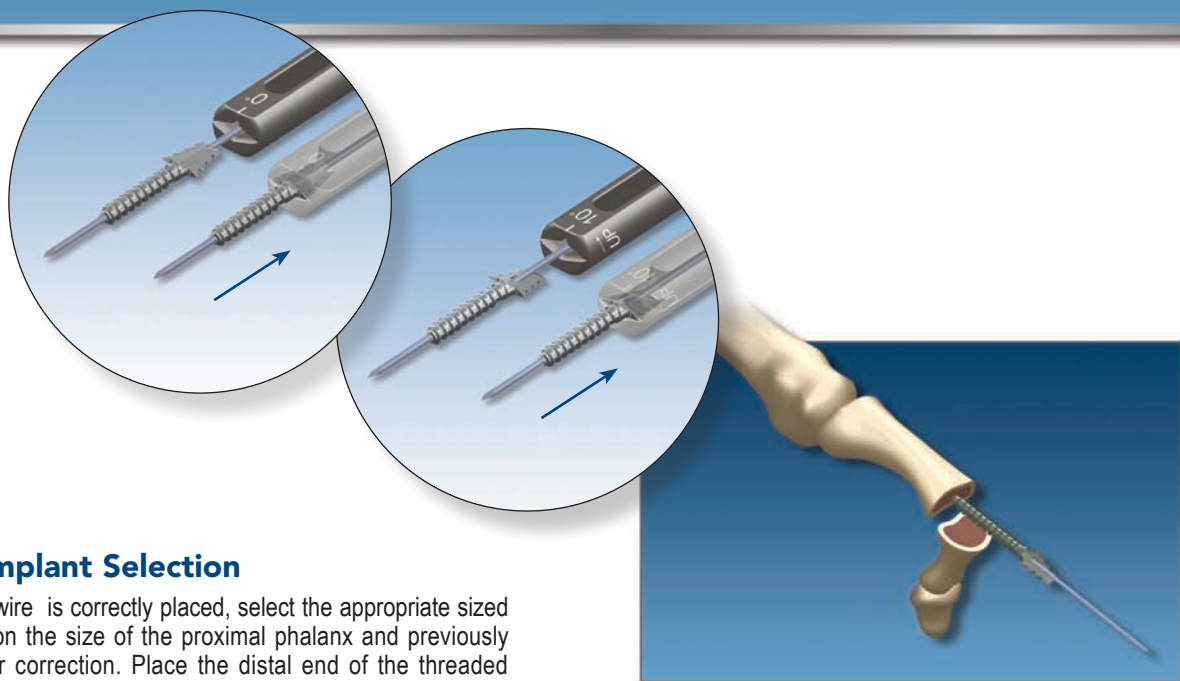
Step 1

Step 2

Step 3

System Features

- Combined screw/anchor blade system provides enhanced stabilization
- Cannulated implant/instruments aid in accurate placement
- 2.0mm and 2.5mm diameters with 0° and 10° angle options
- Standard and short blade options cover a wide range of phalanx anatomy
- Manufactured from titanium alloy for superior strength and biocompatibility



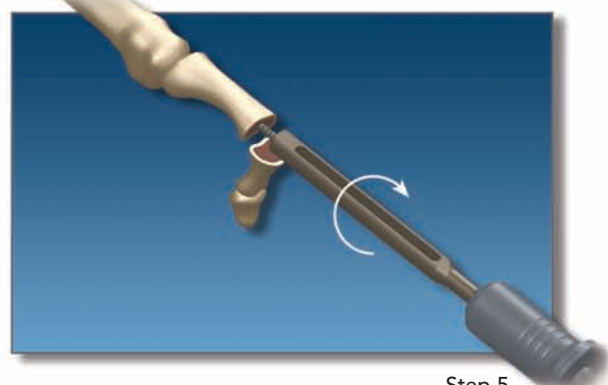
Step 4 – Implant Selection

After the guide wire is correctly placed, select the appropriate sized implant based on the size of the proximal phalanx and previously selected plantar correction. Place the distal end of the threaded portion of the implant over the guide wire and push the implant up to the resection site.

Step 4

Step 5 – Implant Placement in Proximal Phalanx

Slide the driver (0° or 10°), over the guide wire and engage the barbed end of the implant. Care should be taken to make sure the 0° or 10° driver is utilized on the corresponding 0° or 10° implant. Turn the screw into the proximal phalanx until the threaded portion of the implant is completely or near completely recessed into the phalanx and the dorsal mark on the driver is aligned in the 12 o'clock position. It is important to leave blade tips proud of the proximal phalanx to maximize engagement in the middle phalanx.



Step 5

Step 6 – Placement of Middle Phalanx and Closure

Manually distract the middle phalanx and place the broached hole over the barbed end of the implant that is protruding from the proximal phalanx using care to align the broached hole with the implant blade. Using firm pressure press the middle phalanx onto the barbed end until the resected surfaces of the middle and proximal phalanx meet. Once the implant is fully seated, check manually for retention. Verification can be confirmed by utilizing intra-operative radiographs in multiple axes. Close the incisions with the suture material of choice. Post operative care is according to surgeon preference and should follow protocol for fusions of a similar nature.



Step 6

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Ordering Information

Implants / Guide Wires

Catalog No.	Description
DF-2000	DigiFuse Implant 2.0mm - 0° Angle
DF-2000-S	DigiFuse Implant 2.0mm - 0° Angle - Short
DF-2010	DigiFuse Implant 2.0mm - 10° Angle
DF-2010-S	DigiFuse Implant 2.0mm - 10° Angle - Short
DF-2500	DigiFuse Implant 2.5mm - 0° Angle
DF-2510	DigiFuse Implant 2.5mm - 10° Angle
DW-2590	DigiFuse Guide Wire (.80 x 70mm)

Instrumentation

Catalog No.	Description
DF-1500	DigiFuse Ratchet Handle
DF-2600	DigiFuse Driver Shaft - 0°
DF-2610	DigiFuse Driver Shaft - 10°
DF-2670	DigiFuse Broach
DF-2680	DigiFuse Screw Pick Up
DT-3500	DigiFuse Sterilization Tray

DigiFuse™ System

Catalog No.	Description
DT-1000	Instruments and Implant System



Also available from Metasurg

BioMotion™

Cannulated 1st MPJ Hemi Implant System



TruArch™

Cannulated Subtalar Implant System



Ti6™

Internal Fixation System



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