FOOTMOTION HAMMERTOE
PROXIMAL INTERPHALANGEAL IMPLANTS

- Comprehensive range of intramedullary implants:
  4 sizes with and without plantar flexion
- Designed for optimized anchorage
- Ergonomic instruments
FOOTMOTION HAMMERTOE

Indications: The implants of the Footmotion HammerToe range are intended for proximal interphalangeal arthrodeses of lesser toes in adults.

Contraindications:
- Serious vascular deterioration, bone devitalization.
- Pregnancy.
- Acute or chronic local or systemic infections.
- Lack of musculo-cutaneous cover, severe vascular deficiency affecting the concerned area.
- Insufficient bone quality preventing a good fixation of the implants into the bone.
- Muscular deficit, neurological deficiency or behavioral disorders, which could submit the implant to abnormal mechanical strains.
- Allergy to one of the materials used or sensitivity to foreign bodies.
- Serious problems of non-compliance, mental or neurological disorders, failure to follow post-operative care recommendations.
- Unstable physical and/or mental condition.

TECHNICAL FEATURES

HAMMERTOE INTRAMEDULLARY IMPLANTS

A COMPREHENSIVE RANGE OF PROXIMAL INTERPHALANGEAL IMPLANTS

Implants of the Footmotion HammerToe range are one-piece intramedullary implants:
- 3 sizes to accommodate various anatomical and bone quality needs.
- 2 angle configurations: 0° or 10° angulation of the distal part, for S, M and L sizes only.
- Titanium alloy implants.
- Proximal part oriented at 90° from the distal part to optimize the mechanical flexion properties.

1 implant (size R) specifically designed for revision surgeries and osteoporotic bone (0° angulation only).

IMPLANT TECHNICAL FEATURES

- Distal tip to center the implant.
- Central hole to grasp the implant with the implant holder.
- Central mechanical stop to avoid excessive implant insertion.

Designed for optimized anchorage:
1. Distal grooves,
2. Proximal grooves,
3. Two elastic proximal rods:
   - to obtain a spring effect,
   - to increase the resistance to flexion in the proximal phalanx,
4. Small hooks.

ERGONOMIC INSTRUMENTS

THE REAMER
A specific Ø7 mm reamer (ANC508) is provided to gently remove the cartilage of the middle and proximal phalanges, to prepare the joint surface for the arthrodesis while minimizing shortening or damage of the surrounding soft tissues.

ONE DISTAL AND ONE PROXIMAL PUNCHES ADAPTED TO EACH IMPLANT

These punches have dimensions and shapes specifically designed to match with the implant design. Proximal punches match with the implant in closed position. Each punch is specifically dedicated to the distal or proximal part of the implant to prepare middle and proximal phalanxes medullary canal, facilitating the implant insertion while ensuring an optimized anchorage.

DRILLS
In order to prepare the proximal punch insertion and the implant insertion, two drills are available:
- Ø1.8 mm (ANC347) for sizes S, M and R,
- Ø2.2 mm (ANC844) for size L.

THE IMPLANT HOLDER
The implant holder (ANC610) used to insert the implant in the proximal phalanx can stay engaged during the reduction of the middle phalanx (see “Surgical technique”, step 7).
SURGICAL TECHNIQUE

1.a A dorsolinear incision is created over the proximal interphalangeal joint. Resect the joint of the proximal phalanx (P1) following the usual techniques and ream it using the reamer (ANC508) (a) to obtain a regular flat surface. Then, resect the joint of the middle phalanx (P2) (b) using the reamer (ANC508). NB: To get a better consolidation of the joint, make sure that all the joint capsule is well removed.

2. Choose the appropriate implant. The implant size is determined thanks to the template (ANC868) and according to the quality and size of the bone. The angulation is selected according to the plantar flexion angulation desired (0° or 10°). The implant choice is left to the discretion of the surgeon.

3. Insert and bury the proximal punch - Sizes S, M and R - Large (ANC865) into P1.

4. Insert and bury the distal punch size M (ANC625) into P2.

5. The implant is maintained by a silicone sleeve in the sterile double tube. Use the holder for interphalangeal implant (ANC610) to grab the implant and remove it from the double tube.

6. Then, insert the implant into P1 until the mechanical stop is reached (1).

7. Manually reduce P2 over the distal part of the implant. The holder for interphalangeal implant (ANC610) can stay engaged during the reduction of the middle phalanx over the implant.

8. Remove the holder for interphalangeal implant (ANC610) and manually complete the reduction to ensure a good contact between the two surfaces.

Option

• If the canal width is too narrow, drill using the Ø1.8 mm drill bit (ANC347) into P1. Thus, reinsert the proximal punch - Sizes S, M and R - Large (ANC865).

• If the anchorage of the proximal punch is not efficient, insert and bury the bigger proximal punch (ANC866) into P1. Then, select the corresponding size L implant.

STEPS 3 & 4

Instrument positioning

Pay attention to the orientation of the punch. The punch insertion shall be inserted in one single movement (without crosswise and rotary movements) to obtain an implant adjusted imprint.
### IMPLANTS AND INSTRUMENTS REFERENCES

#### FOOTMOTION HAMMERTOE IMPLANTS

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<tr>
<th>Ref.</th>
<th>Description</th>
<th>Qty</th>
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<tbody>
<tr>
<td>D0MAT3L19-ST</td>
<td>Proximal interphalangeal intramedullary implant - Size S - Large - 0°</td>
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<tr>
<td>D0MAT4L19-ST</td>
<td>Proximal interphalangeal intramedullary implant - Size R - Large - 0°</td>
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<td>D0MAT4L20-ST</td>
<td>Proximal interphalangeal intramedullary implant - Size M - Large - 0°</td>
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<td>D0MAT4L22-ST</td>
<td>Proximal interphalangeal intramedullary implant - Size L - Large - 0°</td>
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<td>D10MAT3L19-ST</td>
<td>Proximal interphalangeal intramedullary implant - Size S - Large - 10°</td>
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<td>D10MAT4L22-ST</td>
<td>Proximal interphalangeal intramedullary implant - Size L - Large - 10°</td>
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</table>

* Delivered in sterile packaging.

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<table>
<thead>
<tr>
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<th>Description</th>
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<tbody>
<tr>
<td>ANC347</td>
<td>Ø1.8 mm quick coupling drill bit - L 75 mm</td>
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<tr>
<td>ANC506</td>
<td>Distal punch - Size S</td>
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<tr>
<td>ANC508</td>
<td>Ø7 mm reamer</td>
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<tr>
<td>ANC610</td>
<td>Holder for interphalangeal implant</td>
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<td>ANC624</td>
<td>Distal punch - Size R</td>
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<td>ANC625</td>
<td>Distal punch - Size M</td>
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<td>ANC626</td>
<td>Distal punch - Size L</td>
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<td>ANC844</td>
<td>Ø2.2 mm quick coupling drill bit - L 75 mm</td>
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<td>ANC865</td>
<td>Proximal punch - Sizes S, M and R - Large</td>
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<tr>
<td>ANC866</td>
<td>Proximal punch - Size L - Large</td>
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<tr>
<td>ANC868</td>
<td>Template for proximal interphalangeal intramedullary implant - Large</td>
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Punches and drills are identified with a silicone colored ring matching with the color code of the implant:
- Size S: grey ring
- Size R: yellow ring
- Size M: pink ring
- Size L: blue ring

### INSTRUMENTS REFERENCES

#### FOOTMOTION HAMMERTOE INSTRUMENTATION SET

ANC500/B