Nitinol Staples
Surgical Technique | TriMed Staples System
**Preparation and Provisional Fixation**

- Provisionally fix the prepared fusion, fracture or osteotomy site with K-wires.

**Note:** For optimal seating of the staple ensure the approximated bone surfaces are even.

**Drill and Measure**

- Adjust Drill Guide to desired implant width, and ensure drill sleeves are flush with the bone.
  - Staple sizes 08 - 12mm: use 2.0mm (yellow) drill
  - Staple sizes 15 - 25mm: use 2.3mm (red) drill
- Drill first hole and insert drop-in pin through the sleeve.
- Drill second hole and remove drill guide and pin.
- Measure the length for each staple leg with depth gauge.

**Distract and Insert**

- Place staple onto the Distraction Clamp.
  - Staple sizes 08 - 15mm: use Small Distraction Clamp
  - Staple sizes 18 - 25mm: use Large Distraction Clamp
- Tighten thumb nut until staple legs are parallel. Avoid over tightening.
- Align legs with the pre-drilled holes and insert until the lip of the Distraction Clamp contacts the bone surface.
- Loosen thumb nut and remove Distraction Clamp.
Impact

- Using the Mallet and Impactor, impact the staple until it is flush with bone surface.

Final Fixation

- If needed, repeat steps above for 90/90 fixation with another staple.
All implants made from surgical grade Nitinol

**Nitinol Staples**

![Symmetrical and Asymmetrical Staples](image)

<table>
<thead>
<tr>
<th>Sizes</th>
<th>Width (mm)</th>
<th>Leg Length (mm)</th>
<th>Drill</th>
<th>Distractor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>08</td>
<td>10</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Sym.</td>
<td>08/08</td>
<td>10/10</td>
<td>10/10</td>
<td>10/10</td>
</tr>
<tr>
<td>Asym.</td>
<td>13/13</td>
<td>13/15</td>
<td>13/15</td>
<td>15/17</td>
</tr>
<tr>
<td></td>
<td>12/12</td>
<td>13/16</td>
<td>14/14</td>
<td>15/17</td>
</tr>
</tbody>
</table>

- **Drill Guide**: GDSTPL-2.0
- **Impactor**: IMPCT-STPL

---

**Small Distraction Clamp** (for staple widths 8-15mm)

![Small Distraction Clamp](image)

**Large Distraction Clamp** (for staple widths 18-25mm)

![Large Distraction Clamp](image)

---

©2019 TriMed, Inc. All rights reserved. LC-72-0001-001 REV-E (08-19)


The technique presented is one suggested surgical technique. The decision to use a specific implant and the surgical technique must be based on sound medical judgment by the surgeon that takes into consideration factors such as the circumstances and configuration of the injury.

This document is controlled by TriMed, Inc. When downloaded, printed, and/or copied, this document becomes uncontrolled, and users should always check trimedortho.com for the latest version.