# stryker EasyFuse Dynamic Compression System Instruction Manual



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Contents



## Introduction

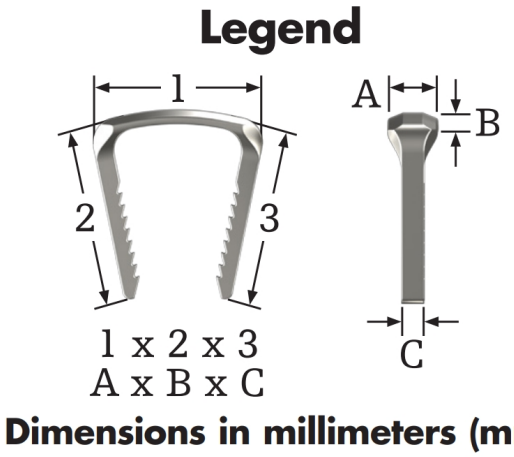
Easy Fuse dynamic compression system is an internal fixation system intended for fractures, osteotomies, and

jointarthrodesis of the mid foot and hind foot. The system is provided as a single-use sterile pack comprising of a bone staple implant and select instruments for implantation. Multiple implants sizes are available consisting of two-leg and four-leg variants with features such as low-profile and wide bridges, as well as multiple leg lengths. Additional instruments are provided in separate, single-use sterile packs. The staple is composed of nickel-titanium (nitinol) alloy per ASTM F2063. EasyFuse implants are provided pre-loaded on a single-use disposable cartridge. Thiscartridge is then attached to an inserter creating the assembly used to implant the staple. The implant is designed to provide sustained compression to facilitate bony fusion.

Proper surgical procedures and techniques are the responsibility of the medical professional. The following guidelines are furnished for information purposes only. Each surgeon must evaluate the appropriateness of the procedures based on his or her personal medical training and experience. Prior to use of the system, the surgeon should refer to the product package insert for complete warnings, precautions, indications, contraindications and adverse effects. Package inserts are also available by contacting the manufacturer. Contact information can be found on the back of this surgical technique and the package insert is available on the website listed.

**Acknowledgments:**
Surgeon design team – The EasyFuse dynamic compression system was developed in conjunction with: John R. Clements, DPM (Roanoke, VA), Kent Ellington, MD (Charlotte, NC), Carroll Jones, MD (Charlotte, NC), John S. Lewis, Jr., MD (Louisville, KY)




## Indications and contraindications

### Indications

The Easy Fuse dynamic compression system is intended to be used for fracture fixation, osteotomy fixation, and joint arthrodesis of the foot and ankle

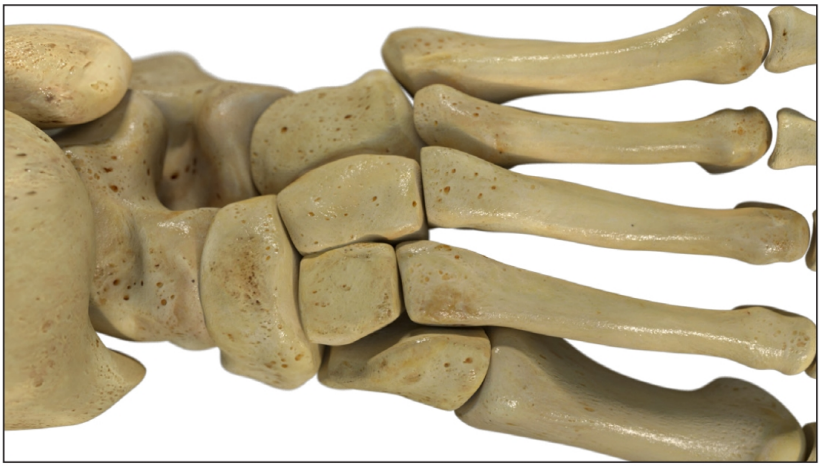
### Contraindications

There are no product specific contraindications.

## Operative technique

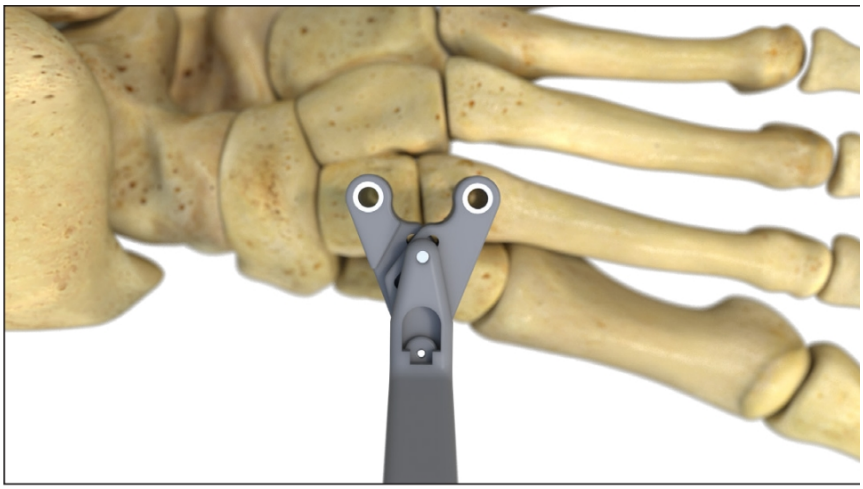
Mid/Hind foot surgical technique

**Prepare fusion site**

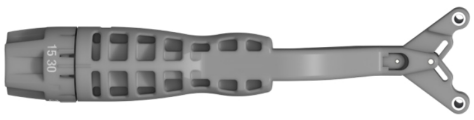


Create the osteotomy and/or prepare the fusion site needed to implant Easy Fuse.

**Size**

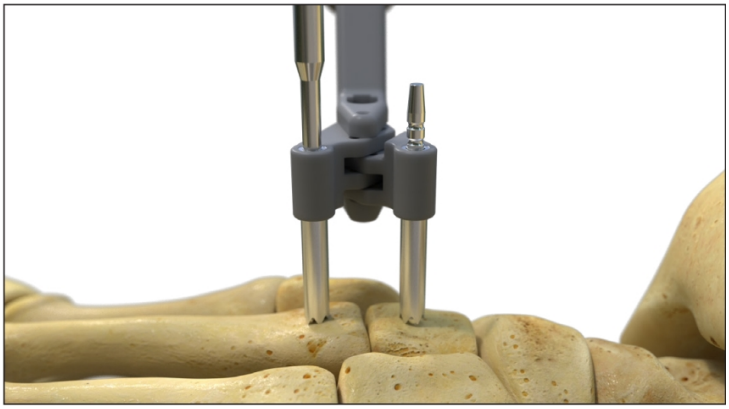


Place the Universal Drill Guide perpendicular across the fixation site to determine the appropriate implant size. Rotate the knob clockwise and select the preferred staple size. Notice the distance between drill holes will change as the knob is rotated to each size.



**Universal Drill Guide**

**Drill**

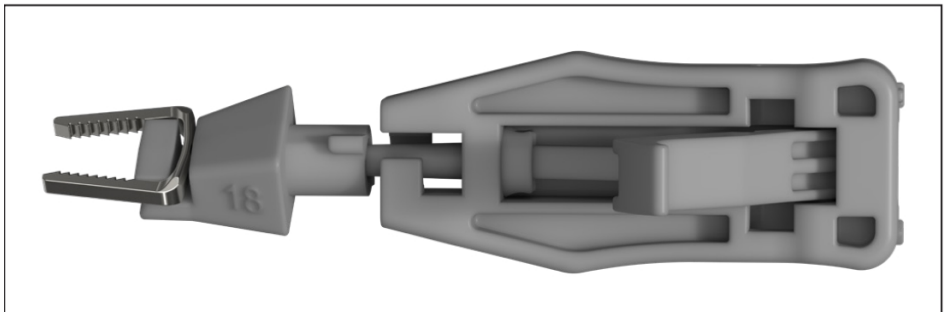


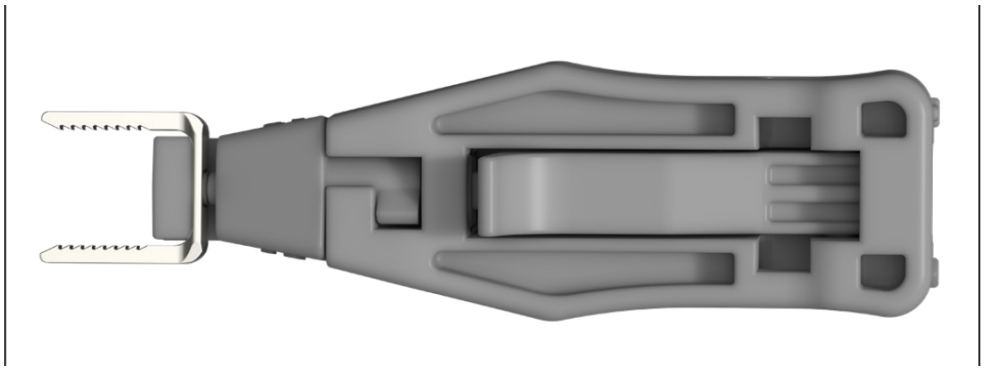
Use the Drill to create a pilot hole in the bone. Use the laser markings on the Drill to measure the drill depth. Prior to drilling any additional holes, place a corresponding

**Locator Pin**

**Drill**

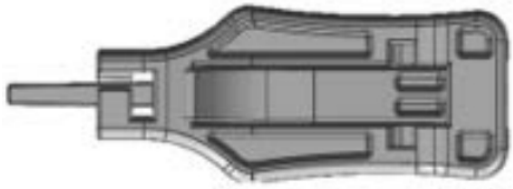
**Prepare inserter**



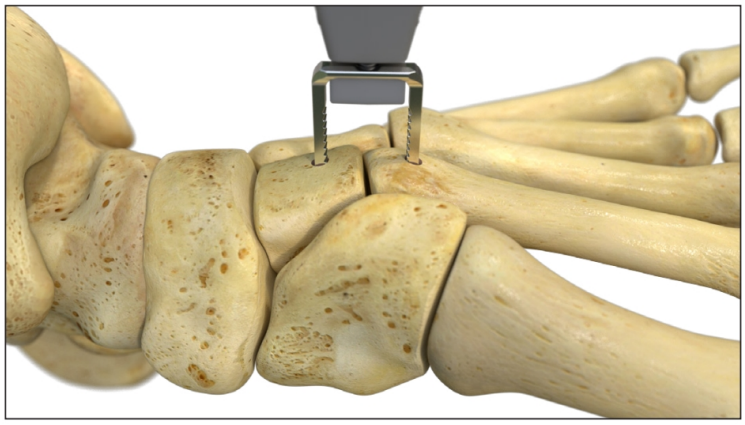
Place the Universal Implant Inserter into its unlocked position by lifting the lever up. Assemble the selected implant Cartridge onto the Universal Inserter by aligning the tabs on the implant Cartridge with the grooves of the Universal Inserter and rotating clockwise until locked.  Proceed to press the lever of the Universal Inserter down to its locked position to outwardly displace the legs of the EasyFuse implant.

**Universal Inserter**



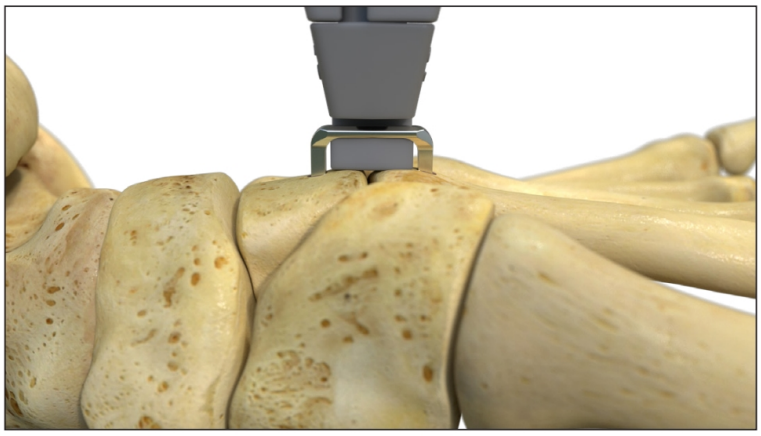
**Implant Cartidge**

**Insert implant**



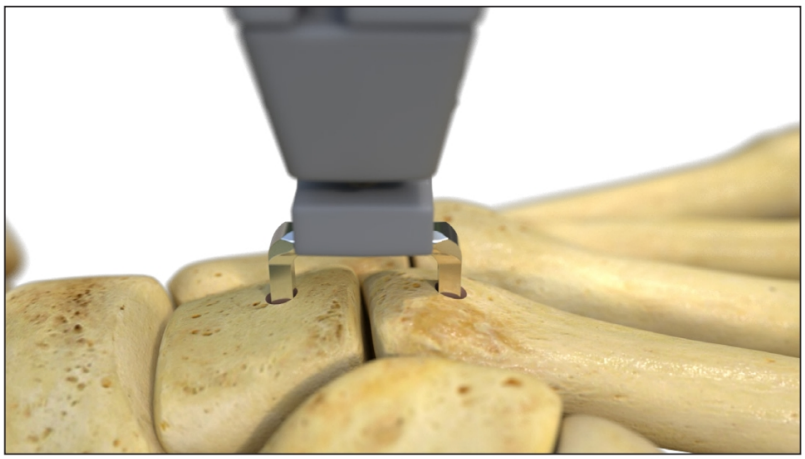
Remove the Locating Pins and Drill Guide before inserting the implant. Position the legs of the EasyFuse over the pilot holes and advance the implant into the holes by hand until fully seated.

**Remove inserter**



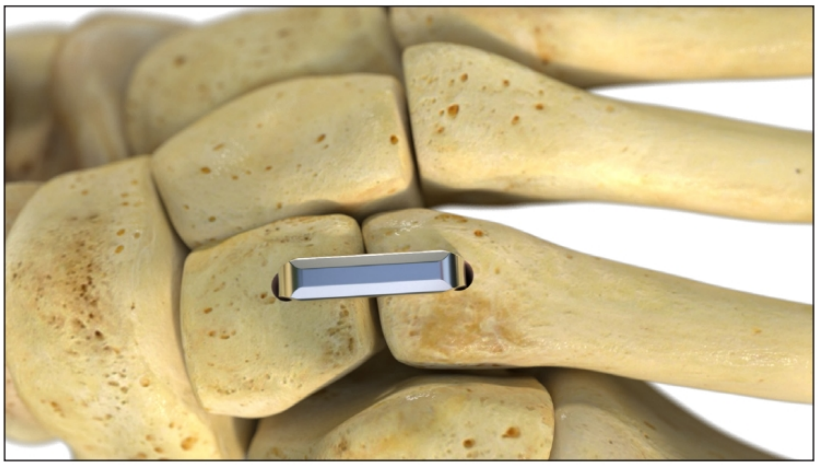
Unlock the Universal Implant Inserter from the implant  by moving the inserter lever to its unlocked position. Slide outward or twist counter-clockwise the Universal Inserter to disengage cartridge from implant.

**Final seat and fluoro check**



If necessary, place the implant Cartridge on the EasyFuse bridge and lightly tap with a mallet on the back of the Inserter until the implant is flush to the bone. Check the final position of the EasyFuse implant under fluoroscopy.

**Additional implants**



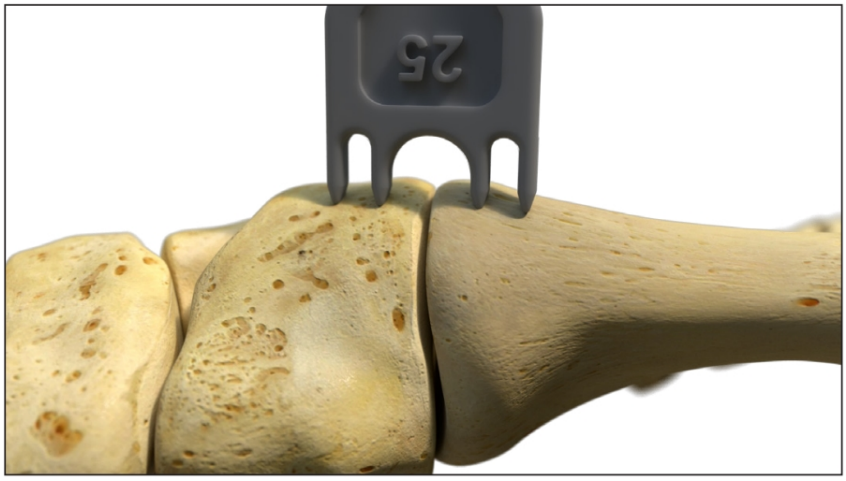
Repeat steps 2 through 7 for each additional Easy Fuse implant used. Tip: If placing 2 EasyFuse implants in any orientation other than parallel to one another, stagger the implant placement so the legs do not obstruct one another inside the bone.

## 4-Leg surgical technique

**Prepare fusion site**

Create the osteotomy and/or prepare the fusion site needed to implant Easy Fuse.

**Size**




Place the 4-leg Sizer perpendicular across the fixation site to determine the appropriate implant size. Adjust the distance across the Universal Drill Guide to the selected size by rotating the knob clockwise. Attach the 4-leg Clip to the Universal Drill Guide.

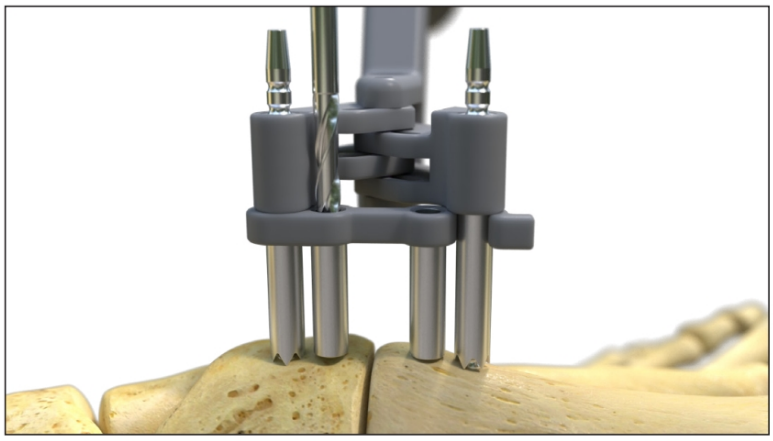
**4-Leg Sizer**


4-Leg Sizer

**4-Leg Clip**

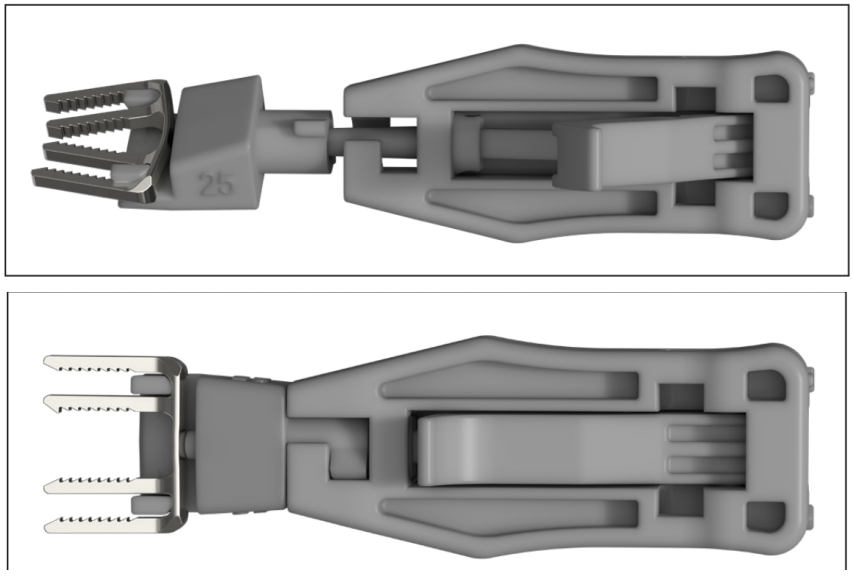
4-Leg Clip

**Drill**



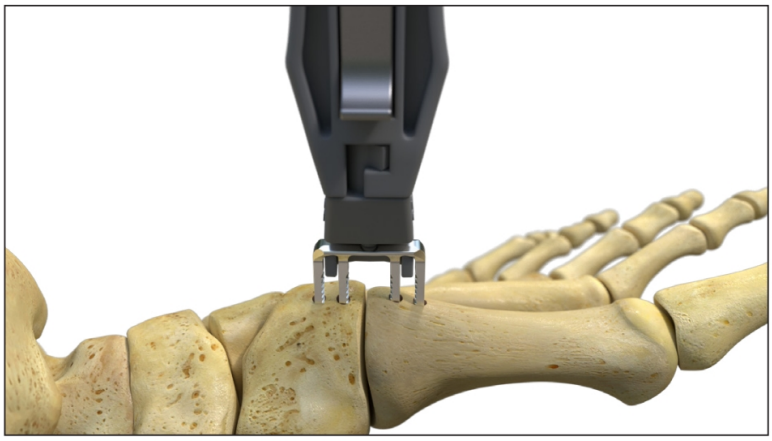
Place the Universal Drill Guide across the fixation site. Use the Drill to create a pilot hole in the bone. Use the laser markings on the Drill to measure the drill depth.
Prior to drilling any additional holes, place a corresponding Locator Pin in the first hole through the drill guide. Prepare the outer most holes first prior to preparing the inner holes.

**Prepare inserter**




Place the Universal Implant Inserter into its unlocked position by lifting the lever up. Assemble the selected implant Cartridge onto the Universal Inserter by aligning the tabs on the implant Cartridge with the grooves of the Universal Inserter and rotating clockwise until locked. Proceed to press the lever of the Universal Inserter down to its locked position to outwardly displace the legs of the Easy Fuse implant

**Insert implant**

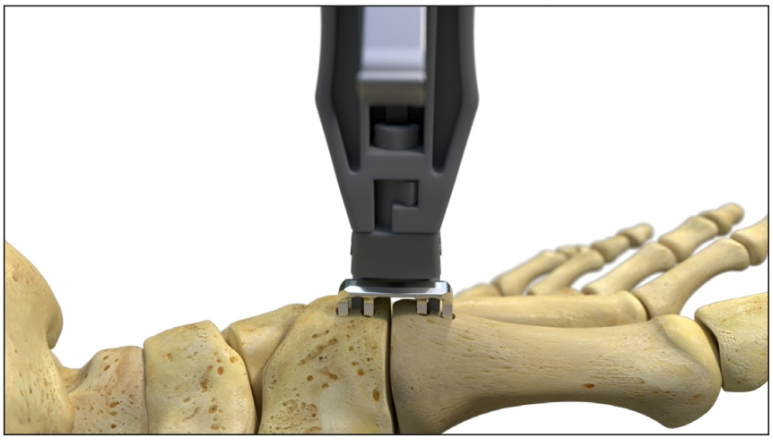


Remove the Locator Pins and Drill Guide before inserting the implant. Position the legs of the EasyFuse implant over the pilot holes and advance the implant into the holes by hand until fully seated.

**Remove inserter**

Unlock the Universal Implant Inserter from the implant by moving the inserter lever to its unlocked position. Slide outward or twist counter-clockwise the Universal Inserter to disengage cartridge from implant.

**Final seat and fluoro check**

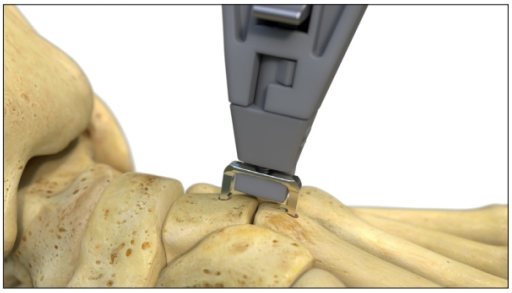


If necessary, place the implant Cartridge on the Easy Fuse bridge and lightly tap with a mallet on the back of the Inserter until the implant is flush to the bone. Check the final position of Easy Fuse implant under fluoros copy

**Additional implants**

Repeat steps 2 through 7 for each additional Easy Fuse  implant used. Tip: If placing 2 EasyFuse implants in any orientation other than parallel to one another, stagger the implant placement so the legs do not obstruct one another inside the bone

## Removal and reinsertion



The Easy Fuse implant can be removed using the Universal Implant Inserter and the appropriate implant Cartridge. Assemble the implant Cartridge onto the Universal Inserter. Ensure that the Universal Inserter lever is in its unlocked position.
To remove an Easy Fuse implant, use a flat-sided instrument, like an osteotome, to wedge the bridge of the implant slightly off the bone. Place the Cartridge Tip underneath the implant bridge and lock onto the implant by moving the Universal Inserter lever to its locked position. Pull up on the inserter to remove the implant from the bone. If required, the Easy Fuse implant can be repositioned and inserted again following step 5 in the surgical technique.

### Explant information

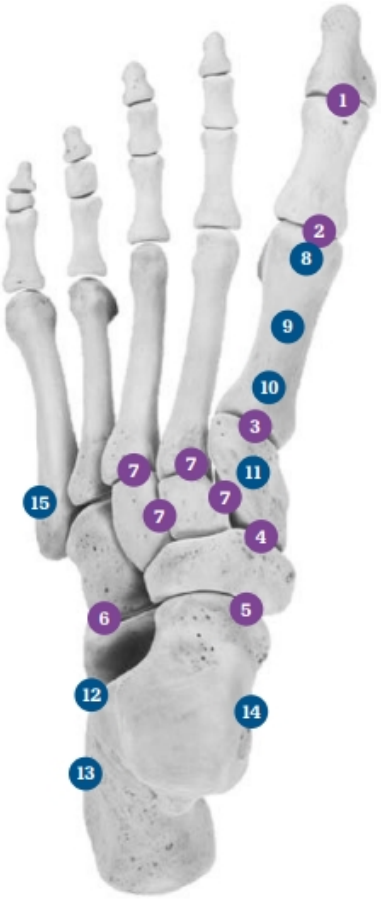
If the removal of the implant is required due to revision or failure of the device, the surgeon should contact the manufacturer using the contact information located on the back cover of this surgical technique to receive instructions for returning the explanted device to the manufacturer for investigation.

### Postoperative management

Postoperative care is the responsibility of the treating physician.

## Procedural sizing chart

The diagram and chart below highlight some of the suggested procedures and recommended sizing.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| Index | Procedure | Implant sizing |
|---|---|---|
| **1** | Hallux IP Fusion | 15×12 |
| **2** | MTPJ Fusion | 18×15, 20×15, MTP |
| **3** | Lapidus Fusion | 15×15, 18×20, 18×25, 20×25 4 Leg |
| **4** | Naviculocuneiform Fusion | 18×15, 18×20, 20×15, 20×20 |
| **5** | Talonavicular Fusion | 18×20, 18×25, 20×20, 20×25 |
| **6** | Calcaneocuboid Fusion | 18×25, 20×20, 20×25, 4 Leg |
| **7** | TMT Fusion | 15×15, 15×20, 18×15, 18×20,20×15, 20×20 |
| **8** | Chevron Osteotomy | 15×15, 15×20,18×15, 18×20 |
| **9** | Metatarsal Osteotomy | 15×15, 15×20, 18×15, 18×20,20×15 |
| **10** | Proximal Base Osteotomy | 15×15, 15×20, 18×15, 20×15 |
| **11** | Cotton Osteotomy | 18×15, 18×20, 20×15, 20×20 |
| **12** | Evans Osteotomy | 20×20, 20×25, 25×20, 25×25 |
| **13** | Calcaneal Osteotomy | 20×20, 20×25, 25×20, 25×25 |
| **14** | Subtalar Fusion | 20×20, 20×25, 25×20, 25×25 |
| **15** | Jones Fracture | 15×12, 18×15 |

## Ordering information

### 2-Leg Implant Part Numbers

| Part number | Description |
|---|---|
| FFS21512 | EasyFuse Implant Procedure Pack, 15×12 |
| FFS21515 | EasyFuse Implant Procedure Pack, 15×15 |
| FFS21520 | EasyFuse Implant Procedure Pack, 15×20 |
| FFS21815 | EasyFuse Implant Procedure Pack, 18×15 |
| FFS21820 | EasyFuse Implant Procedure Pack, 18×20 |
| FFS21825 | EasyFuse Implant Procedure Pack, 18×25 |
| FFS22015 | EasyFuse Implant Procedure Pack, 20×15 |
| FFS22020 | EasyFuse Implant Procedure Pack, 20×20 |
| FFS22025 | EasyFuse Implant Procedure Pack, 20×25 |
| FFS22520 | EasyFuse Implant Procedure Pack, 25×20 |
| FFS22525 | EasyFuse Implant Procedure Pack, 25×25 |
| FFSP1530 | EasyFuse Instrument Procedure Pack |

**4-Leg Implant Part Numbers**

| Part number | Description |
|---|---|
| FFS4MTPS | EasyFuse Implant Procedure Pack, MTP, Small |
| FFS4MTPL | EasyFuse Implant Procedure Pack, MTP, Large |
| FFS42520 | EasyFuse Implant Procedure Pack, 4-Leg, 25×20 |
| FFS43020 | EasyFuse Implant Procedure Pack, 4-Leg, 30×20 |
| FFSP1530 | EasyFuse Instrument Procedure Pack |

## Coustamer Support

**Foot & Ankle**

**Manufacturer**

Stryker Corporation 1023 Cherry Road Memphis, TN 38117 800 238 7117 901 867 9971 www.wright.com

## Documents / Resources

| | |
|---|---|
|   | stryker EasyFuse Dynamic Compression System [pdf] Instruction Manual<br>EasyFuse Dynamic Compression System, EasyFuse, Dynamic Compression System, Compression System |

## References

- Wright Medical Group N.V. | a global medical device company