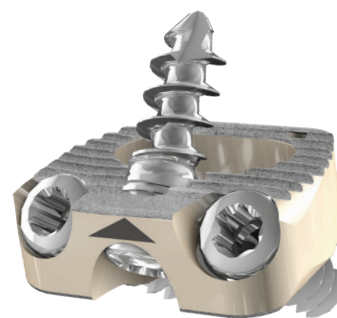
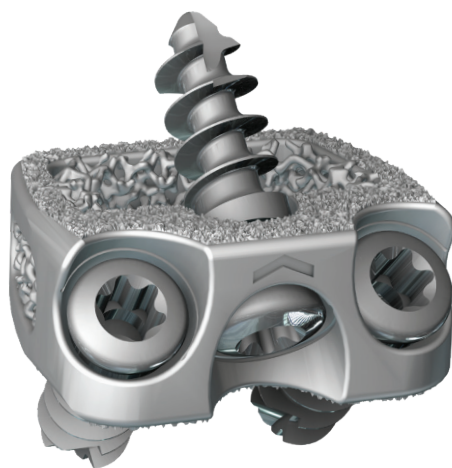
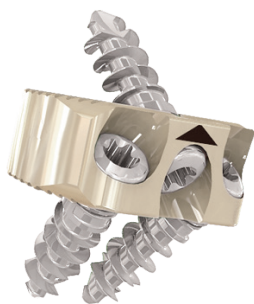




# STALIF C® Portfolio

No Profile® Anterior Cervical Integrated Interbody™ Systems

## TECHNIQUE & PRODUCT GUIDE



\* Multilevel indicates for 1-2 contiguous levels.

\*\* Not All Products Available in All Markets

# STALIF C® Portfolio

No Profile® Anterior Cervical Integrated Interbody™ Systems

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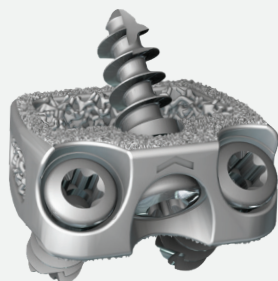
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## STALIF C® Portfolio

The **STALIF C** Portfolio is a comprehensive set of instruments and implants designed to support an anterior approach to the cervical spine. The **STALIF C** portfolio No Profile® implant designs are engineered to conform to patient anatomy, simplify surgery, enhance stability, and maximize opportunities for fusion.

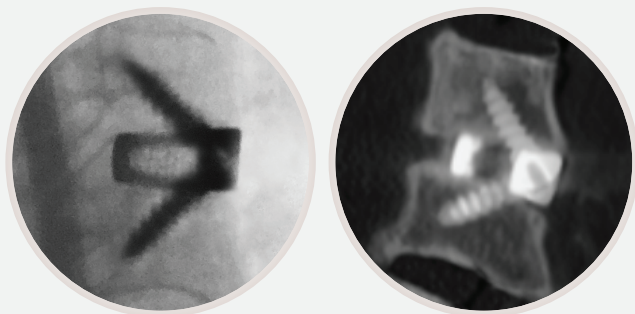
**STALIF C** portfolio Integrated Interbody™ anterior cervical fusion devices are designed to achieve immediate load-sharing and segmental stability. Innovative implant design complemented by unique cancellous screws co-function during the healing process to form an “integrated” fusion construct that is highly stable. Laboratory evaluations have repeatedly shown that the **STALIF C** product family attains equivalent biomechanical performance to anterior plate and cage technologies.<sup>1, 2, 3, 4, 5</sup>

**STALIF C** portfolio implants are provided in 3 state of the art material options, including **FLX**® (Flexible Lucent MatriX 3D-Printed porous titanium FUSE-THRU®trabecularscaffold), **Ti-ACTIVE**™ (microporous texturized titanium surface), and PEEK (poly-ether-ether-ketone). Unlike other stand-alone implants, **STALIF**® devices are manufactured according to a specific biomechanical design rationale. This rationale was established with the original **STALIF** device introduced over 35 years ago. Through its multiple product iterations, **STALIF** has remained consistent and steadfast with the original design rationale.

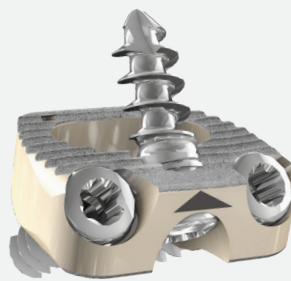


## STALIF C **FLX** Implants

**STALIF C FLX** implants are the next evolution in **STALIF** devices. These 3D-printed porous titanium Integrated Interbody devices feature a combination of solid and porous, radiolucent FUSE-THRU titanium sections which reduce mechanical stiffness and improve visibility compared to solid titanium implants. The proprietary FUSE-THRU trabecular scaffold is modeled to allow for bony on-growth, in-growth, and thru-growth.



*Lateral Fluoroscopy of **STALIF C FLX** (left) and  
Lateral Computed Tomography (CT) scan of  
**STALIF C FLX** (right)*



## STALIF C **Ti** Implants

**STALIF C-Ti** is an innovative, titanium-surfaced, PEEK Integrated Interbody device design that blends the benefits of titanium and PEEK integrated interbody devices. PEEK has superior visualization properties and a modulus of elasticity that is similar to that of cortical bone while titanium is cell-friendly and enables human mesenchymal stem cells to adhere to the surface and proliferate.

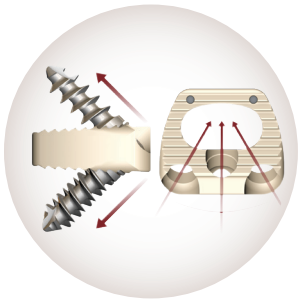
The **Ti-ACTIVE** surface topography is designed to provide enhanced cellular attachment and proliferation vs rougher titanium surfaces, enhancing opportunities for fusion.



## STALIF *Design Rationale*

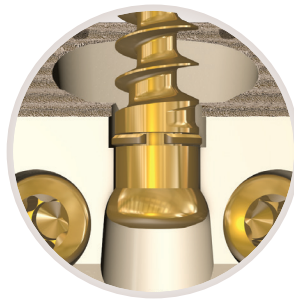
### RATIONALE #1

#### Achieve Stable Fixation of the Motion Segment for Superior Biomechanics



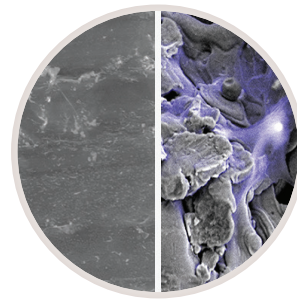
##### Optimized Screw Trajectories

- 3-screw design utilizes a midline convergence pattern in conjunction with an optimal horizontal inclination.
- Screw trajectories are intended to reduce incidence of backout and increase expulsion resistance.



##### Anti Back-Out (ABO®) Technology

- Titanium split ring Anti Back-Out (ABO) feature provides increased resistance to screw back-out without compromising the biomechanical principles of the Integrated Interbody construct.

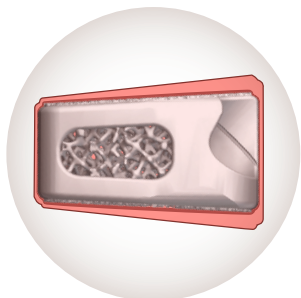


##### Ti-ACTIVE & FLX

- Texturized surface topography provides 20x the roughness of machine finished PEEK providing enhanced stability upon implantation.
- 3-dimensional surface profile designed to provide enhanced cellular attachment and proliferation vs rougher titanium surfaces, with 2x the cellular attachment of courser titanium surfaces and 20x the cellular proliferation of other titanium surfaces.<sup>6,7</sup>
- **FLX** FUSE-THRU® trabecular scaffold designed to allow for bony in-growth, on-growth, and thru-growth.

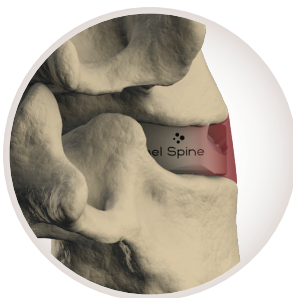
## RATIONALE #2

## Restore Sagittal Balance, Disc Height, &amp; Lordosis



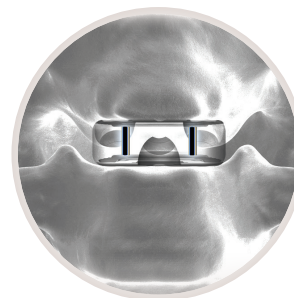
## Multiple Footprints &amp; Configurations

- Available in multiple footprint and height configurations.



## No Profile® Device

- “No Profile” design allows the device to seat fully within the confines of the vertebral body.
- Leaves the anatomy unchanged external to the interbody.

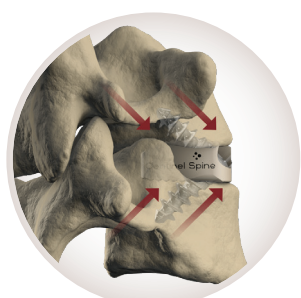


## Anatomical Design

- Anatomical shape that is designed to sit on the apophyseal ring and better fill the disc space.

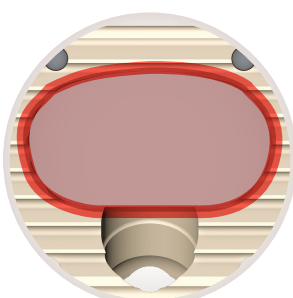
## RATIONALE #3

## Enhance Opportunities for Fusion



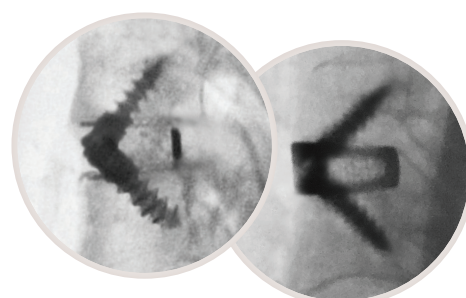
## Compressive Lag Fixation

- Cancellous screws produce a lag effect between the vertebral body and the implanted device.
- Following Wolff's Law, the lag effect provides constant compressive forces against the implant and graft material to promote fusion.



## Large Graft Window

- The large graft area, combined with an anatomical footprint and load-sharing design, affords the best opportunity for fusion.



## Radiolucent Advantage

- Implants afford accurate post-operative assessment of fusion development.
- The **Ti-ACTIVE** surface allows for radiographic visualization of the graft-endplate contact.
- The **FLX** matrix enhances visualization of fusion post-operatively vs solid titanium devices

## Indications for Use

Refer to the IFU for indications for use and contraindications

## Warnings & Precautions

- Patients with previous spinal surgery at the levels to be treated may not experience the same clinical outcomes as those without a previous surgery.
- Selection of an appropriately sized device for the patient is important and increases the likelihood of a satisfactory outcome.
- The implantation of the intervertebral body fusion device should be performed only by experienced spinal surgeons with specific training in the use of this type of device.
- Do not use if the package is damaged or opened. Contents may not be sterile.
- Do not use if current date exceeds label expiry date.
- Do not re-sterilize sterile implants.
- Instrumentation provided with the implants must be used in accordance with the approved surgical technique.
- Do not use excessive force when introducing and positioning the implant within the intervertebral body space to avoid damaging the implant.
- Re-usable surgical instruments must be re-sterilized prior to next use.
- Do not reuse the device even if the device shows no external signs of damage. Internal stresses from previous use may cause early failure.
- On insertion of the screw into the **STALIF C** / **STALIF C-Ti** / **STALIF C FLX** device, ensure soft tissue is not trapped between the head of the screw and the device.
- Should not be used with components of any other system or manufacturer.
- Based on fatigue testing results, when using the **STALIF C** / **STALIF C-Ti** / **STALIF C FLX** system, the physician / surgeon should consider the levels of implantation, patient weight, patient activity level, other patient conditions, etc., which may impact on the performance of this system.

## Case Preparation

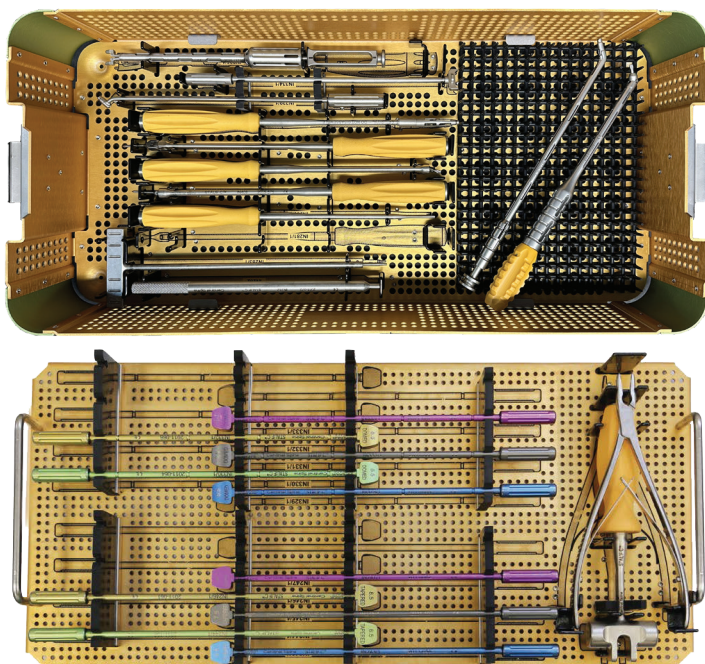
### Required Sets

The following instrument sets are required for the **STALIF C** portfolio implants surgical technique.

- CAS01072 **STALIF C** Instrument Set

### Quick Reference Guide

The **STALIF C** / **STALIF C-Ti** Quick Reference Guide (LBL164) and **STALIF C FLX** Quick Reference Guide (LBL555), contain an abundance of information about implant offerings, sizes, and measurements and it is recommended to bring one into every case.



**STALIF C** Instrument Set  
CAS01072

## Surgical Technique

### Approach

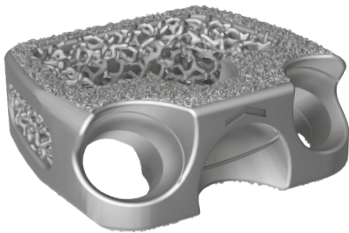
**STALIF C** / **STALIF C-Ti** / **STALIF C FLX** is available in multiple anterior / posterior depth and height configurations.

The surgeon also has a choice of both lordotic and domed sagittal profiles. **STALIF C** / **STALIF C-Ti** / **STALIF C FLX** is supplied sterile and individually packaged.

A standard anterior approach is used to access the cervical spine.

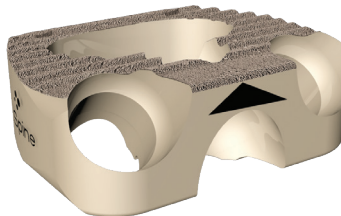
### 1. Devices Shown with Three Available Material Choices

#### STALIF C FLX



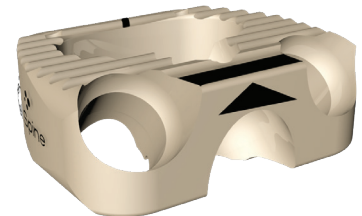
FLX WITH  
**FUSE-THRU™**

#### STALIF C Ti



PEEK WITH  
**Ti ACTIVE™**

#### STALIF C



WITH  
**PEEK**

### tech TIP

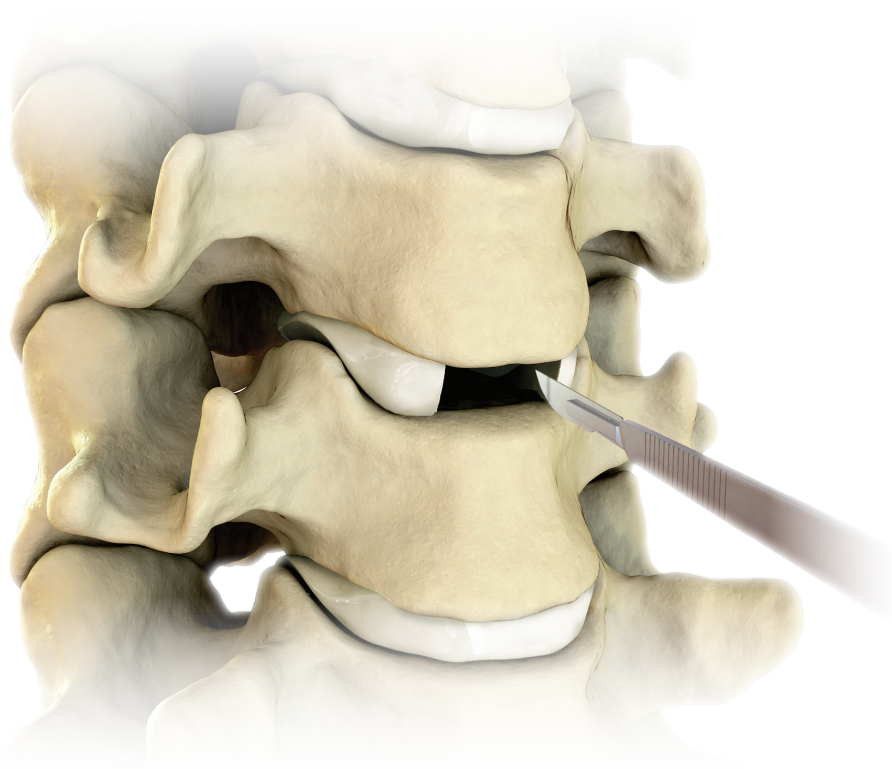
Material choices include 3D-printed titanium (**FLX**), PEEK with a microporous titanium surface (**Ti-ACTIVE**), and machine finished PEEK.

### Discectomy & Endplate Preparation

Locate and confirm the operative level. Using the surgeon's preferred method, resect the Anterior Longitudinal Ligament (ALL) and perform a complete discectomy (**Figure 2**).

Prepare the endplates and address any obstructive osteophytes. While careful removal of the cartilaginous endplate is critical to a successful fusion, take care not to compromise the integrity of the bony endplates. This will reduce the risk of subsidence.

## 2. Performing Discectomy



### **please NOTE**

*Take care not to compromise the integrity of the vertebral body endplates.*



## Surgical Technique (continued)

### Trialing

The correct height and footprint of the **STALIF C** / **STALIF C-Ti** / **STALIF C FLX** device are determined by inserting the trial sizers into the disc space (**Figure 3**). If distraction has been used, it must be relaxed prior to trial sizing.

To achieve the proper fit it may be necessary to use gentle slap hammer impaction to tap the trial into position.

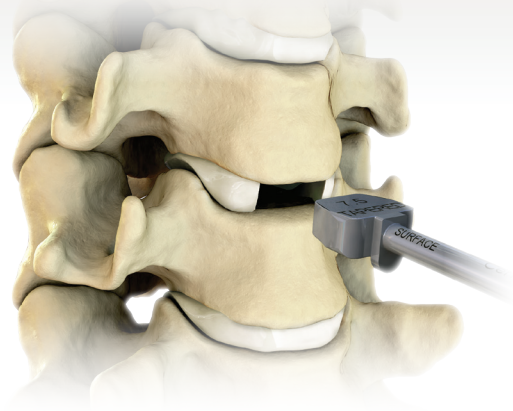
The trial should be flush with the anterior edge of the vertebral body. To ensure proper implant selection, the trial must achieve a tight fit. It is recommended to select the largest footprint that can safely be implanted to optimize the load transfer across the apophyseal ring.



### Trial Sizer (Lordotic)

IN243/1, IN244/1, IN245/1, IN246/1, IN247/1, IN439, IN440, IN441, IN442, or IN443

## 3. Trial Sizer Insertion

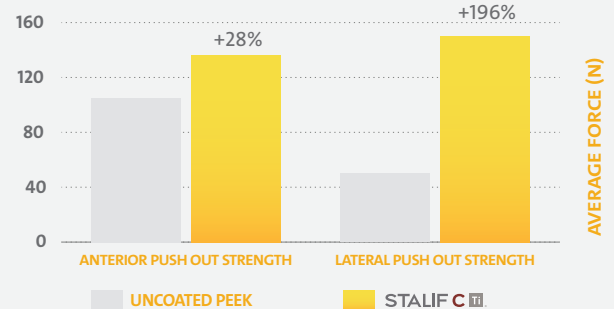


### tech TIP

**Ti-ACTIVE™** surfaced implants require increased insertion force. See graph to the right. (Note: Testing was performed without screws.)

Imaging should be performed to verify proper trial sizer fit.

### IMPLANT INSERTION & REMOVAL FORCE <sup>8</sup>



### please NOTE

For **STALIF C FLX**, trial must have a tight fit within disc space to limit implant movement during screw insertion.

## Device Insertion

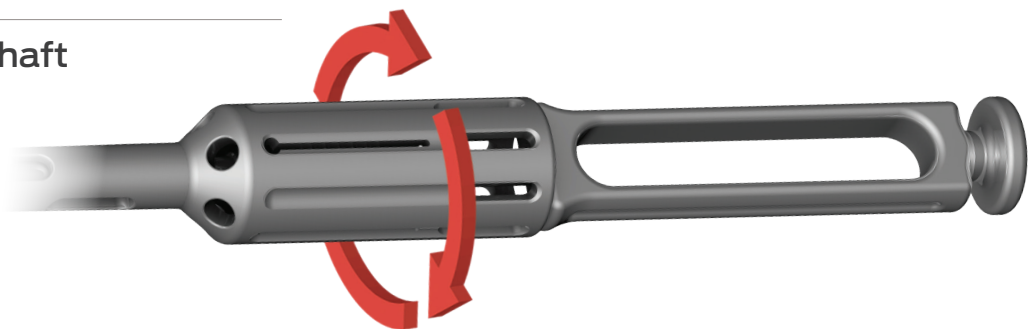
After selecting the appropriate **STALIF C** / **STALIF C-Ti** / **STALIF C FLX** device, attach the device to the Low Profile Introducer. Rotate the Introducer shaft fully counterclockwise to enable it to receive the implant (**Figure 4**).

Secure the device to the Introducer by placing the introducer pegs into the two outer screw holes, aligning the small nubs opposite the introducer pegs with the arrow on the device (**Figure 5**), and rotating the introducer shaft clockwise (**Figure 6**). Tighten securely to ensure a snug fit between the device and the Introducer.



**Low Profile Introducer**  
IN1411

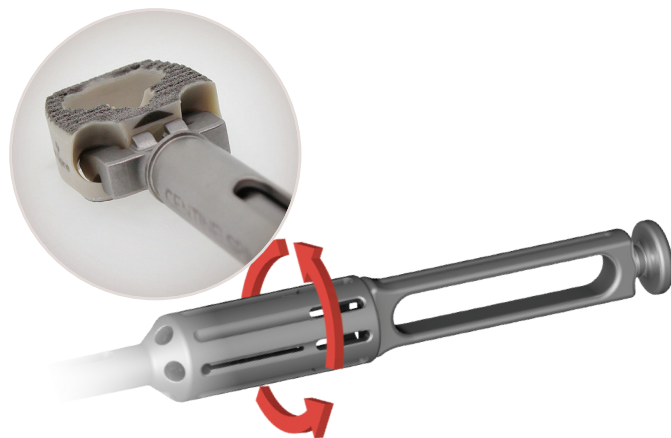
### 4. Rotating Introducer Shaft Counterclockwise



### 5. Securing Device



### 6. Rotating Introducer Shaft Clockwise



## tech TIP

Once the Introducer has been tightened, check to verify a snug fit between the device and Introducer.

**\* Not Included in Standard BOM**

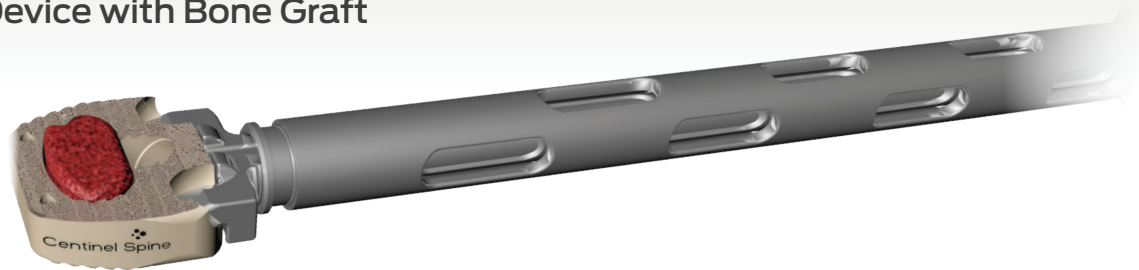


## Surgical Technique (continued)

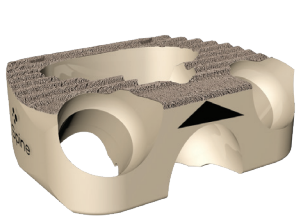
The central cavity of the **STALIF C** / **STALIF C-Ti** / **STALIF C FLX** device is filled with autograft bone and/or allogenic bone graft composed of cancellous and/or corticocancellous bone graft. The autograft and/or allograft should be packed so that it exceeds the superior and inferior surfaces of the device by 1mm on each side (**Figure 7**). The device should be securely loaded onto the introducer before filling the central cavity of the device with graft material.

When implanting the **STALIF C-Ti**, **STALIF C**, or **STALIF C FLX** lordotic device, the single screw hole can be positioned either cephalad or caudally (**Figures 8a and 8b**) to accommodate patient anatomy. When implanting lordotic **STALIF C-Ti**, **STALIF C**, or **STALIF C FLX** devices at two contiguous levels, both devices must be implanted with the same screw orientation with the single screw hole of both devices positioned either cephalad or caudal. When implanting the domed device, the single screw hole must be oriented cephalad (**Figure 8c**) and the two screw holes caudally, to accommodate the convex shape of the device as it contacts the concave endplate of the superior vertebral body.

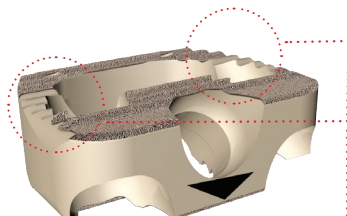
### 7. STALIF C-Ti Device with Bone Graft



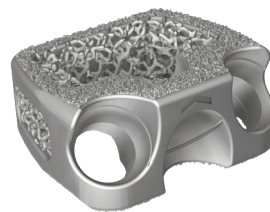
### 8. Device Orientations Demonstrated



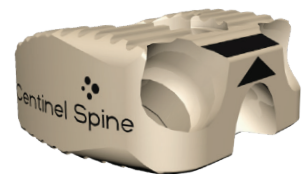
a. Device Oriented Cephalad



b. Device Oriented Caudal



c. **STALIF C FLX** Device Oriented Cephalad



d. Domed **STALIF C** Device Oriented Cephalad

#### please NOTE

Uncoated areas on the bottom of the **STALIF C-Ti** device are intentional. These areas are too small to obtain a uniform plasma spray thickness.

#### tech TIP

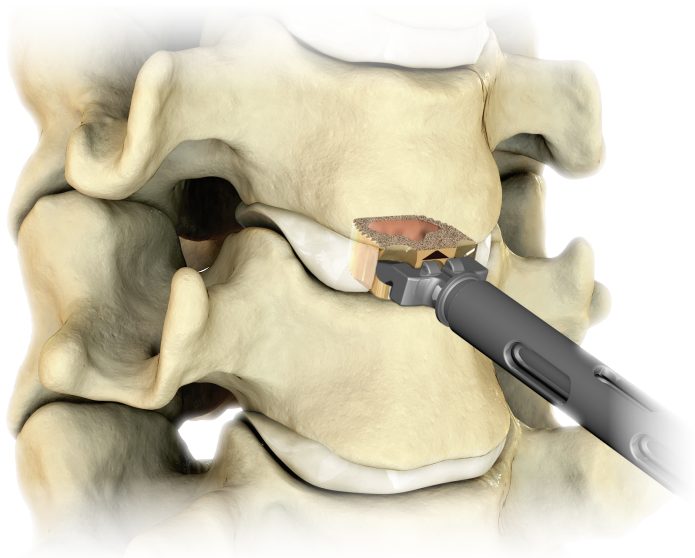
When implanting lordotic devices at two contiguous levels, it is recommended that both devices be implanted with the same screw orientation.

Insert the **STALIF C** / **STALIF C-Ti** / **STALIF C FLX** device into the disc space (**Figure 9**), ensuring that the device is aligned with the center of the vertebral body.

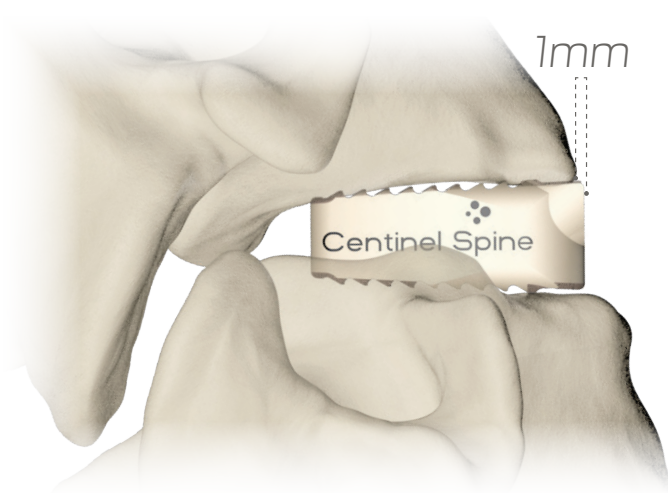
**STALIF C** and **STALIF C FLX** device positioning should be 1mm proud of the vertebral anterior plane (**Figure 10**). This allows for additional device movement when preparing pilot holes and tightening the Cancellous Lag Screws. This will result in a device that is flush with the anterior plane.

**STALIF C-Ti** device positioning should be flush with the vertebral anterior plane. The increased surface roughness of these implants provides added control with respect to device placement.

## 9. Inserting Device into Disc Space



## 10. Demonstrating Initial Device Positioning\*



### please NOTE

Care should be taken to prevent rotation of the device during insertion.

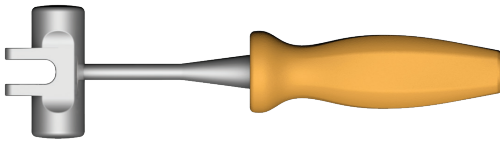
### tech TIP

\* **STALIF C** and **STALIF C FLX** device positioning should be 1mm proud of the vertebral anterior plane. **STALIF C-Ti** device positioning should be flush with the anterior plane.

## Surgical Technique (continued)

Gentle slap hammer impaction can be used against the strike surface of the Introducer to tap the device into position. The Low Profile Introducer is removed and distraction can now be released.

It is advisable to take Anterior/Posterior (A/P) and lateral images (**Figures 11, 12, 13, and 14**) to ensure that the device is correctly oriented and sits fully within the disc space. If necessary, the device can be repositioned by re-attaching the Low Profile Introducer or using the provided Tamp.

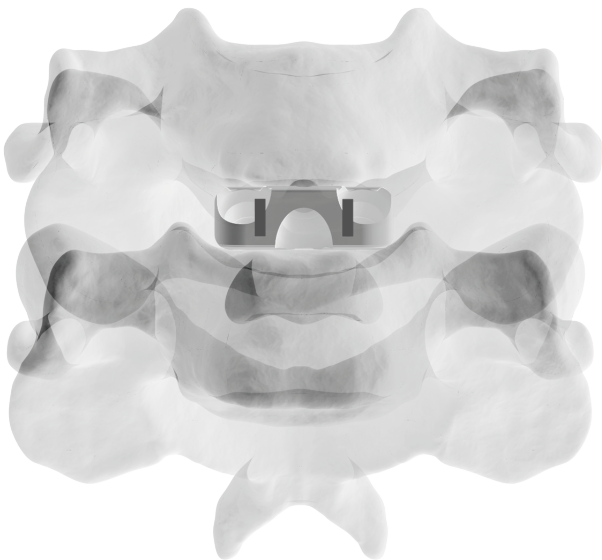


**Slap Hammer**  
IN236/3



**Tamp**  
IN334/1

### 11. Anterior / Posterior Fluoroscopy with STALIF C and STALIF C-Ti Device



### 12. Lateral Fluoroscopy with STALIF C and STALIF C-Ti Device



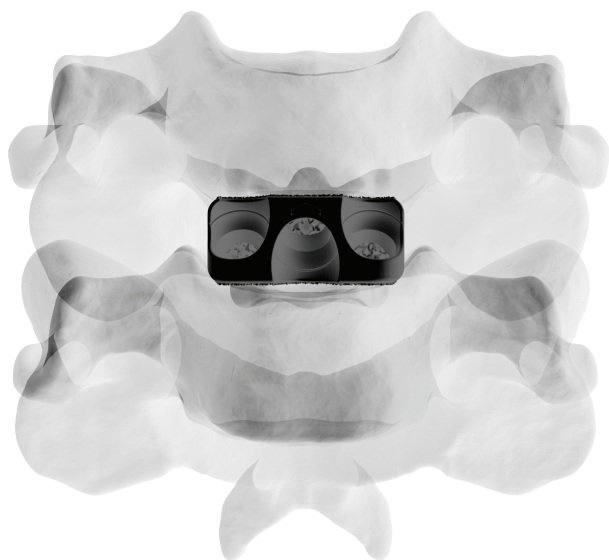
**please NOTE** Do not use excessive force when striking the Insertor, as this may damage the device.

**tech TIP** If the two posterior markers are not closely aligned, either the x-ray may not be a true lateral or the device may be rotated.

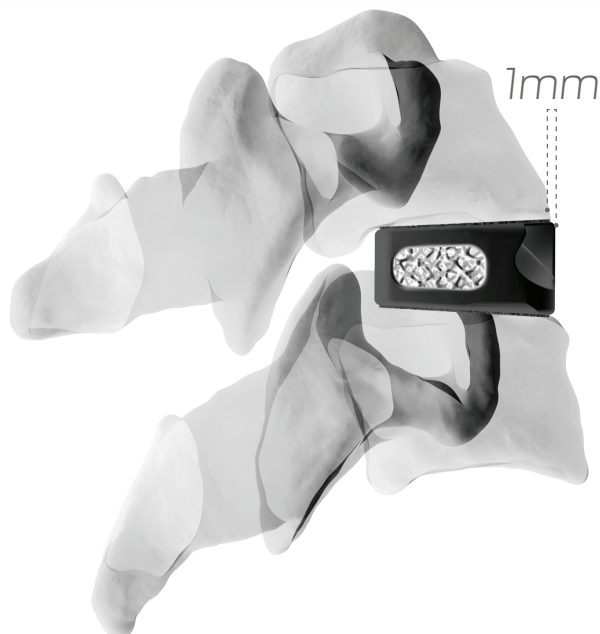
For **STALIF C** and **STALIF C-Ti** implants, two tantalum rod markers are used to radiologically assess implant position. The two tantalum rod markers are located on each corner of the posterior portion of the **STALIF C** and **STALIF C-Ti** implants. The posterior rod markers should be closely aligned/superimposed on lateral fluoroscopy (**Figure 13**).

For **STALIF C FLX**, the implant profile is visible under fluoroscopy. In the anterior view, the central screw hole should be aligned with the spinous process and the lateral screw holes should be symmetrical to the central screw hole. In the lateral view, the face of the implant should be 1mm proud of the anterior lip of the vertebral body, and the trapezoidal graft window should have crisp edges (**Figure 14**).

### 13. Anterior/Posterior Fluoroscopy with STALIF C FLX Device



### 14. Lateral Fluoroscopy with STALIF C FLX Device



## Surgical Technique (continued)

### Screw Placement

Once implant positioning is confirmed, select the appropriate awl and awl guide to create a pilot hole for the center screw (**Figure 15**). There are four standard awl options: 45° Fixed Angle Punch Awl (with built-in awl guide), Guided Straight Punch Awl (with built-in awl guide), Ball-Joint Awl, and Universal-Joint Awl; the Ball-Joint and U-Joint awls require the use of the Angled Awl Guide.

On occasion, to facilitate proper angulation to the screw holes and enable the awl guide to properly seat within the screw aperture, it may be necessary to remove a small portion of the lip of the vertebral body adjacent to the screw hole. The slotted mallet may be used to impact the strike surface of the awl to create the pilot hole. Once the pilot hole has been created, remove the awl and awl guide, taking care not to bring the tip of the awl guide near any sensitive structures.



**45° Fixed Angle Punch Awl**  
IN1501



**Guided Straight Punch Awl**  
IN351/2 or IN351/3



**Ball-Joint Awl**  
IN408

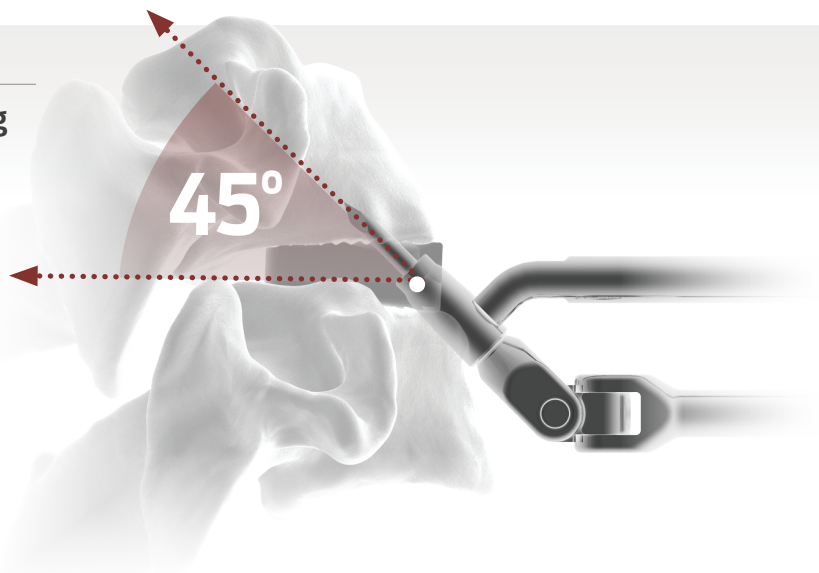


**Universal-Joint Awl**  
IN407



**Angled Awl Guide**  
IN239/1

### 15. Confirming 45° Awl Trajectory Using Lateral Fluoroscopy



### please NOTE

*It is critical that the awl guide be seated and used with the universal-joint and ball-joint awls so the pilot hole is concentric and the optimal screw trajectory is obtained.*

*It is also important that only one awl hole is created at a time (a screw should be placed prior to the creation of the next awl hole).*



Prior to screw insertion, any soft tissue around the screw hole should be removed to prevent entrapment between the screw head and device.

There are three screwdriver options for screw insertion: Fixed Angle, Straight, or Ball-Joint.

The appropriate length screw is selected (**Figure 16**) and loaded onto the preferred screwdriver.

Adopt a thumb and two-finger-style grip (**Figure 17**) to achieve optimal compressive fixation. This reduces the risk of stripping the bone thread by over tightening.



**Fixed Angle Screwdriver**  
IN1457

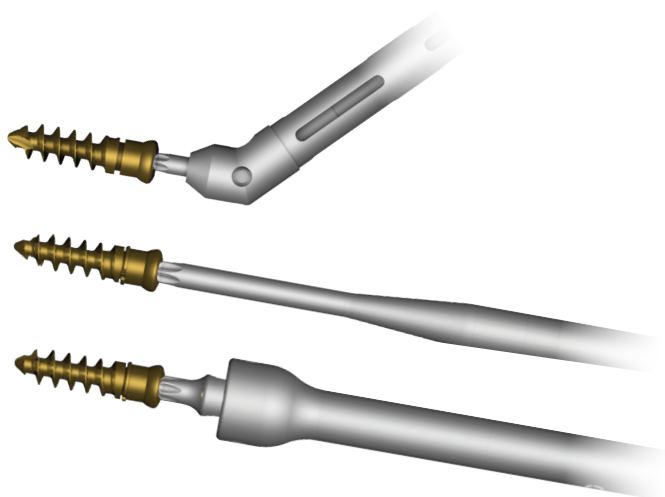


**Ball-Joint Screwdriver**  
IN357/1 or IN357/2



**Straight Screwdriver**  
IN255/2

## 16. Three Screwdrivers Loaded with Screws



## 17. Demonstrating Thumb and Two-Finger Grip



### **please NOTE**

*For STALIF C and STALIF C-Ti, the center screw should not be fully tightened to prevent rotation of the implant until an opposing screw is positioned.*

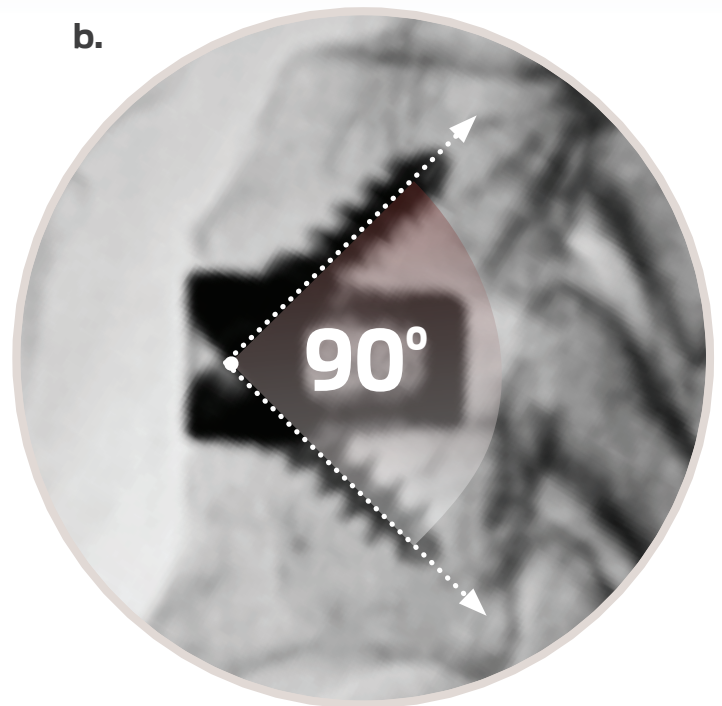
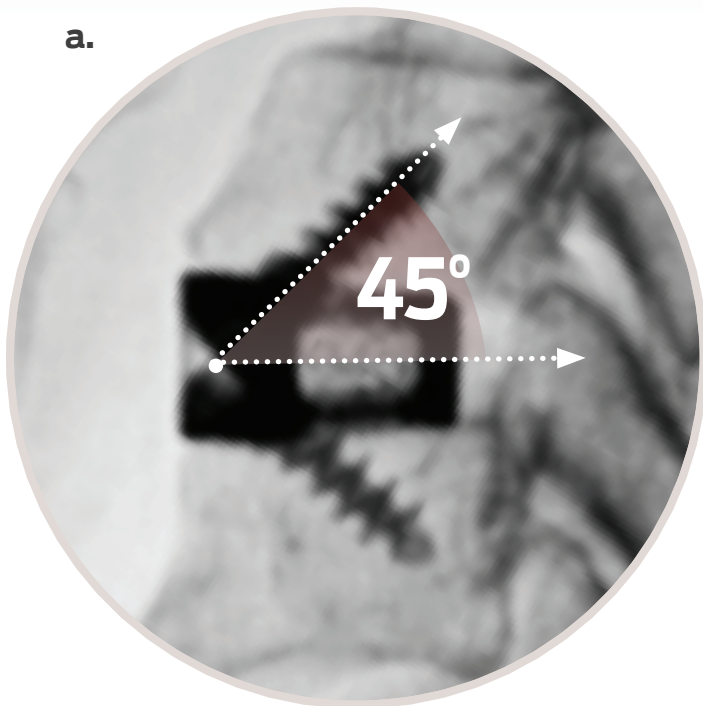
*For STALIF C FLX, each screw should be fully tightened when placed to enable proper ABO engagement.*

## Surgical Technique (continued)

Screw insertion is initiated with the central screw. Load the chosen screw onto the driver and insert the first screw through the center hole where the pilot hole was created. It is recommended to confirm the 45° screw trajectory using lateral fluoroscopy (**Figure 18a**). For **STALIF C** and **STALIF C-Ti**, tighten the screw down 90%; for **STALIF C FLX**, tighten the screw down 100%.

Repeat the above steps to create an awl hole for the second screw, then place and fully tighten the second screw. The second awl / screw trajectory should be approximately 90° from the center screw (**Figure 18b**). It is recommended to not overtighten the screw as tactile feel will vary due to varying patient bone quality.

### 18. Proper Trajectory

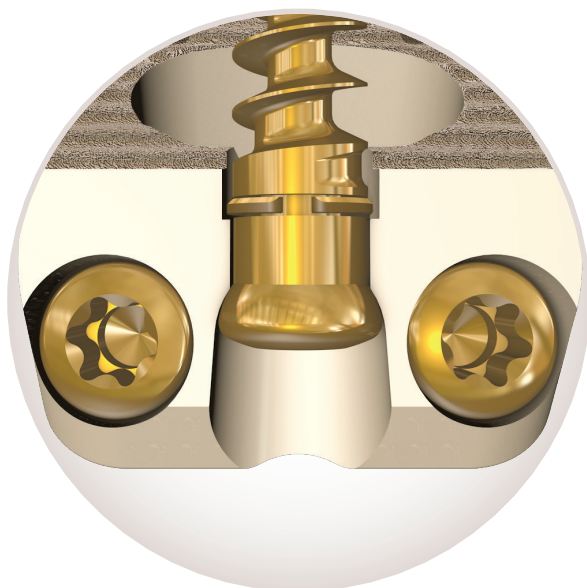


**tech TIP** For **STALIF C** and **STALIF C-Ti** the center screw should not be fully tightened to prevent rotation of the implant until an opposing screw is positioned. For **STALIF C FLX**, each screw should be fully tightened when placed to enable proper ABO engagement.

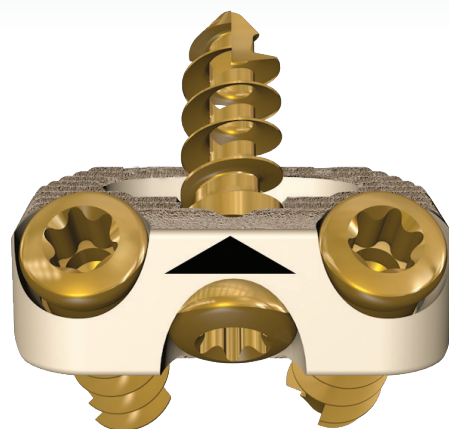
Repeat for the third screw, fully tightening the third screw. The third screw should be in alignment with the second screw. For **STALIF C** and **STALIF C-Ti**, final tighten the center screw after the second and third screws have been placed and tightened to maximize compressive fixation.

Both Standard and Revision Cancellous Screws feature an Anti Back-Out (ABO®) titanium split ring (**Figure 19**) which first compresses and then deploys during insertion. Each screw head must be fully seated within the device screw apertures to ensure the ring is properly deployed (**Figures 20a and 20b**).

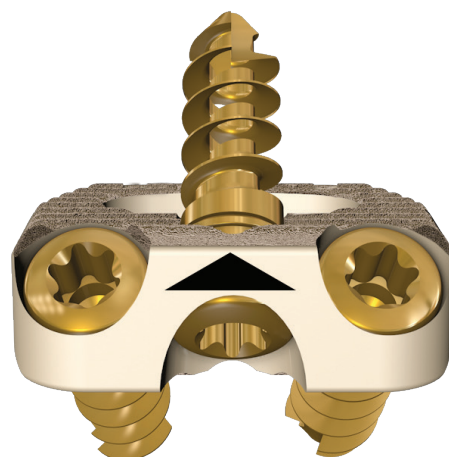
### 19. Cancellous Screw with ABO® Titanium Split Ring Deployed



### 20. Screw Seating



a. Screw Heads Not Fully-Seated



b. Screw Heads Fully-Seated

### please NOTE

The ABO® titanium split ring is properly deployed when the screw head is fully seated (see above).



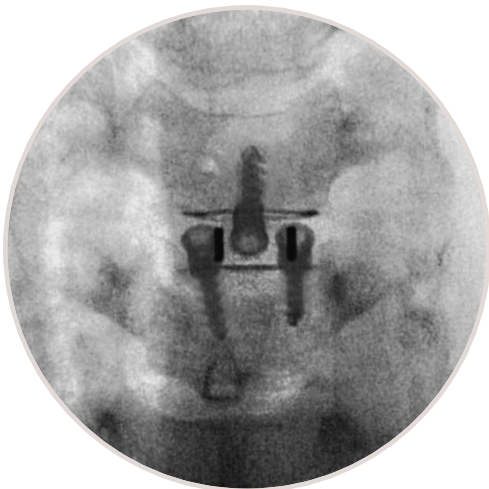
## Surgical Technique (continued)

### X-Ray Confirmation

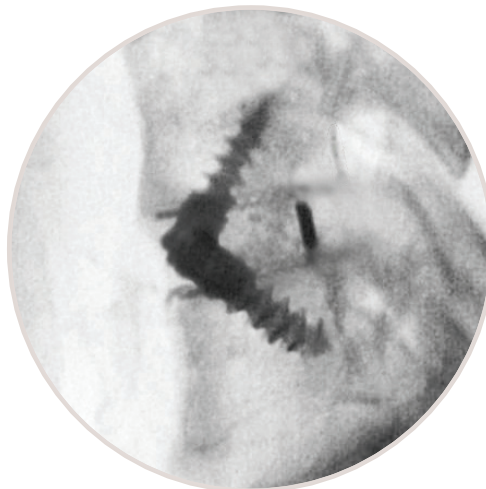
A/P & lateral X-rays should be taken prior to closing to ensure proper device position. **STALIF C** and **STALIF C-Ti** positioning can be assessed using marker pin positioning. Two markers are clearly evident on an A/P film; on a 'true'

lateral X-ray, two parallel markers in close approximation may be identified, or the appearance of a single marker if the markers are superimposed (**Figures 21a, 21b & 21c**).

## 21. Fluoroscopy of Final Positioning



**a.** A/P View of **STALIF C-Ti** device with Single Screw Oriented Cephalad



**b.** Lateral View of **STALIF C-Ti** device with Single Screw Oriented Cephalad



**c.** Lateral View of **STALIF C-Ti** device (Two Contiguous Levels\*)

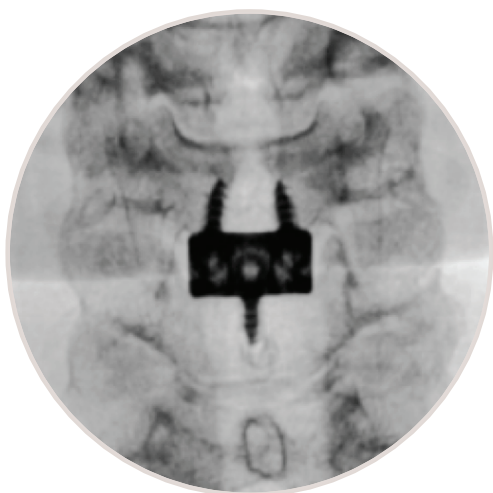
### please NOTE

With **STALIF C-Ti**, the CP Ti-coated surfaces may be visible under x-ray, as shown in Figures 21a, 21b, and 21c.

\* Indicated for one or two contiguous levels

For confirmation that the screws are fully seated and the ABO is engaged, take a lateral fluoroscopy image. For **STALIF C** and **STALIF C-Ti**, the screw heads should be partially overlapped, forming a “fish mouth” (the taller the cage, the more open the mouth will be), and for **STALIF C-Ti**,

the screw heads should be within the confines of the **Ti-ACTIVE** surface (**Figures 21b & 21c**). For **STALIF C FLX**, the screw heads should be contained within the confines of the implant (**Figure 21e & 21f**).



**d.** A/P View of **STALIF C FLX** device with Single Screw Oriented Cephalad



**e.** Lateral View of **STALIF C FLX** device



**e.** Lateral View of **STALIF C FLX** device (Two Contiguous Levels\*)

*\* Indicated for one or two contiguous levels*

## Surgical Technique (continued)

### Removal / Revision

Revision involves reversing the steps of implantation. The screwdriver can be used to remove the screws if the thread pattern is intact. In the event that the bone thread has been compromised and a screw cannot be removed with the screwdriver, a screw removal instrument has been included in the **STALIF C** instrument set. The Screw Remover is designed to be used in conjunction with the Screw Remover Sleeve provided.

Place the Screw Remover Sleeve over the affected screw head (the convex screw head profile must sit against the concave sleeve tip) and maintain downward pressure. The placement

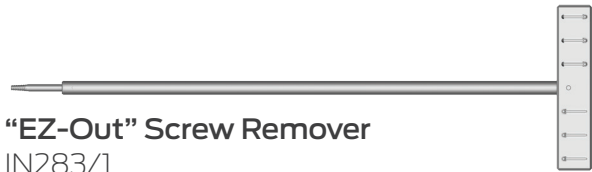
angle of the sleeve must match the insertion angle of the screw (**Figure 20**).

Carefully slide the Screw Remover into the sleeve until it contacts the screw head (**Figure 21**). Maintaining downward pressure on the sleeve to prevent the screw from spinning, slowly rotate the screw remover T-handle counterclockwise until purchase is felt.

Once purchase is established, release downward pressure on the sleeve and—while rotating counterclockwise—pull back slowly but evenly on the T-handle to collapse the ABO® split ring and extract the screw (**Figure 22**). The screw should be discarded after removal.



**“EZ-Out” Screw Remover Sleeve**  
IN282

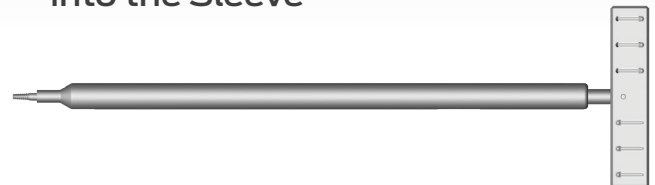


**“EZ-Out” Screw Remover**  
IN283/1

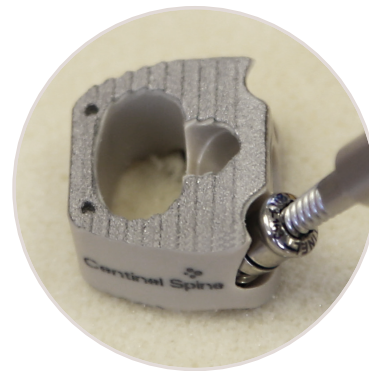
### 22. Placing the Screw Remover Sleeve



### 23. “EZ-Out” Screw Remover Slides into the Sleeve



### 24. Extracting the Screw



### tech TIP

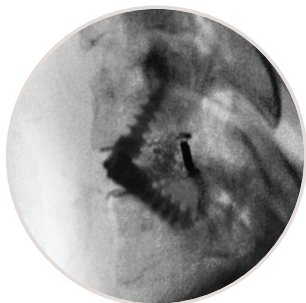
Should difficulty with screw purchase be encountered, a gentle slap hammer tap of the T-Handle will assist in screw engagement.

## Tips & Pearls

- Refer to quick reference guides.

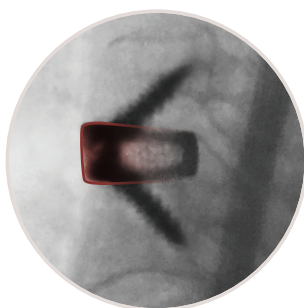
### For STALIF C PEEK:

- Place PEEK implants 1mm proud of anterior edge of VB.
- Recommend first inserting but not fully seating the center screw until two outer screws are fully secured.
- Caution against over-tightening screws (there is no audible click).
- Confirm screw ABO® engagement with lateral fluoro.
  - Screw heads partially overlapped—forming a fish mouth.



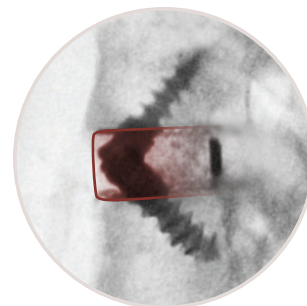
### For STALIF C FLX:

- Trial should have a tight fit
- Place **FLX** implants 1mm proud of anterior edge of VB.
  - Do not recess—implant will lag & handle like PEEK.
- Recommend first inserting & fully seating the center screw.
  - Recommend using lateral fluoroscopy to confirm awl & screw angulation for each screw.
    - Place & fully seat each screw before awling the next screw hole.
- Caution against over tightening screws (there is no audible click).
- Confirm screw ABO® engagement with lateral fluoro.
  - Screw heads fully contained within confines of implant



### For STALIF C-Ti:

- If the trial is difficult to insert/back out, consider going down 1 height—**Ti-ACTIVE** surface adds up to 0.4mm in total height & has increased friction because of surface topography.
  - Trial should be snug but only take a few impactions to back out.
  - Place implant as midline as possible.
- Adjustment will be difficult due to increased friction from **Ti-ACTIVE** surface.
- Place **Ti-ACTIVE** implants flush with anterior edge of VB.
  - Do not recess because cage will still lag (just not as much as the PEEK) & will be very difficult to back out.
- Recommend first inserting, but not fully seating the center screw until two outer screws are fully secured.
- Caution against over-tightening screws (there is no audible click).
- Confirm screw ABO® engagement with lateral fluoro.
  - Screw heads partially overlapped—forming a fish mouth— & contained within confines of **Ti-ACTIVE** surface.





# APPENDIX:

## STALIF C System Instrument Offering

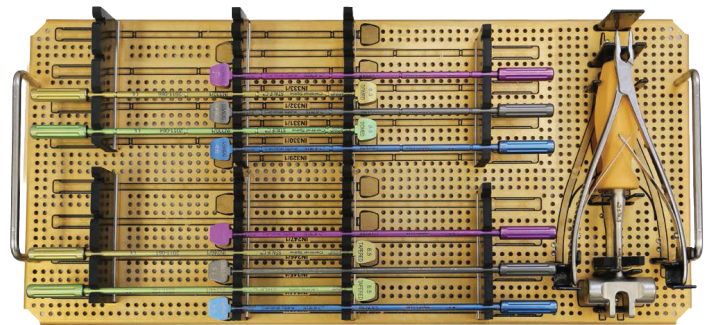
### Standard Instrument Set BOM (CAS01072)

*For reference only. Contact Customer Service for latest BOM.*

CAS01072 Instrument Tray

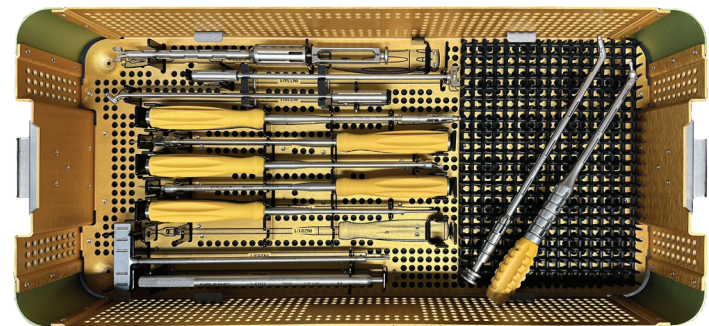
#### TOP LEVEL

IN250	Rongeur (3mm Bite)
IN236/3	Slap Hammer
IN439	12mm A/P Lordotic Trial Sizer, 5.5mm
IN440	12mm A/P Lordotic Trial Sizer, 6.5mm
IN441	12mm A/P Lordotic Trial Sizer, 7.5mm
IN442	12mm A/P Lordotic Trial Sizer, 8.5mm
IN443	12mm A/P Lordotic Trial Sizer, 9.5mm
IN243/1	14mm A/P Lordotic Trial Sizer, 5.5mm
IN244/1	14mm A/P Lordotic Trial Sizer, 6.5mm
IN245/1	14mm A/P Lordotic Trial Sizer, 7.5mm
IN246/1	14mm A/P Lordotic Trial Sizer, 8.5mm
IN247/1	14mm A/P Lordotic Trial Sizer, 9.5mm



#### BOTTOM LEVEL

IN1411	Low Profile Introducer
IN334/1	Tamp
IN239/1	Angled Awl Guide
IN351/2 or IN351/3	Guided Straight Punch Awl
IN407	Universal-Joint Awl
IN357/1 or IN357/2	Ball-Joint Screwdriver
IN408	Ball-Joint Awl
IN255/2	Straight Screwdriver
IN283/1	"EZ-Out" Screw Remover
IN282	"EZ-Out" Screw Remover Sleeve
IN1501	45° Fixed Angle Punch Awl
IN1457	Fixed Angle Screwdriver
CRM07489	Pin Mat



## *Additionally Available Instruments (Special Order)*

### **IN850**

Single Piece Introducer\*

\*Must be paired with IN236/3 Slap Hammer



### **IN281/2**

Universal-Joint Screwdriver



### **IN329 - IN333**

14mm A/P Domed Trial Sizers,  
5.5 - 9.5mm

(For **STALIF C** and **STALIF C-Ti** only)



### **IN478 - IN479**

14mm A/P Taller Height Trial Sizers,  
10.5 - 11.5mm



### **IN462 - IN466**

16mm A/P Trial Sizers,  
5.5 - 9.5mm

(For **STALIF C-Ti** only)



## References:

<sup>1</sup> Stein MI, et al.; Biomechanics of an Integrated Interbody device versus ACDF anterior locking plate in a single-level cervical spine fusion construct. *Spine J.*, January 2014; 14(1):128-136. <sup>2</sup> Nayak AN, et. Al; Biomechanical Analysis of an Interbody Cage with Three Integrated Cancellous Lag Screws in a Two-Level Cervical Spine Fusion Construct: An In Vitro Study. *Spine J.*, December 2014; 14 (12): 3002-10. <sup>3</sup> Voronov LI, et. Al; Integrated Interbody Fusion Device in a 2-Level Cervical Construct: Biomechanical Evaluation. April-May, 2014. <sup>4</sup> Kang DG, et. Al; Biomechanical Stability of the STALIF C® Stand-Alone Spacer in Multilevel and Hybrid Cervical Fusion Constructs. *Spine J.*, November 2014; 14 (11): S121-122. <sup>5</sup> Cappuccino A, Cunningham BW; Multi-directional flexibility properties of STALIF C versus conventional methods of interbody cervical arthrodesis: an in-vitro calf spine model. November 2007. <sup>6</sup> Yoon, Byung Jo Victor et al. "Optimizing Surface Characteristics For Cell Adhesion And Proliferation On Titanium Plasma Spray Coatings On Polyetheretherketone". *The Spine Journal* (2016): n. pag. Web. 6 Oct. 2016. <sup>7</sup> Silony Spine Report VAL-2014-010. <sup>8</sup> Silony Spine Report VAL-2014-010-R.



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